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TGTE/WR/GS/2026
PAPER—A
(GENERAL PAPER)

Question Booklet
Number

Candidate's Signature

Series :

a

Time : 2 Hours

Maximum Marks : 150

ROLL NO.

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DO NOT OPEN THE SEAL UNTIL INSTRUCTED TO DO SO

1. Which Article of the Indian Constitution grants constitutional status to the National Commission for Scheduled Tribes (NCST)?

- [A] Article 338
- [B] Article 338A
- [C] Article 340
- [D] Article 342

2. Which regulatory body manages and monitors the 'National Pension System' (NPS) in India?

- [A] IRDAI
- [B] SEBI
- [C] PFRDA
- [D] RBI

3. Which statutory autonomous body is responsible for food safety and regulation across India?

- [A] BIS
- [B] FSSAI
- [C] CPCB
- [D] ICMR

4. The 'Uber Cup' is an elite international trophy contested by women in which sport?

- [A] Table tennis
- [B] Lawn tennis
- [C] Badminton
- [D] Squash

5. With which sport is the elite player Koneru Humpy associated?

- [A] Archery
- [B] Weightlifting
- [C] Chess
- [D] Table tennis

6. Which constitutional body determines the distribution mechanism of central tax revenues between the Union and individual States?

- [A] The NITI Aayog
- [B] The Finance Commission
- [C] The GST Council
- [D] The Comptroller and Auditor General

7. The longest river bridge in India, the Dhola-Sadiya Bridge (Bhupen Hazarika Setu), spans across which major tributary?

- [A] Subansiri river
- [B] Lohit river
- [C] Dibang river
- [D] Manas river

8. The strategic 'Sela Tunnel' project, constructed to provide all-weather connectivity to Tawang, was engineered by which body?

- [A] The National Highways Authority of India (NHAI)
- [B] The Border Roads Organisation (BRO)
- [C] The Public Works Department (PWD)
- [D] The Larsen & Toubro Infra

9. The iconic Hornbill Festival, celebrated extensively to showcase tribal heritage, is hosted annually by which State?

- [A] Manipur
- [B] Nagaland
- [C] Mizoram
- [D] Arunachal Pradesh

10. The strategic 'Agartala-Akhaura' international rail link project establishes direct cross-border rail connectivity between India and

- [A] Myanmar
- [B] Bangladesh
- [C] Bhutan
- [D] Nepal

11. The unique 'Sangai Festival' is an annual cultural extravaganza celebrated by which State to promote its biodiversity tourism?

- [A] Mizoram
- [B] Manipur
- [C] Nagaland
- [D] Arunachal Pradesh

12. The historic cross-border 'Mithun' semi-domesticated bovine is the designated State Animal of Nagaland and which other State?

- [A] Mizoram
- [B] Assam
- [C] Arunachal Pradesh
- [D] Manipur

13. In which calendar year was the Union Territory of Arunachal Pradesh officially elevated to the status of a full State of the Indian Union?

- [A] 1972
- [B] 1975
- [C] 1987
- [D] 1991

14. Which major river, originating in Tibet as the Yarlung Tsangpo, enters India through Arunachal Pradesh under the name 'Siang'?

- [A] Subansiri
- [B] Brahmaputra
- [C] Kameng
- [D] Lohit

15. The iconic agricultural 'Solung Festival' is the main socioeconomic and socioreligious festival of which major tribe?

- [A] Nyishi tribe
- [B] Adi tribe
- [C] Monpa tribe
- [D] Apatani tribe

16. What is the official State bird of Arunachal Pradesh, featured prominently in regional tribal folklore and headgear?

- [A] The Great Hornbill
- [B] The Emerald Dove
- [C] The Black-necked Crane
- [D] The Blyth's Tragopan

17. Which location in Arunachal Pradesh is recognized as the easternmost inhabited settlement of India, where the first sunrise is observed?

- [A] Kibithu
- [B] Tuting
- [C] Mechuka
- [D] Nampong

18. Which Indian State hosted the Khelo India Youth Games in early 2025, demonstrating state-of-the-art sports infrastructure aligned with India's long-term Olympic hosting goals?

- [A] Tamil Nadu
- [B] Bihar
- [C] Haryana
- [D] Maharashtra

19. Which Committee/Commission recommended the establishment of a three-tier Panchayati Raj system in India?

- [A] The Ashok Mehta Committee
- [B] The L. M. Singhvi Committee
- [C] The Balwant Rai Mehta Committee
- [D] The Sarkaria Commission

20. What type of chemical bond is formed when a complete transfer of electrons takes place from one atom to another?

- [A] Covalent bond
- [B] Ionic bond
- [C] Coordinate bond
- [D] Hydrogen bond

21. If I _____ rich, I would travel the world.

- [A] am
- [B] was
- [C] were
- [D] be

22. She has lived here _____ 2010.

- [A] for
- [B] since
- [C] from
- [D] by

23. I look forward _____ you soon.

- [A] see
- [B] seeing
- [C] to seeing
- [D] saw

24. Choose the **correct** article :

She bought _____ umbrella.

- [A] a
- [B] an
- [C] the
- [D] No article

25. By next year, they _____ the project.

- [A] complete
- [B] completed
- [C] will complete
- [D] will have completed

26. Which of the following sentences is **correct**?

- [A] Each of the boys have a book.
- [B] Each of the boys has a book.
- [C] Each of the boys had books.
- [D] Each boys has a book.

27. She asked me where _____.

- [A] was I going
- [B] I was going
- [C] am I going
- [D] I am going

28. The teacher made the students _____ quietly.

- [A] sit
- [B] sat
- [C] sitting
- [D] to sit

29. 'At the drop of a hat' means

- [A] slowly
- [B] immediately
- [C] randomly
- [D] secretly

30. Choose the antonym of 'Victory'.

- [A] Triumph
- [B] Success
- [C] Defeat
- [D] Glory

Answer question number 31 to 40 based on passage 1 :

Passage 1

The invention of the printing press by Johannes Gutenberg in the fifteenth century transformed the way knowledge was shared across the world. Before the printing press, books were copied by hand, making them expensive and available only to a small section of society. The printing press enabled the mass production of books, reducing costs and increasing accessibility.

As books became more widely available, literacy rates began to rise. People from different social backgrounds gained access to information, education, and new ideas. The spread of printed materials contributed significantly to intellectual movements such as the Renaissance and the Protestant Reformation. Scholars could exchange ideas more efficiently, and scientific discoveries reached larger audiences.

The printing press also played a crucial role in preserving knowledge. Historical records, literary works, and scientific texts could be reproduced accurately and distributed widely. Although modern digital technology has transformed communication once again, the printing press remains one of the most influential inventions in human history because it democratized access to information and learning.

31. What is the central idea of the passage?

- [A] The decline of handwritten books
- [B] The impact of the printing press on society and knowledge dissemination
- [C] The history of digital technology
- [D] The causes of low literacy rates

32. Before the invention of the printing press, books were

- [A] printed in large quantities
- [B] available to everyone
- [C] copied by hand
- [D] written only in Latin

33. The printing press reduced

- [A] literacy rates
- [B] the cost of books
- [C] the number of readers
- [D] scientific discoveries

34. As books became more available, what happened?

- [A] Literacy rates decreased
- [B] Books became more expensive
- [C] Literacy rates increased
- [D] Education declined

35. According to the passage, the printing press helped

- [A] limit access to information
- [B] increase access to education and ideas
- [C] replace all forms of communication
- [D] end scientific research

36. Which intellectual movement is mentioned in the passage?

- [A] Industrial Revolution
- [B] Cold War
- [C] Renaissance
- [D] Romanticism

37. The word 'accessibility' in the first paragraph means

- [A] restriction
- [B] availability and ease of access
- [C] secrecy
- [D] ownership

38. Scholars benefited from the printing press because

- [A] they could exchange ideas more efficiently
- [B] they no longer needed books
- [C] they travelled more often
- [D] they stopped writing manuscripts

39. What type of materials could be preserved through printing?

- [A] Only religious texts
- [B] Only scientific works
- [C] Historical, literary and scientific texts
- [D] Only Government documents

40. The printing press is considered influential because it

- [A] eliminated education
- [B] replaced libraries completely
- [C] democratized access to information
- [D] reduced communication

41. When an educator maps out a lesson plan and sets specific instructional goals ahead of time, they are primarily practicing which principle of teaching?

- [A] Principle of flexibility and elasticity
- [B] Principle of planning
- [C] Principle of child-centeredness
- [D] Principle of correlating with other subjects

42. Which general principle of teaching acknowledges that students vary in their innate and acquired traits, such as being slow or fast learners?

- [A] Principle of utilising past experiences
- [B] Principle of active participation and involvement
- [C] Principle of making provision for individual differences
- [D] Principle of definiteness of goals or objectives

43. What is the recommended remedy for the ill-effects of monotony, fatigue and lack of attention during learning?

- [A] Strict disciplinary action
- [B] Repetition and rote learning
- [C] Provision of change, rest and recreation
- [D] Increasing the difficulty level of the task

44. Which of the following is considered a positive reinforcement tool under the psychological principles of teaching?

- [A] Praise, grades and certificates
- [B] Strict rules and penalties
- [C] Unplanned schedules
- [D] Drill and rote memorization

45. According to operant conditioning principles, which of the following best describes the process of negative reinforcement?

- [A] Decreasing a behavior by presenting an aversive stimulus following the action
- [B] Strengthening a behavior by removing an aversive stimulus when the behavior occurs
- [C] Decreasing a behavior by removing a pleasant stimulus following the action
- [D] Strengthening a behavior by presenting a desired stimulus after the action

46. Albert Bandura challenged traditional behaviorism by distinguishing between enactive learning and observational learning. What defines observational (or vicarious) learning?

- [A] Learning by doing and experiencing the consequences of your own actions
- [B] Learning reflex-like responses through the contiguous pairing of stimuli
- [C] Learning by observing others, which requires cognitive factors like attention and memory
- [D] Learning through strict schedules of positive and negative reinforcement

47. In the cognitive view of learning, knowing how to translate a passage into Spanish, divide fractions, or design a website is classified as

- [A] declarative knowledge
- [B] self-regulatory knowledge
- [C] procedural knowledge
- [D] domain-general knowledge

48. According to the School-Wide Positive Behavior Support (SWPBS) model, which level of prevention targets students with serious, chronic challenging behaviors that substantially interfere with learning?

- [A] Primary prevention
- [B] Secondary prevention
- [C] Tertiary prevention
- [D] Response to Intervention (RTI)

49. When developing daily classroom schedules to prevent challenging behaviors, teachers are recommended to

- [A] schedule all demanding tasks consecutively to get them out of the way
- [B] alternate demanding and preferred activities
- [C] allow students open-ended choices for all classroom activities
- [D] avoid incorporating breaks during long instructional blocks

50. During a lesson utilizing response cards, what does the term 'wait-time' refer to?

- [A] The time a student spends waiting in the hallway as a punishment
- [B] The time period between the teacher's feedback and the next question
- [C] The interval between which the teacher asks a question and the student responds
- [D] The time it takes for student transition from one activity to another

51. Which branch of philosophy is primarily concerned with human conduct in society and the distinction between 'good' and 'bad'?

- [A] Metaphysics
- [B] Epistemology
- [C] Ethics (Axiology)
- [D] Cosmology

52. Which type of value is described as being 'good in itself' rather than just a means to achieve something else?

- [A] Instrumental value
- [B] Intrinsic value
- [C] Subjective value
- [D] Remote value

53. According to the philosophy of naturalism, a teacher's primary responsibility is to

- [A] act as a dictator in the class to enforce social traditions
- [B] function as a 'spectator' or 'guide', creating a conducive environment for the child to learn from nature
- [C] focus exclusively on religious rituals and spiritual salvation
- [D] force-feed bookish knowledge into the minds of the students

54. In the philosophy of existentialism, what ethical role does the teacher play regarding student discipline?

- [A] The teacher uses corporal punishment to enforce obedience
- [B] The teacher acts as a guide to help students turn from 'extroversion to introversion' to achieve self-realization
- [C] The teacher ignores students entirely to allow for absolute chaos
- [D] The teacher prioritizes State-mandated curriculum over the student's individual interests

55. According to the sources, what is a key responsibility of a teacher regarding the 'socialization' of a child?

- [A] To treat the child with sympathy and love while respecting their individuality and interests
- [B] To keep children isolated from their peers to prevent bad influences
- [C] To impose social traditions through fear and pressure
- [D] To focus only on academic grades, ignoring the child's behavioral modifications

56. Which of the following is **not** one of the four families of models of teaching discussed in the text?

- [A] The Information Processing Family
- [B] The Developmental Family
- [C] The Social Family
- [D] The Behavioral Systems Family

57. The Biological Sciences Curriculum Study (BSCS) approach, which involves 'Invitations to Enquiry', was primarily shaped by the ideas of which educator?

- [A] Joseph Schwab
- [B] Jerome Bruner
- [C] Hilda Taba
- [D] Carl Rogers

58. In the Concept Attainment model, what is the primary purpose of presenting negative exemplars?

- [A] They punish students for incorrect answers
- [B] They help students identify the boundaries of the concept
- [C] They test the students' reading comprehension
- [D] They provide a break from intense study

59. Psychological learning is best defined as

- [A] a temporary change in the behavior caused by fatigue
- [B] a relatively permanent change in behavior resulting from practice or experience
- [C] the physical growth of the body over time
- [D] the biological reflexes we are born with

60. Which of Thorndike's laws states that a connection is strengthened if it results in 'satisfying state of affairs'?

- [A] Law of readiness
- [B] Law of exercise
- [C] Law of effect
- [D] Law of multiple response

61. The 'sudden' solution to a problem that occurs when a learner understands the relationship between all the parts of a situation is called

- [A] trial and error
- [B] insight
- [C] chaining
- [D] rote memorization

62. According to the classroom management styles described in the text, which type of teacher is characterized as a 'warm demander' who combines high expectations with high responsiveness?

- [A] Authoritarian teacher
- [B] Permissive teacher
- [C] Authoritative teacher
- [D] Autocratic teacher

63. Which communication process involves listening carefully to a student and then 'feeding back' the message in your own words to verify understanding?

- [A] Passive listening
- [B] Active listening
- [C] Direct instruction
- [D] Peer coaching

64. The practice of proactively planning varied approaches to what students need to learn, how they learn it and how they express learning is called

- [A] standardized instruction
- [B] differentiated instruction
- [C] rote memorization
- [D] one-size-fits-all teaching

65. What is the fundamental theme of the current volume of *Instructional-Design Theories and Models, Volume IV*?

- [A] Building a common knowledge base
- [B] Shifting the paradigm of instruction from teacher-centered to learner-centered
- [C] Examining the diversity of existing instructional theories
- [D] Promoting standardized testing across all school districts

- 66.** The source describes two primary types of personalized goals. What are they?
- [A] Individual goals and group goals
 - [B] Academic goals and social goals
 - [C] Long-term life/career goals and short-term learning goals
 - [D] Mandatory State goals and optional extracurricular goals
- 67.** How is the role of the teacher redefined in a truly learner-centered instructional model?
- [A] As the 'sage on the stage' who delivers all content
 - [B] As a 'guide on the side' or mentor who facilitates learning
 - [C] As a neutral observer who does not interfere with student play
 - [D] As a technician focused primarily on data entry and grade reporting
- 68.** In Competency-Based Education (CBE), a fully formed competency statement must include which of the following elements?
- [A] Only the student's name and the date of completion
 - [B] The domain (cognitive, affective, etc.), level in Bloom's taxonomy and criteria for mastery
 - [C] A list of all textbooks required to learn the skill
 - [D] A comparison to the national average for that specific competency
- 69.** How does New Literacies Pedagogy (NLP) approach the concept of 'distributed teaching'?
- [A] The teacher remains the only source of knowledge in the classroom
 - [B] Every student is given a different textbook to read
 - [C] Mentorship is spread across the community, leveraging learner interests and digital resources as pedagogical opportunities
 - [D] Teaching duties are rotated strictly between the principal and the teacher
- 70.** In game-based instruction, what is the distinction between 'diegetic' and 'non-diegetic' instruction?
- [A] Diegetic is for adults; non-diegetic is for children
 - [B] Diegetic occurs within the game context (e.g., natural consequences); non-diegetic occurs outside the game (e.g., coaching or tutorials)
 - [C] Diegetic instruction is mandatory; non-diegetic is optional
 - [D] There is no distinction; they are used interchangeably in game design
- 71.** Which of the following **correctly** distinguishes 'growth' from 'development' in the context of child psychology?
- [A] Growth refers to quantitative changes in body size, development refers to qualitative changes in functioning
 - [B] Growth refers to psychological changes, development refers to physical changes only
 - [C] Growth and development are identical processes occurring simultaneously
 - [D] Growth occurs only during childhood; development occurs only in the further stages

72. Which domain of development includes changes in emotional regulation, self-concept and interpersonal relationships?

- [A] Physical domain
- [B] Cognitive domain
- [C] Socio-emotional domain
- [D] Moral domain

73. Kohlberg's theory of moral development is primarily based on

- [A] emotional responses to moral dilemmas
- [B] reasoning and judgement about moral dilemmas
- [C] behavioural reinforcement of moral actions
- [D] socio-cultural traditions and community norms

74. The term 'cephalocaudal principle' in physical development means

- [A] development proceeds from the centre of the body outward
- [B] development proceeds from the head downward to the feet
- [C] development proceeds from simple to complex
- [D] development proceeds from the feet upward to the head

75. Which of the following is a characteristic feature of adolescent cognitive development according to Piaget?

- [A] Ability to think abstractly and hypothetically
- [B] Understanding of object permanence
- [C] Conservation of number and volume
- [D] Egocentrism limited to sensory experiences

76. Deviation in development refers to the

- [A] development that is ahead of the chronological age norms
- [B] development that departs significantly from the expected norms, either above or below average
- [C] development that strictly follows the average norms
- [D] development that occurs only in the physical domain

77. Classical conditioning was demonstrated by

- [A] B. F. Skinner
- [B] Ivan Pavlov
- [C] John Dewey
- [D] Jerome Bruner

78. Which principle of learning states that learning is more effective when the learner is ready mentally and physically?

- [A] Law of effect
- [B] Law of exercise
- [C] Law of readiness
- [D] Law of recency

79. According to Constructivism, the role of the learner is to

- [A] receive information passively from the teacher
- [B] memorize facts and reproduce them accurately
- [C] construct knowledge actively through experience and reflection
- [D] follow a prescribed set of learning steps

- 80.** Meaningful verbal learning and the concept of 'advance organizers' are associated with
- [A] Piaget
 - [B] Bruner
 - [C] Ausubel
 - [D] Vygotsky
- 81.** Social learning theory, which emphasizes observational learning and modeling, was proposed by
- [A] B. F. Skinner
 - [B] Albert Bandura
 - [C] John Watson
 - [D] Carl Rogers
- 82.** The Socratic method of teaching primarily involves
- [A] presenting information through lectures
 - [B] using audio-visual aids for demonstration
 - [C] guided questioning to stimulate critical thinking
 - [D] assigning projects for independent study
- 83.** Which of the following best describes a 'positive classroom environment'?
- [A] A quiet, strictly disciplined room with minimal student interaction
 - [B] A physically attractive room with no academic expectations
 - [C] A safe, inclusive and stimulating space that supports learning and well-being
 - [D] An environment where only high-achieving students receive attention
- 84.** The 'think-pair-share' technique is an example of
- [A] summative assessment
 - [B] direct instruction
 - [C] active learning/cooperative learning strategy
 - [D] rote learning technique
- 85.** Which component is **not** typically part of a standard lesson plan?
- [A] Learning objectives
 - [B] Student's personal background report
 - [C] Teaching-learning activities
 - [D] Evaluation/assessment strategy
- 86.** Bloom's Taxonomy is used in lesson planning primarily to
- [A] organize classroom seating arrangements
 - [B] frame learning objectives at different cognitive levels
 - [C] assess the physical development of students
 - [D] prepare the school timetable
- 87.** A well-written learning objective should be
- [A] broad, immeasurable and teacher-centered
 - [B] Specific, Measurable, Achievable, Relevant and Time-bound (SMART)
 - [C] based solely on the teacher's subjective judgment
 - [D] focused only on memorization of facts

88. Outcome-Based Education (OBE) focuses primarily on

- [A] completing the prescribed syllabus within the academic calendar
- [B] ensuring students achieve defined learning outcomes by the end of the programme
- [C] ranking students based on competitive examination scores
- [D] emphasizing rote learning and textbook-based instruction

89. What is the new school structure proposed under NEP 2020?

- [A] 10 + 2 structure (Elementary + Secondary + Higher Secondary)
- [B] 5 + 3 + 3 + 4 structure (Foundational + Preparatory + Middle + Secondary)
- [C] 8 + 4 structure (Elementary + Secondary)
- [D] 6 + 3 + 3 structure (Primary + Upper Primary + Secondary)

90. The concept of 'Holistic Report Cards' in NEP 2020 is aimed at

- [A] replacing all examinations with portfolio assessment only
- [B] reporting only academic scores of students
- [C] providing 360-degree assessment covering cognitive, affective and psychomotor domains
- [D] evaluating only teachers' performance

91. Which of the following is an example of an asynchronous mode of ICT-based learning?

- [A] Live video conferencing class
- [B] Real-time online quiz
- [C] Pre-recorded video lectures accessed at the learner's convenience
- [D] Interactive webinar with live Q&A

92. The 'flipped classroom' model involves

- [A] students teaching the teacher during class hours
- [B] replacing the classroom with an outdoor learning environment
- [C] conducting all learning activities outside the school premises
- [D] reversing homework and classroom instruction—students learn new content at home and apply it in class

93. Formative assessment is primarily used to

- [A] grade students at the end of the academic year
- [B] monitor students' learning during instruction and provide feedback for improvement
- [C] rank students for competitive entrance examinations
- [D] certify the completion of a course or programme

94. Peer assessment contributes to learning primarily because it

- [A] reduces the workload of teachers
- [B] develops critical thinking, metacognition and communication skills in students
- [C] eliminates the need for teacher-led evaluation
- [D] provides official grades recognized by the education board

95. A Criterion-Referenced Test (CRT) measures

- [A] a student's performance relative to peers
- [B] whether a student has attained a specified level of performance on defined objectives
- [C] the intelligence quotient of a student
- [D] the physical fitness level of students

96. Providing effective feedback to students should primarily

- [A] focus only on errors and weaknesses
- [B] be given only at the end of the year
- [C] be specific, timely, constructive and focused on improvement
- [D] compare the student's performance with the class topper

97. An assessment tool that evaluates performance based on a set of criteria with defined levels of quality is called a/an

- [A] checklist
- [B] rating scale
- [C] rubric
- [D] anecdotal record

98. The primary role of a teacher as a 'mentor' is to

- [A] deliver subject content efficiently
- [B] guide, support and inspire a learner's personal and professional growth over time
- [C] enforce discipline and maintain order in the classroom
- [D] administer examinations and record grades

99. A teacher acting as an 'academic leader' in school primarily

- [A] manages school finances and infrastructure
- [B] supervises student attendance records
- [C] handles parent-teacher meeting logistics
- [D] inspires instructional improvement, mentors colleagues and drives curriculum innovation

100. Which of the following documents provided the foundational vision for NCF 2005?

- [A] The Kothari Commission Report (1964-66)
- [B] The Yashpal Committee Report 1993, (Learning Without Burden)
- [C] The Mudaliar Commission Report (1952-53)
- [D] The University Education Commission Report (1948-49)

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1. Which of the following is the primary objective of accounting?

- [A] To maximize profit
- [B] To maintain systematic record of transactions
- [C] To prepare tax returns
- [D] To manage employees

2. Which of the following is **not** a basic accounting term?

- [A] Debtor
- [B] Creditor
- [C] Voucher
- [D] Dividend Yield

3. Which Basis of Accounting, records income when earned and **not** when received?

- [A] Cash Basis
- [B] Hybrid Basis
- [C] Accrual Basis
- [D] Single Entry Basis

4. Cash received from Mohan is ₹ 36,000 after allowing him a discount at the rate of 10%. Amount debited to Discount Account will be

- [A] ₹ 3,600
- [B] ₹ 4,000
- [C] ₹ 4,400
- [D] ₹ 40,000

5. Which of the following is a Current Liability?

- [A] Bank loan (10 years)
- [B] Mortgage
- [C] Trade payables
- [D] Debentures

6. **Assertion (A)** : Capital is treated as a liability in accounting.

Reason (R) : According to the Business Entity Concept, the business is separate from its owner.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

7. **Assertion (A)** : Trade discount is recorded in books of accounts.

Reason (R) : Cash discount is allowed to encourage early payment.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

8. **Assertion (A)** : GAAP ensures uniformity and comparability of financial statements.

Reason (R) : GAAP stands for Generally Accepted Accounting Principles.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

9. Match the following :

(Term)	(Definition)
(p) Capital Expenditure	(i) Recurring expense
(q) Revenue Expenditure	(ii) Creates future benefit
(r) Drawings	(iii) Asset purchase
(s) Deferred Revenue Expenditure	(iv) Owner withdraws cash

(p)	(q)	(r)	(s)
[A] (iii)	(i)	(iv)	(ii)
[B] (ii)	(iii)	(i)	(iv)
[C] (iii)	(iv)	(i)	(ii)
[D] (iv)	(i)	(ii)	(iii)

10. Which of the following is **not** an Accounting Concept?

- [A] Going concern
- [B] Consistency
- [C] Materiality
- [D] Profitability

11. Which book records all credit purchases of goods?

- [A] Cash Book
- [B] Sales Book
- [C] Purchase Book
- [D] Journal Proper

12. Paid to Mohan on behalf of Kiran ₹ 10,000 will be debited to

- [A] cash account
- [B] Mohan's personal account
- [C] Kiran's personal account
- [D] drawings account

13. Ledger is also called the

- [A] book of original entry
- [B] book of final entry
- [C] book of prime entry
- [D] subsidiary book

14. A _____ is sent to the supplier when we return goods.

- [A] bill
- [B] cash memo
- [C] debit note
- [D] credit note

15. A cash book with discount and bank columns is called

- [A] simple cash book
- [B] double column cash book
- [C] triple column cash book
- [D] petty cash book

16. Viren Enterprises purchased goods worth ₹ 51,500 from Jitender on credit and later returned goods worth ₹ 4,500. Which books will be used to record these?

- [A] Sales Book and Sales Return Book
- [B] Purchase Book and Purchase Return Book
- [C] Journal and Cash Book
- [D] Purchase Book and Sales Book

17. Nisha & Co. paid salaries of ₹ 3,20,000 in cash to Mohan. Which account will be debited?

- [A] Cash Account
- [B] Nisha and Co. Account
- [C] Salary Account
- [D] Mohan's Account

18. If Opening Capital = ₹ 1,00,000; Additional Capital = ₹ 20,000; Drawings = ₹ 10,000; Profit = ₹ 30,000; then find Closing Capital.

- [A] ₹ 1,30,000
- [B] ₹ 1,40,000
- [C] ₹ 1,20,000
- [D] ₹ 1,50,000

19. Which of the following errors is an Error of Omission?

- [A] Wrong amount posted to wrong side
- [B] A transaction not recorded at all
- [C] Wrong account debited
- [D] Compensating error

20. The process of transferring entries from Journal to Ledger is called

- [A] journalizing
- [B] balancing
- [C] posting
- [D] auditing

21. Depreciation is calculated from the date of

- [A] purchase of assets
- [B] receipt of assets at business premises
- [C] asset put to use
- [D] asset installed

22. Cost of machinery is ₹ 60,000. Useful life is 5 years. Annual depreciation Under Straight Line Method is ₹ 10,000. The scrap value will be

- [A] ₹ 6,000
- [B] ₹ 12,000
- [C] ₹ 10,000
- [D] ₹ 50,000

23. Depletion method of depreciation is used for

- [A] machinery
- [B] buildings
- [C] natural resources like mines
- [D] furniture

24. A provision is created for

- [A] unknown future losses of uncertain amount
- [B] distribution of profits
- [C] specific known expenses
- [D] bonus payment to employees

25. Which of the following is a Revenue Reserve?

- [A] Capital Redemption Reserve
- [B] Securities Premium Reserve
- [C] General Reserve
- [D] Capital Reserve

26. **Assertion (A)** : Reserve is an appropriation of profit; Provision is a charge against profit.

Reason (R) : Both reserves and provisions reduce the net profit equally.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

27. **Assertion (A)** : Under WDV method, depreciation decreases each year.

Reason (R) : Depreciation is calculated on the original cost under WDV method.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

28. On 1st October, 2025, a machine purchased for ₹ 4,00,000, depreciation is charged @ 10% p. a. on diminishing balance method and books are closed on 31st March, 2026. Depreciation for the year 2025-26 is

- [A] ₹ 10,000
- [B] ₹ 20,000
- [C] ₹ 30,000
- [D] ₹ 40,000

29. X Ltd. sold equipment costing ₹ 90,000 with accumulated depreciation of ₹ 57,000, at a gain of ₹ 8,000. What was the selling price?

- [A] ₹ 33,000
- [B] ₹ 41,000
- [C] ₹ 65,000
- [D] ₹ 72,000

30. Which of the following is **not** a cause of depreciation?

- [A] Wear and tear
- [B] Obsolescence
- [C] Efflux of time
- [D] Rise in market value

31. A Trial Balance is prepared to

- [A] calculate profit or loss
- [B] check arithmetical accuracy of books
- [C] show financial position
- [D] verify outstanding expenses

32. Bank Reconciliation Statement is prepared by

- [A] bank
- [B] the account holder
- [C] Government
- [D] auditor

33. Insurance premium of ₹ 12,000 was paid for one year on 1st August, 2025. The unexpired insurance premium on 31st March, 2026 will be

- [A] ₹ 2,000
- [B] ₹ 4,000
- [C] ₹ 6,000
- [D] ₹ 8,000

34. Which error **does not** affect Trial Balance?

- [A] Error of posting on wrong side
- [B] Error of omission
- [C] Addition error in ledger
- [D] Wrong amount posted

35. Gross Profit = Net Sales – ?

- [A] All expenses
- [B] Cost of goods sold
- [C] Administrative expenses
- [D] Depreciation

36. Riya Ltd. has a balance of ₹ 6,000 (Dr.) in its Cash Book but the Passbook shows ₹ 6,500 (Cr.). A cheque of ₹ 3,500 was deposited but not yet credited by the bank. What type of item is this in BPS?

- [A] Cheque dishonored
- [B] Unpresented cheque
- [C] Uncredited deposit
- [D] Direct debit by bank

37. A firm records purchase of machinery ₹ 60,000 in the Purchase Book instead of the Asset Account. This is an Error of

- [A] Omission
- [B] Commission
- [C] Principle
- [D] Compensating Error

38. Match the Errors with their Types :

(Error)		(Type)	
(p) Salary debited to Wages A/c		(i) Error of Principle	
(q) Purchase of asset entered in Purchase Book		(ii) Error of Commission	
(r) Complete transaction not recorded		(iii) Error of Omission	
(s) Two opposite equal errors		(iv) Compensating Error	
(p)	(q)	(r)	(s)
[A] (ii)	(i)	(iii)	(iv)
[B] (i)	(ii)	(iv)	(iii)
[C] (iii)	(iv)	(i)	(ii)
[D] (ii)	(iii)	(i)	(iv)

39. Securities Premium is shown in the Balance Sheet under

- [A] Share Capital
- [B] Reserves and Surplus
- [C] Long-term Borrowings
- [D] Current Liabilities

40. When shares are issued at a price less than face value, it is called

- [A] issue at premium
- [B] issue at par
- [C] issue at discount
- [D] forfeiture

41. Forfeiture of shares means

- [A] buyback of shares
- [B] cancellation of shares due to non-payment of calls
- [C] issue of bonus shares
- [D] surrender of shares

42. Under ESOP, shares are offered to

- [A] general public
- [B] existing shareholders
- [C] employees of the company
- [D] foreign investors

43. Debentures are a form of

- [A] ownership capital
- [B] loan capital
- [C] reserve capital
- [D] working capital

44. Assertion (A) : A company can re-issue forfeited shares at a discount.

Reason (R) : The discount on re-issue cannot exceed the amount forfeited per share.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

45. Assertion (A) : Debentures are liabilities of the company.

Reason (R) : Debenture holders receive interest irrespective of profit or loss.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

46. ABC Ltd. issued 10000 shares of ₹ 10 each at ₹ 12. The company received applications for 15000 shares. 5000 shares were rejected and money refunded. This situation is called

- [A] under-subscription
- [B] over-subscription
- [C] private placement
- [D] sweat equity issue

47. ABC Ltd. forfeited 500 shares of ₹ 10 each (₹ 8 called up and ₹ 6 paid up). These were later re-issued at ₹ 5 per share. Capital Reserve on re-issue will be

- [A] ₹ 500
- [B] ₹ 1,000
- [C] ₹ 1,500
- [D] ₹ 3,000

48. A company issues 1000 debentures of ₹ 100 each at 10% discount. The discount on issue to be written off is

- [A] ₹ 5,000
- [B] ₹ 10,000
- [C] ₹ 15,000
- [D] ₹ 20,000

49. Calls-in-advance is shown in Balance Sheet under

- [A] share capital
- [B] reserves and surplus
- [C] long-term liabilities
- [D] current liabilities

50. Interest on debentures is

- [A] an appropriation of profit
- [B] a charge against profit
- [C] added to share capital
- [D] transferred to general reserve

51. In the absence of a partnership deed, interest on capital is paid at

- [A] 6% per annum
- [B] 12% per annum
- [C] No interest is paid
- [D] 5% per annum

52. The Indian Partnership Act was enacted in

- [A] 1930
- [B] 1932
- [C] 1956
- [D] 1947

53. Outstanding Salary is a

- [A] real account
- [B] nominal account
- [C] personal account
- [D] None of the above

54. Under the Average Profit Method, $\text{Goodwill} = \text{Average Profit} \times ?$

- [A] Net Assets
- [B] Number of Years' Purchase
- [C] Capitalization Rate
- [D] Normal Rate of Return

55. Fixed Capital Account means

- [A] capital changes every year
- [B] capital remains unchanged unless fresh capital is added
- [C] only drawings are adjusted in capital
- [D] None of the above

56. Assertion (A) : In Fluctuating Capital method, only one account (Capital Account) is maintained per partner.

Reason (R) : In Fixed Capital method, a separate Current Account is maintained for each partner.

- [A] Both (A) and (R) are true and (R) is the correct explanation of (A)
- [B] Both (A) and (R) are true but (R) is not the correct explanation of (A)
- [C] (A) is true but (R) is false
- [D] (A) is false but (R) is line

57. Assertion (A) : Guarantee of profit is a special provision in partnership deed.

Reason (R) : Any deficiency due to guarantee is borne by the guaranteeing partner.

- [A] Both (A) and (R) are true and (R) is the correct explanation of (A)
- [B] Both (A) and (R) are true but (R) is not the correct explanation of (A)
- [C] (A) is true but (R) is false
- [D] (A) is false but (R) is true

58. Match Goodwill valuation Methods with their Basis :

(<i>Method</i>)		(<i>Basis</i>)		
(<i>p</i>)	Average Profit	(<i>i</i>)	Normal Profit vs. Actual Profit	
(<i>q</i>)	Super Profit	(<i>ii</i>)	Average $\times$ Years' Purchase	
(<i>r</i>)	Capitalization	(<i>iii</i>)	Capitalizing Super Profit	
(<i>s</i>)	Annuity	(<i>iv</i>)	Present Value of Future Super Profit	
	(<i>p</i>)	(<i>q</i>)	(<i>r</i>)	(<i>s</i>)
[A]	(<i>ii</i>)	(<i>i</i>)	(<i>iii</i>)	(<i>iv</i>)
[B]	(<i>ii</i>)	(<i>i</i>)	(<i>iv</i>)	(<i>iii</i>)
[C]	(<i>iii</i>)	(<i>iv</i>)	(<i>i</i>)	(<i>ii</i>)
[D]	(<i>iv</i>)	(<i>ii</i>)	(<i>i</i>)	(<i>iii</i>)

59. Average Profit = ₹ 60,000; Normal Profit = ₹ 40,000; Capitalization Rate = 10%. By using the Capitalization of Super Profit Method. Find Goodwill.

- [A] ₹ 2,00,000
- [B] ₹ 6,00,000
- [C] ₹ 4,00,000
- [D] ₹ 1,00,000

60. Interest on capital is allowed on

- [A] average capital of the year
- [B] capital at the end of the year
- [C] opening capital of the year
- [D] capital at the middle of the year

61. Prime Cost = Direct Material + Direct Labour + ?

- [A] Factory Overhead
- [B] Office Overhead
- [C] Direct Expenses
- [D] Selling Overhead

62. EOQ stands for

- [A] Economic Order Quotient
- [B] Economic Order Quantity
- [C] Estimated Output Quantity
- [D] Effective Order Queue

63. Marginal Cost = Variable Cost + ?

- [A] Fixed Cost
- [B] Semi-variable Cost
- [C] There is no addition; Marginal Cost = Variable Cost
- [D] Overhead Cost

64. In Job Costing, costs are accumulated for

- [A] each department
- [B] each process
- [C] each specific job or order
- [D] each product batch

65. Conversion Cost = Direct Labour + ?

- [A] Direct Material
- [B] Factory Overhead
- [C] Prime Cost
- [D] Selling Overhead

66. Amit Manufacturing has annual demand = 2000 units, ordering cost = ₹ 50 per order, carrying cost = ₹ 5 per unit per year. Is Raj's current order of 200 units equal to EOQ?

- [A] No, EOQ is 250 units
- [B] Yes, EOQ is 200 units
- [C] No, EOQ is 400 units
- [D] No, EOQ is 100 units

67. A factory produces 10000 units; Fixed Cost = ₹ 1,00,000; Variable Cost = ₹ 20/unit; Selling Price = ₹ 30/unit. BEP (in units) = ?

- [A] 5,000
- [B] 10,000
- [C] 8,000
- [D] 12,000

68. Assertion (A) : Marginal Costing excludes fixed costs from product cost.

Reason (R) : Fixed costs are period costs and written off entirely against contribution.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

69. Assertion (A) : Process Costing is used in industries with continuous production.

Reason (R) : Process Costing identifies costs with each specific customer order.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

70. Match Cost to Categories :

(Cost)		(Category)	
(p) Factory Rent	(i) Variable Cost		
(q) Direct Material	(ii) Fixed Cost		
(r) Power per unit	(iii) Semi-variable cost		
(s) Telephone Bill	(iv) Variable Cost		
(p)	(q)	(r)	(s)
[A] (ii)	(i)	(iv)	(iii)
[B] (i)	(ii)	(iii)	(iv)
[C] (iii)	(iv)	(ii)	(i)
[D] (iv)	(iii)	(i)	(ii)

71. Sales = ₹ 5,00,000; Variable Cost = ₹ 3,00,000; Fixed Cost = ₹ 1,00,000. P/V Ratio = ?

- [A] 40%
- [B] 60%
- [C] 20%
- [D] 80%

72. Contribution = Sales – ?

- [A] Fixed Cost
- [B] Total Cost
- [C] Variable Cost
- [D] Marginal Cost

73. Which costing method is best for profit planning and decision-making?

- [A] Absorption Costing
- [B] Job Costing
- [C] Marginal Costing
- [D] Process Costing

74. Overhead Absorption Rate is calculated as

- [A] Actual Overhead / Budgeted Output
- [B] Budgeted Overhead / Budgeted Output
- [C] Actual Output / Budgeted Overhead
- [D] Budgeted Output / Actual Overhead

75. Cost reduction differs from cost control because cost reduction is

- [A] temporary
- [B] permanent
- [C] only for variable costs
- [D] applicable only to labour costs

76. Which of the financial transactions will improve the current ratio which is 2 : 1?

- [A] Cash collected from Trade Receivables
- [B] Payment to Trade Payables
- [C] Purchase of Goods for Cash
- [D] Credit Purchases of Goods

77. A company's Current Asset is ₹ 6,00,000 and its Current Liability is ₹ 4,00,000. Subsequently, it paid ₹ 1,00,000 to its Trade Creditors. Current Ratio will be

- [A] 1 : 1
- [B] 5 : 3
- [C] 3 : 2
- [D] 7 : 5

78. Funds Flow Statement shows changes in

- [A] cash and bank
- [B] working capital
- [C] fixed assets only
- [D] share capital

79. Debt-Equity ratio measures

- [A] liquidity
- [B] profitability
- [C] solvency / leverage
- [D] activity

80. Net Profit Ratio = (Net Profit / ?) × 100

- [A] Total Assets
- [B] Net Sales
- [C] Gross Profit
- [D] Capital Employed

81. Meena Ltd. has Current Assets = ₹ 4,00,000; Current Liabilities = ₹ 2,00,000; Inventory = ₹ 1,00,000. Quick Ratio = ?

- [A] 2 : 1
- [B] 1.5 : 1
- [C] 1 : 1
- [D] 3 : 1

82. A company's sales increase from ₹ 10 lakh to ₹ 12 lakh but net profit declines. The most likely reason from financial analysis is

- [A] increase in capital
- [B] increase in operating expenses
- [C] decrease in reserves
- [D] increase in debtors

83. Assertion (A) : Common Size Statements express all items as a percentage of a base figure.

Reason (R) : They facilitate comparison across companies of different sizes.

- [A] Both (A) and (R) are true and (R) is the correct explanation of (A)
- [B] Both (A) and (R) are true but (R) is not the correct explanation of (A)
- [C] (A) is true but (R) is false
- [D] (A) is false but (R) is true

84. Assertion (A) : A high Inventory Turnover Ratio always indicates poor performance.

Reason (R) : High inventory turnover means goods are sold quickly.

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

85. Match Ratios to Categories :

(Ratio)		(Category)	
(p) Current Ratio	(i) Profitability		
(q) Gross Profit Ratio	(ii) Liquidity		
(r) Debt-Equity Ratio	(iii) Solvency		
(s) Stock Turnover Ratio	(iv) Activity		
(p)	(q)	(r)	(s)
[A] (ii)	(i)	(iii)	(iv)
[B] (i)	(ii)	(iv)	(iii)
[C] (iii)	(iv)	(i)	(ii)
[D] (iv)	(iii)	(ii)	(i)

86. Sales = ₹ 5,00,000; Gross Profit Ratio = 20%; Average Inventory = ₹ 80,000. Inventory Turnover Ratio = ?

- [A] 3 times
- [B] 4 times
- [C] 5 times
- [D] 6 times

87. If Earning After Tax = ₹ 20,000; Tax = ₹ 10,000; Interest Charged on Debentures = ₹ 30,000 and Capital Employed = ₹ 3,00,000, then Return on Capital Employed = ?

- [A] 15%
- [B] 20%
- [C] 25%
- [D] 10%

88. Net Profit = ₹ 3,20,000, Wages = ₹ 1,60,000, Office Expenses = ₹ 60,000; Selling Expenses = ₹ 20,000. Revenue from Operations = ₹ 16,00,000. Gross Profit Ratio will be

- [A] 20%
- [B] 25%
- [C] 30%
- [D] 40%

89. Which of the following is an Operating activity in Cash Flow?

- [A] Issue of shares
- [B] Purchase of machinery
- [C] Payment of salaries
- [D] Repayment of loan

90. Comparative Financial Statements show

- [A] only current year figures
- [B] two or more years' data side-by-side
- [C] percentage changes only
- [D] budgeted vs. actual data

91. Proprietary Ratio = Shareholders' Funds / ?

- [A] Fixed Assets
- [B] Total Assets
- [C] Current Liabilities
- [D] Long-term Debt

92. Which of the following is **not** a limitation of Financial Statement Analysis?

- [A] Ignores price level changes
- [B] Based on historical data
- [C] Provides detailed cash forecasts
- [D] Window dressing is possible

93. Interest Coverage Ratio = EBIT / ?

- [A] Tax
- [B] Total Debt
- [C] Interest Expense
- [D] Dividend

94. The amount left after deducting Gross Profit from Revenue from Operations is generally

- [A] Material Consumed
- [B] Cost of Revenue from Operations
- [C] Opening Inventory + Purchases – Closing Stock
- [D] All of the above

95. With increase in the production, fixed cost per unit

- [A] remains constant
- [B] decreases
- [C] increases
- [D] first increases then decreases

96. Interest on debenture is calculated on

- [A] market value
- [B] face value
- [C] issue price
- [D] redemption value

97. The concept that states “.... do not anticipate profits but provide for all losses”, is

- [A] going concern
- [B] consistency
- [C] conservatism
- [D] materiality

98. In CVP analysis, the point where Total Revenue = Total Cost is

- [A] Margin of Safety
- [B] Profit-volume Ratio
- [C] Break-even Point
- [D] Contribution Point

99. Revenue from Operations = ₹ 8,00,000; Gross Profit Ratio = 40%; Indirect Expenses = 10% of Gross Profit and Income Tax is 30%. What will be the amount of Profit after Tax?

- [A] ₹ 72,000
- [B] ₹ 86,400
- [C] ₹ 2,01,600
- [D] ₹ 2,88,000

100. A debenture issued as collateral security is

- [A] recorded as a liability immediately
- [B] shown as a note/contingent liability
- [C] cancelled upon issue
- [D] converted to equity automatically

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TGTE/WR/AGR/2026

PAPER—B

(CONCERNED PAPER)

Question Booklet
Number

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a

Time : 3 Hours

Maximum Marks : 300

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1. The south-west monsoon is also known as

- [A] winter monsoon
- [B] retreating monsoon
- [C] summer monsoon
- [D] dry monsoon

2. The drop diameter of drizzle is

- [A] 0.2 to 0.5 mm
- [B] 0.6 to 0.7 mm
- [C] 0.01 to 0.05 mm
- [D] 0.8 to 0.9 mm

3. The SI unit of temperature is

- [A] Rankine
- [B] Fahrenheit
- [C] Celsius
- [D] Kelvin

4. Direct solar radiation is measured with the help of which instrument?

- [A] Pyranometer
- [B] Pyrheliometer
- [C] Pyradiometer
- [D] Kipp radiometer

5. AICRP on agrometeorology by ICAR at CRIDA was established in the year

- [A] 1977
- [B] 1993
- [C] 1983
- [D] 1987

6. The ozone layer is present in

- [A] stratosphere
- [B] troposphere
- [C] mesosphere
- [D] thermosphere

7. Summer rainfall occurs due to which form of cloud?

- [A] Altocumulus
- [B] Cumulonimbus
- [C] Cirrus
- [D] Cirrostratus

8. The portion of incident solar radiation energy that is reflected back is known as

- [A] solar constant
- [B] albedo
- [C] diffused radiation
- [D] insolation

9. The horizontal motion of air in response to a pressure gradient is known as
- [A] wind
- [B] air current
- [C] Both [A] and [B]
- [D] cyclone
10. Classification of wind velocity was given by
- [A] Josef Black
- [B] Torricelli
- [C] Radford
- [D] Beaufort
11. First irrigation census in India was started in
- [A] 1975-76
- [B] 1983-84
- [C] 1986-87
- [D] 1973-74
12. Nutrient Based Subsidy (NBS) policy by the Government of India was implemented in
- [A] 1st April, 2010
- [B] 1st April, 2012
- [C] 1st April, 2013
- [D] 1st April, 2014
13. The Soil Health Card Scheme (SHCS) was launched in 2015 from which State of India?
- [A] Arunachal Pradesh
- [B] West Bengal
- [C] Rajasthan
- [D] Uttar Pradesh
14. Who among the following is **not** the recipient of the World Food Prize?
- [A] M. S. Swaminathan
- [B] Verghese Kurien
- [C] Rattan Lal
- [D] Bechan Lal
15. The cultivation of two or more crops of different heights simultaneously on a piece of land is called
- [A] parallel cropping
- [B] multi-storey cropping
- [C] strip cropping
- [D] relay cropping
16. Who is considered the father of natural farming?
- [A] Masanobu Fukuoka
- [B] Leas Lackson
- [C] Neyman
- [D] Nicholas

17. Concept of Multiple Cropping Index (MCI) was given by

- [A] Gregory
- [B] Watson
- [C] Dalrymple
- [D] Fukuoka

18. The National Policy for Management of Crop Residues was formulated by the

- [A] Ministry of Education
- [B] Ministry of Commerce and Industry
- [C] Ministry of Agriculture and Farmers Welfare
- [D] Ministry of Environment, Forest and Climate Change

19. Largest producer of millets is

- [A] India
- [B] Sri Lanka
- [C] Bangladesh
- [D] China

20. Litres of water required for the production of 1 (one) kilogram of wheat is

- [A] about 2000 litre
- [B] about 3000 litre
- [C] about 1000 litre
- [D] about 5000 litre

21. The topmost surface soil horizon is

- [A] C horizon
- [B] A horizon
- [C] B horizon
- [D] E horizon

22. Non-laminar, massive structure formed by the cooling and crystallization of molten magma on or beneath the Earth's surface is

- [A] schist rock
- [B] metamorphic rock
- [C] sedimentary rock
- [D] igneous rock

23. Which of the following is an agent of physical weathering?

- [A] Hydration
- [B] Solution
- [C] Water
- [D] Hydrolysis

24. Which of the following is a passive factor of soil formation?

- [A] Relief
- [B] Climate
- [C] Biosphere
- [D] Vegetation

25. Relative proportion of sand, silt and clay content on weight basis is called

- [A] soil structure
- [B] soil texture
- [C] Both [A] and [B]
- [D] soil profile

26. Which of the following is the **true** density of soil?

- [A] Total porosity
- [B] Void ratio
- [C] Bulk density
- [D] Particle density

27. A standard system of accurate description of soil colour involves

- [A] Munsell colour chart
- [B] DMRT colour chart
- [C] ANOVA chart
- [D] Gantt chart

28. Most common form of soil erosion by water is

- [A] sheet erosion
- [B] gully erosion
- [C] rill erosion
- [D] splash erosion

29. Universal Soil Loss Equation is

- [A] $A = R \times K \times L \times S \times C \times W$
- [B] $A = R \times M \times L \times S \times C \times P$
- [C] $A = R \times K \times L \times S \times C \times Z$
- [D] $A = R \times K \times L \times S \times C \times P$

30. Which of the following is a low analysis fertilizer?

- [A] HNO_3
- [B] CaCO_3
- [C] NH_4Cl
- [D] NH_2CONH_2

31. A weed that has become an integral part of a crop ecosystem is called

- [A] parasitic weeds
- [B] satellite weeds
- [C] facultative weeds
- [D] alien weeds

32. The botanical name of wild oat is

- [A] *Phalaris minor*
- [B] *Avena fatua*
- [C] *Eichhornia*
- [D] *Cyperus rotundus*

33. Which one of the following is **not** a bioherbicide?

- [A] DeVine
- [B] Collego
- [C] BioMal
- [D] Biochar

34. Atrazine is the common name of

- [A] Aatrex
- [B] Prefar
- [C] Banvel
- [D] Lasso

35. *Triticum aestivum* is

- [A] durum wheat
- [B] bread wheat
- [C] spelt wheat
- [D] emmer wheat

36. Inflorescence of wheat is called

- [A] panicle
- [B] head
- [C] arrow
- [D] spike

37. The isolation distance of rice for foundation seed production is

- [A] 3 meters
- [B] 15 meters
- [C] 50 meters
- [D] 40 meters

38. Queen of beverage crop is

- [A] coconut
- [B] tea
- [C] cocoa
- [D] coffee

39. CSR 30 is a recently released variety of

- [A] chickpea variety
- [B] herbicide-tolerant mustard variety
- [C] stem-resistant wheat variety
- [D] salt-tolerant basmati rice

40. Khaira is due to deficiency of

- [A] Zn
- [B] Fe
- [C] Mn
- [D] Mg

41. Self-incompatibility in plants was first observed by

- [A] Shull
- [B] Lewis
- [C] Kolreuter
- [D] Hull

42. The colour of the official certification tag issued for certified seed is

- [A] blue
- [B] white
- [C] purple
- [D] golden brown

43. Grow out test is performed to determine

- [A] phenotype
- [B] seed vigour
- [C] seed viability
- [D] genetic purity

44. Triticale is a man-made cereal developed from a cross between

- [A] wheat and barley
- [B] wheat and rice
- [C] wheat and rye
- [D] barley and rye

45. Lerma Rojo is an example of

- [A] primary introduction
- [B] secondary introduction
- [C] domestication
- [D] mass selection

46. The terms 'vertical resistance' and 'horizontal resistance' were given by

- [A] Marshall
- [B] Flor
- [C] Donald
- [D] Van der Plank

47. Pure line theory was proposed by

- [A] Johannsen
- [B] Mendel
- [C] Huxley
- [D] Nilsson-Ehle

48. Chromosome number in *Gossypium hirsutum* is

- [A] $2n = 46$
- [B] $2n = 50$
- [C] $2n = 52$
- [D] $2n = 44$

49. Duplication of DNA occurs in

- [A] G1
- [B] G2
- [C] metaphase
- [D] S phase

50. The father of DNA fingerprinting is

- [A] Har Gobind Khorana
- [B] Kary Mullis
- [C] Alec Jeffreys
- [D] Frederick Sanger

51. *Trogoderma granarium* is the scientific name of

- [A] drug beetle
- [B] pulse beetle
- [C] flour beetle
- [D] khapra beetle

52. The Insecticides Act was enacted in which year?

- [A] 1968
- [B] 1958
- [C] 1978
- [D] 1988

53. Pressure produced by a foot sprayer is

- [A] 7-8 kg/cm²
- [B] 17-21 kg/cm²
- [C] 37-41 kg/cm²
- [D] 52-56 kg/cm²

54. Sorghum shoot fly can be managed by

- [A] early sowing
- [B] high seed rate
- [C] fish meal trap
- [D] All of the above

55. *Scirpophaga incertulas* is an insect pest of

- [A] wheat
- [B] rice
- [C] sorghum
- [D] brinjal

56. DDT was synthesized by

- [A] O. Zeidler
- [B] Paul Müller
- [C] Michael Faraday
- [D] Teunis van der Linden

57. Chlorpyrifos belongs to which group?

- [A] Organochlorine
- [B] Carbamate
- [C] Organophosphate
- [D] Synthetic pyrethroid

58. Silver shoot or onion leaf symptom in rice is caused by

- [A] house fly
- [B] gall midge
- [C] sand fly
- [D] brown plant hopper

59. Rearing of silkworms is called

- [A] sericulture
- [B] silviculture
- [C] apiculture
- [D] lac culture

60. *Trichogramma japonicum* is a/an

- [A] larval parasitoid
- [B] egg parasitoid
- [C] pupal parasitoid
- [D] adult parasitoid

61. The formula used to design the drains is

- [A] Manning's formula
- [B] Cunnings formula
- [C] Fleming's formula
- [D] None of the above

62. The unit of Electrical Conductivity (EC) is

- [A] dSm^{-1}
- [B] dSm^{-2}
- [C] sDm^{-1}
- [D] sDm^{-2}

- 63.** Standard operating pressure designed for a drip irrigation system is
- [A] 4.5 kg/cm²
 - [B] 6.5 kg/cm²
 - [C] 2.5 kg/cm²
 - [D] 8.5 kg/cm²
- 64.** The most widely used method of surface irrigation is
- [A] check basin
 - [B] basin flooding
 - [C] border strip method
 - [D] furrow flooding
- 65.** The amount of dry matter produced per unit of water used by a crop is known as
- [A] consumptive use efficiency
 - [B] water distribution use efficiency
 - [C] water use efficiency
 - [D] water expense efficiency
- 66.** The loss of water in the form of vapor from leaves is known as
- [A] transpiration
 - [B] evaporation
 - [C] Both [A] and [B]
 - [D] fumigation
- 67.** The most critical growth stage for water requirement in rice is
- [A] mid-tillering
 - [B] panicle initiation to flowering
 - [C] nursery stage
 - [D] maturity stage
- 68.** The downward movement of water through a soil column beyond the root zone is
- [A] permeability
 - [B] percolation
 - [C] perforation
 - [D] seepage
- 69.** The relationship between the dry matter produced by a crop and its evapotranspiration is
- [A] linear
 - [B] quadratic
 - [C] exponential
 - [D] sigmoidal
- 70.** Total available fresh water on Earth is
- [A] about 30%
 - [B] about 13%
 - [C] about 03%
 - [D] about 10%

71. *Apis mellifera* is commonly known as

- [A] little bee
- [B] Himalayan bee
- [C] Italian bee
- [D] Indian bee

72. The science which deals with adult learning is known as

- [A] pedology
- [B] pedagogy
- [C] edaphology
- [D] andragogy

73. Lab to Land Programme was launched by ICAR on the occasion of its

- [A] golden jubilee
- [B] silver jubilee
- [C] diamond jubilee
- [D] platinum jubilee

74. Vermicast is also known as

- [A] red gold
- [B] green gold
- [C] black gold
- [D] brown gold

75. The first KVK was established in

- [A] Mumbai
- [B] Pondicherry
- [C] Ranchi
- [D] Cuttack

76. Inputs like seeds and fertilizers used in agricultural production are classified as

- [A] fixed costs
- [B] overhead costs
- [C] sunk costs
- [D] variable costs

77. Relation between demand and price is

- [A] directly proportional
- [B] inversely proportional
- [C] independent
- [D] constant at all price levels

78. Processing, packaging and branding of agricultural commodities primarily create

- [A] place utility
- [B] time utility
- [C] form utility
- [D] possession utility

79. Short-term agricultural loans are typically granted to farmers for a duration of

- [A] 6 to 18 months
- [B] 3 to 5 years
- [C] 10 to 15 years
- [D] 20 to 25 years

80. RBI came into existence in the year

- [A] 1925
- [B] 1945
- [C] 1935
- [D] 1915

81. Number of ATPs required for the formation of one glucose in the Calvin cycle is

- [A] 18
- [B] 28
- [C] 38
- [D] 12

82. Pineapple is a

- [A] C_3 plant
- [B] C_4 plant
- [C] CAM plant
- [D] C_2 plant

83. The end product of glycolysis is/are

- [A] shikimic acid
- [B] 2-pyruvic acids
- [C] 8-pyruvic acids
- [D] citric acid

84. Osmotic pressure of pure water is (in atm)

- [A] one
- [B] two
- [C] three
- [D] zero

85. Biosynthesis of the plant hormone auxin requires which of the following micronutrients?

- [A] Fe
- [B] Mn
- [C] Zn
- [D] Cl

86. Which of the following plant growth regulators is widely known as the stress hormone?

- [A] ABA
- [B] Ethylene
- [C] Cytokinin
- [D] Gibberellin

87. High auxin and low cytokinin favour the development of

- [A] shoot formation
- [B] callus formation
- [C] Both [A] and [B]
- [D] root formation

88. The most abundant protein found on Earth is

- [A] rubisco
- [B] myoglobin
- [C] amylase
- [D] keratin

89. Dark reaction of photosynthesis occurs in

- [A] plasma membrane
- [B] stroma
- [C] vesicle
- [D] thylakoid membrane

90. Plants that grow and thrive in shady areas are called

- [A] sciophytes
- [B] hydrophytes
- [C] halophytes
- [D] heliophytes

91. Wolf apple is the common name of

- [A] *Solanum lycocarpum*
- [B] *Solanum melongena*
- [C] *Solanum tuberosum*
- [D] *Solanum nigrum*

92. Tomato ketchup is preserved by using

- [A] sugar
- [B] sodium benzoate
- [C] salt
- [D] potassium metabisulfite

93. Jasmine species that produce yellow flowers is

- [A] *J. humile*
- [B] *J. auriculatum*
- [C] *J. officinale*
- [D] *J. grandiflorum*

94. The famous Rock Garden is situated in

- [A] Jaipur
- [B] Chandigarh
- [C] Bangalore
- [D] Nagpur

95. Economic part of Aloe vera is

- [A] fruit
- [B] stigma
- [C] root
- [D] leaf

96. Antifungal properties in onion are due to the presence of

- [A] catechol
- [B] thiosulphate
- [C] iron
- [D] cobalt

97. Himsagar is a variety of

- [A] guava
- [B] mango
- [C] tomato
- [D] pineapple

98. The commercial method of propagation in Dahlia is through

- [A] tubers
- [B] seeds
- [C] rhizome
- [D] corms

99. Gourds belong to which family?

- [A] Malvaceae
- [B] Cucurbitaceae
- [C] Solanaceae
- [D] Brassicaceae

100. *Curcuma longa* is the scientific name of

- [A] coriander
- [B] pepper
- [C] curry leaf
- [D] turmeric

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1. The living organism which synthesizes its own food is known as

- [A] heterotroph
- [B] autotroph
- [C] symbiont
- [D] parasite

2. Which of the following statements is **true** about chlorophyll molecules?

- [A] Chlorophyll is present in Mitochondria.
- [B] It is a photosynthetic pigment with porphyrin ring (head), Mg at center and long phytol tail in grana (stacks of thylakoids) within the chloroplast.
- [C] Chlorophyll is present in ribosomes.
- [D] It is a photosynthetic pigment present in endoplasmic reticulum.

3. The holozoic mode of nutrition is found in which of the following organisms?

- [A] Cuscuta
- [B] Lichens
- [C] Amoeba
- [D] Fungi

4. The epiglottis in human is a small protective tissue flap at the entrance of the larynx, which is mainly responsible for

- [A] preventing of food and liquids from entering windpipe (trachea) during swallowing
- [B] allowing food and liquids to enter into respiratory tract
- [C] distorting the opening of the windpipe
- [D] not preventing choking

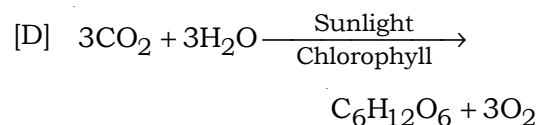
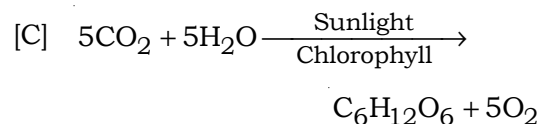
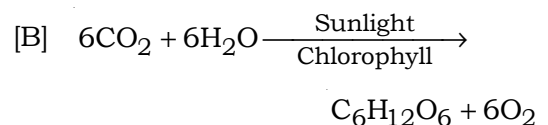
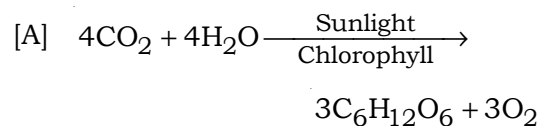
5. Which of the following is **not** a C4 plant?

- [A] Sugarcane
- [B] Maize
- [C] Sorghum
- [D] Rice

6. The specialized kidney-shaped tissues which regulate the opening and closing of the stomatal pore in a leaf is called

- [A] lenticels
- [B] guard cells
- [C] respiratory cells
- [D] stomatal cells

7. Which of the following equations is **correct** regarding glucose production during photosynthesis?



8. Which of the following inactive proteolytic enzymes is secreted by the pancreas and converted into its active form in the small intestine?

- [A] Hydrochloric acid
- [B] Trypsinogen (Inactive form of Trypsin)
- [C] Pepsin
- [D] Trypsin

9. The **correct** statement for aerobic respiration is
- [A] breakdown of glucose molecules in the absence of oxygen in yeast.
 - [B] breakdown of 1 glucose molecule in the presence of oxygen produces carbon dioxide, water and energy (36-38 ATP).
 - [C] breakdown of glucose molecules in muscle in the absence of oxygen during heavy exercise.
 - [D] breakdown of glucose molecules in lung.
10. Which of the following definitions is **true** for osmosis?
- [A] Water moves from higher water potential to lower water potential through semipermeable membrane
 - [B] Water moves from lower water potential to higher water potential through semipermeable membrane
 - [C] Water moves from lower water potential to higher water potential through permeable membrane
 - [D] Water moves from higher solute concentration to lower solute concentration through semipermeable membrane
11. Which of the following is the **correct** statement for lymph?
- [A] It is extremely rich in red blood cells.
 - [B] It is a clear or slightly yellowish fluid rich in lymphocytes (white blood cells) found in lymphatic system of animal and human.
 - [C] It does not help in defense and immunity.
 - [D] It does not contain protein, salt and water.
12. Phloem is a vascular tissue of plant which is responsible for
- [A] transportation of water and mineral from soil to leaves
 - [B] transportation and translocation of food from source (leaves) to sink (roots, fruits, seeds and meristematic tissues)
 - [C] transportation of only mineral from leaves to different parts of plant
 - [D] transportation of only glucose from leaves to different parts of plant
13. The initial urine formed in the kidney during glomerular filtration is known as
- [A] glomerulus
 - [B] glomerular filtrate
 - [C] kidney filtrate
 - [D] renal filtration
14. Which of the following explanations is **true** for gustatory receptors?
- [A] Receptors or tiny sensors found on the sensory organs like tongue that help to detect different tastes
 - [B] Receptors found in the nose that help to detect scent
 - [C] Receptors found in the ear that help to detect sound
 - [D] Receptors found in the nose that detect vibration
15. The forebrain is the largest part of the central nervous system of the human brain, which is also known as
- [A] cerebrum
 - [B] cerebellum
 - [C] medulla
 - [D] pons

16. Which of the following statements is **correct** about the reflex arc?

- [A] It comprises only the central nervous system.
- [B] It comprises receptor, sensory neuron, interneuron, motor neuron and effector.
- [C] It does not have effector and receptor.
- [D] It has effector but does not have receptor.

17. Tropic movement in plant is defined as

- [A] non-directional movement
- [B] directional movement
- [C] multi-directional movement
- [D] bi-directional movement

18. Negative phototropism in the root of a plant occurs when the

- [A] roots bend away from light and grow towards the ground
- [B] roots bend towards light and grow away from the ground
- [C] roots do not bend towards light but grow away from the ground
- [D] roots and shoots do not bend towards light

19. The plant hormone found at shoot tip which is responsible for growth and phototropism is called

- [A] cytokinin
- [B] abscisic acid
- [C] auxin
- [D] gibberellin

20. Thyroxine hormone is secreted by

- [A] pituitary gland
- [B] thyroid gland
- [C] pancreas
- [D] adrenal gland

21. The hormone testosterone is mainly produced by

- [A] testes of the male
- [B] ovaries of the female
- [C] both testes and ovary
- [D] hypothalamus

22. Dopamine, a neurotransmitter associated with reward and motivation, is produced and released by neurons mainly found in the

- [A] parathyroid gland
- [B] thymus gland
- [C] hypothalamus
- [D] pineal gland

23. Leaf fall and senescence in plants are mainly triggered by

- [A] gibberellin
- [B] ethylene and abscisic acid
- [C] auxin
- [D] cytokinin

24. Which of the following explanations is **true** for turgor pressure?

- [A] Pressure exerted inward by cell sap against the cell wall of a plant cell
- [B] Pressure exerted outward by cell sap against the cell wall of a plant cell
- [C] Pressure exerted by water inside the cell membrane
- [D] Pressure exerted by gas inside the cell membrane

25. Which part of the brain is responsible for vision (eyesight)?

- [A] Temporal lobe
- [B] Frontal lobe
- [C] Parietal lobe
- [D] Occipital lobe of the cerebrum

26. The term 'Cytokinesis' is correctly defined as

- [A] nuclear division during M phase
- [B] division of cytoplasm during M phase or mitosis phase of cell division
- [C] karyokinesis during M phase
- [D] anaphase

27. The r-RNA consists of two subunits (40S and 60S) in eukaryotes, which are responsible for synthesis of the protein and are found in

- [A] endoplasmic reticulum
- [B] ribosome
- [C] chloroplast
- [D] mitochondria

28. The mitotic cell division is also known as

- [A] non-equational division
- [B] diakinesis
- [C] equational division
- [D] pachytene

29. The metaphase stage of mitotic cell division is characterized by

- [A] alignment of chromosomes at the polar end
- [B] complete disintegration of nuclear envelope, alignment of chromosomes at the equator and attachment of kinetochores to spindle fibers
- [C] chromosomes begin to move toward the polar end
- [D] non-disintegration of nuclear envelope

30. The stages like Leptotene, Zygotene, Pachytene and Diplotene come under

- [A] Prophase I of Meiosis I
- [B] Metaphase I of Meiosis I
- [C] Anaphase I of Meiosis I
- [D] Telophase of M Phase

31. DNA replication occurs during which phase of the mitosis and meiosis cell division?

- [A] During anaphase before mitosis and meiosis begin
- [B] During S-phase of interphase before mitosis and meiosis begin
- [C] During metaphase before mitosis and meiosis begin
- [D] During interphase before mitosis and meiosis begin

- 32.** Which of the following statements is **true** for vascular bundles of monocot and dicot?
- [A] Vascular bundles in dicot stems are scattered, whereas vascular bundles in monocot stems are arranged in ring pattern.
 - [B] Vascular bundles in dicot stems are arranged in ring pattern, whereas vascular bundles in monocot stems are scattered throughout the ground tissue.
 - [C] Both monocot and dicot stems have scattered vascular bundles.
 - [D] Both dicot and monocot stems have vascular bundles arranged in a ring pattern.
- 33.** In stomatal apparatus, the cells which immediately surround the guard cells are known as
- [A] subsidiary cells
 - [B] epidermal cells
 - [C] xylem cells
 - [D] companion cells
- 34.** In pteridophytes, which of the following is known as a primitive stele?
- [A] Siphonostele
 - [B] Protostele of *Selaginella*
 - [C] Dictyostele
 - [D] Polycyclic stele
- 35.** In the leaf, the tissue present between the adaxial and abaxial epidermis is known as
- [A] endodermis
 - [B] mesophyll
 - [C] cuticle
 - [D] pith
- 36.** In dicot stem, the cambium layer is present between
- [A] parenchyma and aerenchyma
 - [B] xylem and phloem
 - [C] epidermis and cortical tissues
 - [D] endodermis layer and pericycle
- 37.** Which of the following statements is **true** for meristematic tissue in plants?
- [A] It is passively dividing cells.
 - [B] It is passively growing cells.
 - [C] It is actively dividing and undifferentiated cells present in the shoot and root tips of a plant responsible for growth.
 - [D] It is actively dividing cells present only in the shoot tips of a plant responsible for growth.
- 38.** In the plant root, 'area of elongation' is located between
- [A] apical meristem and root cap
 - [B] vascular cylinder and area of maturation
 - [C] area of maturation and area of cell division
 - [D] root cap and root hairs
- 39.** Which of the following statements is **correct** for permanent tissues in plants?
- [A] Simple permanent tissues include parenchyma, collenchyma and sclerenchyma, whereas complex permanent tissues include xylem and phloem.
 - [B] Simple permanent tissues include parenchyma and sclerenchyma, whereas complex permanent tissues include only xylem.
 - [C] Simple permanent tissues include parenchyma, whereas complex permanent tissues include only xylem and cork.
 - [D] Simple permanent tissues include aerenchyma, whereas complex permanent tissues include only phloem and epidermis.

- 40.** The epithelium tissue found in the intestine is known as
- [A] stratified squamous epithelium
 - [B] cuboidal epithelium
 - [C] ciliated epithelium
 - [D] columnar epithelium
- 41.** Which of the following statements is **true** for epithelial tissue?
- [A] It is the inner tissue of the body that protects the vital organs.
 - [B] It is a protective tissue which covers outer surface of the body such as skin and lines the internal organs such as intestine, blood vessels and ducts.
 - [C] It is a protective tissue that covers only outer surface of the body such as skin.
 - [D] It is not a protective tissue that covers only outer and inner surface of the body.
- 42.** Cartilage is flexible and supportive connective tissue is found in
- [A] hard bone of leg
 - [B] elbow bone
 - [C] trachea
 - [D] fibula
- 43.** Which of the following tissues in animals is responsible for storage of fats, provides heat/cold insulation and cushions to internal organs?
- [A] Reticular tissue
 - [B] Areolar tissue
 - [C] Adipose tissue
 - [D] Blood tissue
- 44.** Which of the following muscle tissues work involuntarily throughout life?
- [A] Lung tissue
 - [B] Liver tissue
 - [C] Cardiac muscle tissue
 - [D] Facial tissue
- 45.** A voluntary muscle which is attached to the bone is called
- [A] smooth muscle
 - [B] cardiac muscle
 - [C] skeletal muscle
 - [D] both cardiac and smooth muscles
- 46.** The aims of biological systematics include
- [A] identification and classification of living organisms
 - [B] identification, nomenclature, classification and establishment of phylogenetic relationships among living organisms
 - [C] identification and nomenclature of living organisms
 - [D] identification and phylogeny of living organisms
- 47.** The generic name which is repeating in the specific epithet is called
- [A] tautonym
 - [B] basionym
 - [C] synonyms
 - [D] homonyms
- 48.** The book *Species Plantarum* was officially published by Carolus Linnaeus in which date and year?
- [A] 10th May, 1753
 - [B] 1st May, 1753
 - [C] 8th May, 1753
 - [D] 6th May, 1753

49. The binomial system of nomenclature was first introduced effectively by
- [A] William Roxburgh in *Flora Indica* (1820-1832)
 - [B] Carolus Linnaeus in *Species Plantarum* (1753)
 - [C] Augustin Pyramus de Candolle in *Theorie Elementaire de la Botanique* (1813)
 - [D] Bentham and Hooker in *Genera Plantarum* (1865-1883)
50. The word 'systematics' was first coined by
- [A] Michel Adanson in his book *Histoire Naturelle du Sénégal* (1757)
 - [B] Caspar Bauhin in his book *Pinax Theatri Botanici* (1623)
 - [C] Carolus Linnaeus in his book *Systema Naturae* in 1735
 - [D] Charles Darwin in his book *On the Origin of Species* (1859)
51. In plant nomenclature, the first collection of voucher specimen which is considered to be a type material of a supposedly new taxon is called
- [A] syntype
 - [B] holotype
 - [C] paratype
 - [D] isotype
52. Which of the following is **not** a part of the non-periodic taxonomic literature?
- [A] Flora
 - [B] Conspectus
 - [C] Monograph
 - [D] Journal
53. The term 'taxonomy' was first coined by
- [A] J. D. Hooker (1875)
 - [B] Augustin Pyramus de Candolle (1813)
 - [C] Robert H. Whittaker (1969)
 - [D] Robert F. Thorne (1976)
54. Which of the following statements is **not true**?
- [A] Tautonym is allowed in zoological nomenclature.
 - [B] Tautonym is also allowed in botanical nomenclature.
 - [C] In zoological nomenclature, scientific name is followed by author citation with year of publication.
 - [D] In botanical nomenclature, scientific name is followed by author citation but year of publication is not allowed to be mentioned.
55. The Five-Kingdom Classification System was proposed by
- [A] Herbert F. Copeland (1956)
 - [B] Lynn Margulis and Karlene V. Schwartz (1982)
 - [C] Robert H. Whittaker (1969)
 - [D] Charles Darwin (1859)
56. In Bentham and Hooker system of classification (1865), the term 'gamopetalous' means
- [A] flowers with free petals
 - [B] flowers with few petals
 - [C] flowers with fused or united petals
 - [D] flowers with sepal and free petals

57. Which of the following statements is **not true**?

- [A] Sexual System of Classification proposed by Carolus Linnaeus in 1753 was essentially a natural system of classification.
- [B] Sexual System of Classification proposed by Carolus Linnaeus in 1753 was essentially an artificial system of classification.
- [C] Bentham and Hooker System of Plant Classification (1865) was essentially a natural system of classification.
- [D] Phenetic System of Classification which is associated with numerical taxonomy was first proposed by French Naturalist Michel Adanson (1763).

58. The highest principal taxonomic category recognized in traditional biological classification (animal classification) is called

- [A] phylum
- [B] division
- [C] kingdom
- [D] class

59. In scientific naming convention of animal kingdom, the suffix letters for family are indicated by

- [A] -edae
- [B] -idae
- [C] -oidae
- [D] -inae

60. The *Panthera leo* (Linnaeus, 1758) belongs to the family

- [A] Canidae
- [B] Felidae
- [C] Bovidae
- [D] Muscidae

61. The powerful Golden Eagle - *Aquila chrysaetos* (Linnaeus, 1758) published in Vol. 10 of *Systema Naturae* is a member of the bird family

- [A] Psittacidae
- [B] Cacatuidae
- [C] Falconidae
- [D] Accipitridae

62. Which of the following statements is **true** about official starting date for binomial botanical and zoological nomenclature?

- [A] 6th May 1753 for plant and 10th January 1758 for animal.
- [B] 1st May 1753 for plant and 1st January 1758 for animal.
- [C] 5th May 1753 for plant and 5th January 1758 for animal.
- [D] 8th May 1753 for plant and 6th January 1758 for animal.

63. Which of the following sequences of classification is **correct** for the classes of Kingdom Fungi?

- [A] Ascomycetes, Phycomycetes, Basidiomycetes, Deuteromycetes
- [B] Basidiomycetes, Ascomycetes, Phycomycetes, Deuteromycetes
- [C] Phycomycetes, Ascomycetes, Basidiomycetes, Deuteromycetes
- [D] Basidiomycetes, Deuteromycetes, Phycomycetes, Ascomycetes

64. According to Five-Kingdom Classification, the Kingdom Monera comprises the groups

- [A] fungi and algae
- [B] bryophyte and lichens
- [C] virus and dinoflagellates
- [D] archaebacteria and eubacteria

65. Which of the following organisms belongs to phylum Chordata?
- [A] Jellyfish
 - [B] Spider
 - [C] Human
 - [D] Snail
66. Which of the following statements is **true** for invertebrate organism?
- [A] It lacks internal bony spine.
 - [B] It has a vertebrate column.
 - [C] It has backbone and spinal cord.
 - [D] Fish is an example of invertebrate organism.
67. The primitive plant *Magnolia champaca* is a member of the family
- [A] Ranunculaceae
 - [B] Menispermaceae
 - [C] Liliaceae
 - [D] Magnoliaceae
68. Which of the following statements is **true** for Orchidaceae and Zingiberaceae?
- [A] They are dicot plants.
 - [B] Beautiful flowers with indistinct sepal and petal which is known as tepal.
 - [C] Seeds are large and heavy.
 - [D] Leaves are absent.
69. What is the accepted scientific name of tea?
- [A] *Cocos nucifera* L.
 - [B] *Coffea arabica* L.
 - [C] *Camellia sinensis* (L.) Kuntze
 - [D] *Thea sinensis* L.
70. Bacteria which reproduce primarily through an asexual mode of reproduction is called
- [A] binary fission
 - [B] budding
 - [C] zygospore
 - [D] copulation
71. Which of the following statements is **true**?
- [A] *Spirogyra* is a unicellular blue-green alga.
 - [B] *Spirogyra* is a multicellular green alga belonging to Chlorophyta and reproduces mostly through fragmentation.
 - [C] *Spirogyra* is a multicellular red alga.
 - [D] *Spirogyra* is a multicellular brown alga.
72. Tobacco Mosaic Virus (TMV) reproduces
- [A] outside of the living cell by replication of its RNA
 - [B] outside of the non-living cell by replication of its RNA
 - [C] inside of the living cell by replication of its RNA
 - [D] inside of the living cell by replication of its DNA
73. Human Immunodeficiency Virus (HIV) replicates especially inside which host cells?
- [A] Plasma cell
 - [B] CD4⁺ T-lymphocytes
 - [C] Red Blood Cells
 - [D] Platelet

- 74.** Which of the following statements is **true** about fungal reproduction?
- [A] Plasmogamy is the fusion of the cytoplasm of two compatible fungal cells (or hyphae) during the first step of sexual reproduction.
 - [B] Karyogamy is the fusion of two dissimilar cytoplasms of fungal cells.
 - [C] Plasmogamy is the fusion of the nucleus of two non-compatible fungal cells (or hyphae) during asexual reproduction.
 - [D] Karyogamy is the fusion of two similar cytoplasms of fungal cells.
- 75.** Vegetative reproduction in liverworts (*Marchantia*) is accomplished by
- [A] spore production in the capsule
 - [B] fragmentation and gemmae
 - [C] oogamy
 - [D] anisogamy
- 76.** In orchids, the specialized reproductive structures formed by the fusion of stamens (male parts) and the pistil (female parts) into a single column is known as
- [A] labellum
 - [B] rostellum
 - [C] gynostemium
 - [D] anther cap
- 77.** The central column like structure on which stamens and carpels are arranged spirally in *Magnolia* flower is known as
- [A] spathe
 - [B] hypanthium
 - [C] torus
 - [D] cone
- 78.** Pollen grain in *Pinus* is characterized as
- [A] winged (bisaccate) shaped
 - [B] circular shaped
 - [C] spherical shaped
 - [D] ellipsoidal shaped
- 79.** Which of the following statements is **true** about pteridophyte spores?
- [A] *Lycopodium* reproduces through heterosporous spores.
 - [B] *Lycopodium* reproduces through homosporous spores.
 - [C] *Selaginella* reproduces through homosporous spores.
 - [D] *Isoetes* reproduces through homosporous spores.
- 80.** A specialized egg capsule or casing produced by female cockroaches to protect their fertilized eggs is known as
- [A] hepaticae
 - [B] spermatheca
 - [C] ootheca
 - [D] phallomeres
- 81.** Fertilization in frogs is strictly external, which takes place in water. The development process progresses through a larval stage called a tadpole and further undergoes morpho-anatomical transformation before reaching adulthood which is called
- [A] metamorphosis
 - [B] ovulation
 - [C] fertilization
 - [D] mesorchium

82. In humans, during karyogamy, the haploid nucleus of the sperm immediately fuses with that of the ovum to form

- [A] haploid zygote
- [B] triploid zygote
- [C] diploid zygote ($2n = 46$ chromosomes)
- [D] tetraploid zygote

83. What is the expanded form of PCOS?

- [A] Polycystic Ovarian Symptoms
- [B] Polycystic Ovary Syndrome
- [C] Public Cutaneous Ovarian System
- [D] Polycystic Ovarian Saturation

84. Which of the following statements is **true**?

- [A] Human female has XY chromosomes.
- [B] Human female has YY chromosomes.
- [C] Human female has XX chromosomes while male has XY chromosomes.
- [D] Human male has XX chromosomes.

85. A genetic cross between two organisms to study the inheritance of two separate traits controlled by two different genes is called

- [A] dihybrid cross
- [B] monohybrid cross
- [C] polyhybrid cross
- [D] polygene

86. The Neo-Darwinism explains Darwin theory of natural selection with modern genetics by stating that

- [A] only morphological changes cause variations in organism
- [B] DNA mutations cause the variations in organism which Darwin observed
- [C] environmental changes alone produce inherited variations
- [D] both morphological and anatomical changes cause variations in organism

87. Polytene chromosome is a giant chromosome formed by repeated rounds of DNA replication without cell division which is found in

- [A] *Rana tigrina*
- [B] salivary gland of *Drosophila melanogaster*
- [C] salivary gland of *Periplaneta americana*
- [D] vertebrate oocytes

88. How much percentage of mtDNA (Mitochondrial DNA) is inherited by a child from their parent?

- [A] Child inherits 50% mtDNA from mother and 50% mtDNA from father
- [B] Child inherits 60% mtDNA from mother and 40% mtDNA from father
- [C] Child inherits 100% mtDNA from father
- [D] Child inherits 100% mtDNA from mother

89. Which of the following statements is **correct** for human fertilization?

- [A] Mother contributes 23 nuclear chromosomes via the egg and father contributes 23 nuclear chromosomes plus all the mitochondrial DNA via the sperm.
- [B] Father contributes 23 nuclear chromosomes via the sperm and mother contributes 23 nuclear chromosomes plus all the mitochondrial DNA via the egg.
- [C] Father contributes 24 nuclear chromosomes via the sperm and mother contributes 23 nuclear chromosomes plus all the mitochondrial DNA via the egg.
- [D] Father contributes 23 nuclear chromosomes via the sperm and mother contributes 23 nuclear chromosomes via the egg.

90. Gene Transfer Technology (GTT), which involves natural transmission of genetic material from parent to offspring, is known as

- [A] horizontal gene transfer
- [B] parallel gene transfer
- [C] vertical gene transfer
- [D] artificial gene transfer

91. The genetic disorders caused by mutated genes located on the sex chromosomes (X or Y) is known as

- [A] genetic diseases
- [B] molecular disorders
- [C] sex-linked diseases
- [D] genetic abnormalities

92. Which of the following statements is **true** about infectious and non-infectious diseases?

- [A] Infectious diseases are not caused by germs and cannot be transmitted between individuals.
- [B] COVID-19 and AIDS are infectious diseases, whereas diabetes and cancer are non-infectious diseases.
- [C] Non-infectious diseases are caused by germs and can be transmitted from person to person.
- [D] Cancer and diabetes are infectious diseases that can be transmitted from person to person.

93. Which of the following is **true** regarding level of species diversity in ecosystem?

- [A] Alpha diversity and gamma diversity
- [B] Gamma diversity and beta diversity
- [C] Alpha diversity, beta diversity and Gamma diversity
- [D] Beta diversity and alpha diversity

94. Which of the following chemicals is/are **not** Ozone Depleting Substances (ODS)?

- [A] Chlorofluorocarbons (CFCs)
- [B] Halons
- [C] Carbon Tetrachloride (CCl₄)
- [D] Hydrofluoroolefins (HFOs)

95. The ecological index that measures biodiversity of an ecosystem by calculating the probability that any two individuals randomly selected from the sample ecosystem belong to the same species, is known as

- [A] Simpson's Diversity Index (D)
- [B] Shannon-Wiener Index (H')
- [C] Use Value Index (UVI)
- [D] Margalef's Richness Index (D_{mg})

96. What are the major criteria used by Conservation International (CI) to determine region as global biodiversity hotspot?

- [A] Region must contain at least 1500 species of endemic vascular plants and lost at least 70% of its original primary native vegetation
- [B] Region must contain at least 6000 species of endemic vascular plants and lost at least 40% of its original primary native vegetation
- [C] Region must contain at least 5000 species of endemic vascular plants and lost at least 60% of its original primary native vegetation
- [D] Region must contain at least 3000 species of endemic vascular plants and lost at least 50% of its original primary native vegetation

97. An evolutionary, state-of-the-art farming concept that uses modern Information and Communication Technologies (ICTs) including AI and Big Data Analytics to optimize crop yields, improve resource efficiency and maximize food production quality to improve human livelihood is called

- [A] progressive agriculture
- [B] traditional agriculture
- [C] smart agriculture
- [D] modern agriculture

98. Crops which are naturally grazed by animals themselves from pastures without human intervention is known as

- [A] fodder crops
- [B] forage crops
- [C] silage
- [D] hay

99. Cyanobacteria, such as blue-green algae (*Anabaena azollae*), living symbiotically with the *Azolla*, which are used extensively in wet paddy as fertilizer, is popularly known as

- [A] natural fertilizer
- [B] inorganic fertilizer
- [C] biofertilizer
- [D] organic fertilizer

100. The branch of agricultural sciences which deals with the domestication, breeding, raising, daily care and feeding of farm animals for human livelihood benefit is called

- [A] animal domestication
- [B] animal husbandry
- [C] animal caring
- [D] animal rearing

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1. Which of the following is the most essential characteristic of business activity?
 - [A] It always requires heavy capital investment
 - [B] It involves production or purchase and sale/exchange of goods or services for value
 - [C] It involves manufacturing of goods only
 - [D] It guarantees a fixed and regular income to the owner
2. A homemaker cooks meals, cleans the house and manages finances for her family everyday with great skill and regularity but receives no monetary compensation. Under which category does this activity fall?
 - [A] Profession, since it requires skill and regularity
 - [B] Employment, since she works for others
 - [C] Business, since she performs it regularly
 - [D] None it is a non-economic activity and falls outside all three categories
3. Which of the following is a cause of internal business risk?
 - [A] Change in Government policy
 - [B] Natural calamity
 - [C] Mismanagement by employees
 - [D] Fluctuation in foreign exchange rates
4. Peter Drucker famously argued that the primary purpose of business is
 - [A] maximising shareholder's wealth
 - [B] creating a customer
 - [C] minimising costs
 - [D] paying maximum dividends
5. Buying goods from China, importing them into India and re-exporting them to African nations is an example of
 - [A] import trade
 - [B] export trade
 - [C] entrepot trade
 - [D] bilateral trade agreement
6. As per the Companies Act, 2013, a qualifying company must spend at least how much of its average net profit on CSR?
 - [A] 1 %
 - [B] 2 %
 - [C] 5 %
 - [D] 7 %
7. In a sole proprietorship, the liability of the owner is
 - [A] limited to the amount invested in business
 - [B] zero, as the owner is not responsible for debts
 - [C] unlimited, the owner's personal assets can be used to pay business debts
 - [D] shared equally with employees
8. A document that contains all the terms and conditions agreed upon by the partners is called
 - [A] Memorandum of Association
 - [B] Articles of Association
 - [C] Partnership Deed
 - [D] prospectus

9. A partner who lends his name and reputation to the firm but **does not** contribute capital or take part in management is called a/an
- [A] active partner
 - [B] secret partner
 - [C] nominal partner
 - [D] partner by estoppel
10. The **correct** chronological sequence of stages in the formation of a public company is
- [A] Incorporation → Promotion → Capital Subscription → Commencement of Business
 - [B] Promotion → Incorporation → Capital Subscription → Commencement of Business
 - [C] Capital Subscription → Promotion → Incorporation → Commencement of Business
 - [D] Promotion → Capital Subscription → Incorporation → Commencement of Business
11. A firm outsources its customer support to save costs but later finds that service quality has dropped, customer complaints have risen and its brand reputation is suffering. Which nature of business risk does this best illustrate?
- [A] External risk caused by natural factors
 - [B] Internal risk arising from a strategic/managerial decision
 - [C] Financial risk caused by market fluctuations
 - [D] Legal risk due to non-compliance
12. NSIC helps small industries in getting Government contracts through which Scheme?
- [A] Rural Credit Scheme
 - [B] Single Point Registration Scheme
 - [C] District Development Scheme
 - [D] Industrial Subsidy Scheme
13. Khadi and Village Industries Commission (KVIC) supports rural small businesses. Which of the following is **not** an objective of KVIC?
- [A] Providing employment in rural areas
 - [B] Promoting and developing khadi and village industries
 - [C] Encouraging large-scale mechanised production in cities
 - [D] Building the economic self-reliance of rural communities
14. Which among the following is a Scheduled Commercial Bank?
- [A] RBI
 - [B] NABARD
 - [C] State Bank of India
 - [D] Primary Agricultural Credit Society
15. The principle of 'Subrogation' in insurance means
- [A] the insured can claim insurance money from multiple insurance companies for the same loss
 - [B] after paying the claim to the insured, the insurance company steps into the shoes of the insured and acquires the right to recover the loss from the third party who caused it
 - [C] the insured must subrogate (transfer) all their property rights to the insurance company before making a claim
 - [D] subrogation allows the insured to insure the same property with multiple insurers and collect proportionate amounts from each

- 16.** ADRs are denominated and traded in
- [A] the currency of the foreign company's home country
 - [B] Euro, since they are international instruments
 - [C] US Dollars, on American Stock Exchanges
 - [D] Special Drawing Rights (SDR) of the IMF
- 17.** What is the main difference between equity shares and preference shares in terms of dividend payment?
- [A] Equity shareholders receive dividend before preference shareholders every year
 - [B] Both equity and preference shareholders always receive the same rate of dividend
 - [C] Preference shareholders receive their fixed dividend first and equity shareholders receive dividend only from the remaining profit
 - [D] Preference shareholders never receive any dividend, only equity shareholders receive dividends
- 18.** If a company is wound up (closed down), in which order do shareholders receive their money back?
- [A] Equity shareholders are paid first, then preference shareholders receive whatever is left
 - [B] Both equity and preference shareholders are paid at the same time in equal proportions
 - [C] Preference shareholders are paid back their capital first and equity shareholders receive whatever assets remain after all dues are cleared
 - [D] Neither equity nor preference shareholders ever get money back when a company is wound up

- 19.** The 'Repo Rate' and 'Reverse Repo Rate' differ in that
- [A] repo is the rate at which RBI borrows from banks; Reverse Repo is the rate at which banks borrow from RBI
 - [B] repo is the rate at which commercial banks borrow from RBI; Reverse Repo is the rate at which RBI borrows from banks
 - [C] both are of same rate applied in different quarters
 - [D] repo applies to long-term loans only
- 20.** A 'Letter of Credit' issued by a commercial bank primarily serves to
- [A] guarantee payment to an exporter by the importer's bank
 - [B] allow unlimited withdrawals from a savings account
 - [C] certify the creditworthiness of a domestic borrower
 - [D] authorize RBI to regulate a specific bank
- 21.** Trade credit helps a business primarily by
- [A] increasing long-term capital
 - [B] financing working capital requirements
 - [C] reducing tax liabilities
 - [D] improving fixed asset base
- 22.** '2/10 net 30' in trade credit terms means
- [A] 2% interest charged if payment is delayed beyond 30 days
 - [B] 2% discount if payment is made within 10 days; full amount due in 30 days
 - [C] 10% discount on orders above ₹2 lakhs, payable in 30 days
 - [D] payment of 2% advance, balance within 30 days

23. Which element of business ethics ensures that all stakeholders are treated without bias or favouritism?

- [A] Integrity
- [B] Fairness
- [C] Transparency
- [D] Accountability

24. Under which category do commercial banks lend to small and micro enterprises mandatorily?

- [A] Speculative lending
- [B] Priority sector lending
- [C] Foreign currency lending
- [D] Discretionary lending

25. A bank sanctions ₹ 50 lakh working capital loan to a small manufacturer at 12% p.a. interest. The entrepreneur has only used ₹ 20 lakh so far. On how much will interest be charged?

- [A] ₹ 50 lakh — the full sanctioned limit
- [B] ₹ 20 lakh — only the amount actually utilised
- [C] ₹ 30 lakh — the unused portion
- [D] No interest until the full ₹ 50 lakh is used

26. RBI announces an increase in reverse repo rate. How does this affect liquidity in the banking system and what is RBI's likely objective?

- [A] Increases liquidity — banks lend more to customers
- [B] Reduces liquidity — higher reverse repo rate incentivizes banks to park more funds with RBI rather than lend, absorbing excess liquidity from the system to control inflation
- [C] Has no effect on liquidity — only repo rate affects liquidity
- [D] Increases Government spending automatically

27. An e-commerce website selling groceries crashes every Sunday due to high traffic. Customers are unable to place orders. Which objective of business is being most directly compromised?

- [A] Social objective of community welfare
- [B] Human objective of employee satisfaction
- [C] Economic objective of customer satisfaction and market standing
- [D] National objective of paying taxes

28. Which of the following is **not** an example of a profession?

- [A] A licensed advocate practising in the High Court
- [B] A certified surgeon performing operations in a private hospital
- [C] A trader buying and selling wholesale goods in a market
- [D] A chartered accountant auditing company accounts

29. Which of the following **correctly** lists the dimensions (components) of the Business Environment as studied in Business Studies?

- [A] Economic, financial, production, human resource and marketing environment
- [B] Economic, political, social, technological and legal environment
- [C] Internal, external, national, international and competitive environment
- [D] Supply, demand, competition, Government and consumer environment

30. Staffing is closely linked with which other management function?

- [A] Controlling only
- [B] Organizing only
- [C] Both organizing and directing
- [D] Planning only

31. Under Taylor's Functional Foremanship, how many foremen (supervisors) are responsible for managing workers?

- [A] 4
- [B] 6
- [C] 8
- [D] 10

32. Which of the following **correctly** pairs Taylor's technique with its purpose?

- | Technique | Purpose |
|-------------------|---|
| [A] Motion study | → Determines standard rate per task |
| [B] Time study | → Determines standard time per task |
| [C] Fatigue study | → Eliminates unnecessary body movements |
| [D] Method study | → Determines wages per unit |

33. The classical theories of management are often criticised for treating workers as

- [A] social beings with emotional needs
- [B] creative individuals requiring autonomy
- [C] machines or economic units focused only on wages
- [D] knowledge workers requiring professional development

34. The concept of Management by Objectives (MBO) was introduced by

- [A] Henri Fayol in *General and Industrial Management* (1916)
- [B] Peter Drucker in *The Practice of Management* (1954)
- [C] Elton Mayo in Hawthorne Experiments (1930)
- [D] Frederick Taylor in *The Principles of Scientific Management* (1911)

35. A company's rule states : "All purchase orders above 1 lakh must be approved by the Finance Manager". This is an example of

- [A] strategy
- [B] objective
- [C] policy
- [D] procedure

36. Arrange the following steps of the planning process in the **correct** sequential order :

- I. Evaluating alternative courses of action
- II. Setting organizational objectives
- III. Developing planning premises (assumptions about future environment)
- IV. Selecting the best alternative
- V. Identifying alternative courses of action
- VI. Implementing the plan and following up

- [A] II → III → V → I → IV → VI
- [B] III → II → V → I → IV → VI
- [C] II → V → III → I → IV → VI
- [D] II → III → I → V → IV → VI

37. The 'parity principle' in delegation states that

- [A] all employees must be paid equally regardless of their level
- [B] authority delegated must be equal to the responsibility assigned
- [C] senior and junior managers must share equal decision-making power
- [D] delegation must be done equally to all subordinates

38. The principle of 'absoluteness of accountability' in delegation means

- [A] managers are accountable only for the tasks they personally perform
- [B] a superior who delegates authority still remains ultimately accountable for the outcomes
- [C] subordinates have absolute freedom once authority is delegated to them
- [D] the Board of Directors is absolutely accountable for all organisational activities

39. Recruitment is described as a 'positive process' because

- [A] it eliminates unsuitable candidates from the selection pool
- [B] it involves background verification to confirm positive credentials of candidates
- [C] it attracts and encourages a large number of candidates to apply for the job
- [D] it always results in a positive outcome for both employer and employee

40. According to Herzberg's two-factor theory, which of the following is a hygiene factor?

- [A] Personal growth and recognition for work done
- [B] The nature and challenge of the work itself
- [C] Achievement and advancement opportunities
- [D] Company policy, salary and interpersonal relations

41. In autocratic (authoritarian) leadership, the leader

- [A] consults all team members before making any decision
- [B] gives complete freedom to subordinates and rarely interferes in their work
- [C] shares equal decision-making power with every member of the team
- [D] makes all decisions independently without consulting subordinates

42. Grapevine is associated with which type of communication?

- [A] Formal downward communication within the organization
- [B] Written communication through official memos within the organization
- [C] Informal communication flowing through unofficial social networks within the organization
- [D] Diagonal communication between different departments within the organization

43. Which of the following statements about a Market Order vs. a Limit Order is **correct**?

- [A] A market order guarantees the best price; a limit order guarantees execution
- [B] A limit order guarantees execution; a market order guarantees price
- [C] A market order guarantees execution but not price; a limit order guarantees price but not execution
- [D] Both guarantee execution but differ only in speed

44. The primary objective of financial management is

- [A] profit maximisation — earning the highest possible profits in the shortest time
- [B] sales maximisation — increasing revenue at any cost
- [C] wealth maximisation — maximising the market value of shareholders' equity in the long-run
- [D] cost minimisation — reducing all expenses to zero

45. Working Capital is calculated as

- [A] Total Assets – Total Liabilities
- [B] Fixed Assets – Long-term Liabilities
- [C] Current Assets – Current Liabilities
- [D] Total Revenue – Total Expenses

46. Treasury Bills (T-Bills) are short-term money market instruments issued by

- [A] the Reserve Bank of India on behalf of the State Governments
- [B] large private corporations to raise short-term funds
- [C] commercial banks to raise funds from the public
- [D] the Government of India to meet its short-term borrowing requirements

47. Which of the following is an example of a secondary market in India?

- [A] A company launching its Initial Public Offering (IPO) for the first time
- [B] The Government of India issuing new Treasury Bills to banks
- [C] Bombay Stock Exchange (BSE) where existing shares are bought and sold daily
- [D] A company issuing rights shares to its existing shareholders

48. A company earns ₹10 crore profit. The Board decides to retain ₹6 crore and distributes ₹4 crore as dividends. Which statement **correctly** identifies the decisions involved?

- [A] This is purely a dividend decision — the Board is only deciding how much to pay out.
- [B] This is purely a financing decision — retained earnings are a source of internal finance.
- [C] This involves both a dividend decision and a financing decision simultaneously.
- [D] This is an investment decision because retaining profits means reinvesting them in the business.

49. 'Dematerialisation' of shares means
- [A] destroying old physical share certificates permanently
 - [B] converting physical share certificates into electronic form
 - [C] destroying old physical share certificates for short period
 - [D] listing shares on multiple stock exchanges

50. SEBI's function of conducting inquiries and audits of stock exchanges falls under which category?

- [A] Protective functions
- [B] Developmental functions
- [C] Regulatory functions
- [D] Advisory functions

51. WTO's 'Most-Favoured Nation (MFN)' principle means

- [A] a country must give special privileges to its most important trading partner
- [B] a country must extend the same trade terms it gives to its best trading partner to all WTO members equally
- [C] developing countries receive the most favourable treatment automatically
- [D] rich nations must favour poor nations in trade negotiations

52. A company has a debt-equity ratio of 2 : 1. This means

- [A] the company owns twice as many assets as it owns in debt
- [B] the company earns ₹ 2 profit for every ₹ 1 of equity invested
- [C] the company's equity is twice its debt, indicating a conservative capital structure
- [D] for every ₹ 1 of shareholders' funds, the company has borrowed ₹ 2

53. A street stallholder and an itinerant retailer are often confused. What is the key distinction?

- [A] Street stallholders sell only food items; itinerant retailers sell manufactured goods and itinerant retailers have fixed location
- [B] Both are identical — street stallholders are simply one type of itinerant retailer
- [C] Street stallholders operate from a semi-fixed location and do not move during business hours; itinerant retailers have no fixed locations and keep moving from place to place
- [D] Street stallholders are licensed traders; itinerant retailers operate illegally

54. Which of the following pairs **correctly** classifies the two main types of internal trade?

- [A] Import trade and export trade
- [B] Wholesale trade and retail trade
- [C] Bilateral trade and multilateral trade
- [D] Entrepot trade and direct trade

55. Which of the following is **not** a feature of a supermarket?

- [A] Self-service shopping
- [B] A sales assistant assigned to every customer for personalised help
- [C] Wide variety of food and household goods under one roof
- [D] Checkout counters with cashiers at the exit

56. The chambers of commerce and industry are best described as

- [A] Government regulatory bodies that control trade practices
- [B] courts that settle all commercial disputes in the country
- [C] financial institutions that provide loans to traders and industrialists
- [D] voluntary associations of business people and traders that represent, support and promote the interests of the business community

57. The entire export procedure follows a strict sequence. Which of the following sequences is **correct**?

- [A] Shipment of Goods → Receipt of Export Order → Obtaining IEC → Customs Clearance
- [B] Obtaining IEC → Receipt of Export Order → Pre-shipment Finance → Production/Procurement of Goods → Customs Clearance → Shipment → Submission of Documents to Bank → Receipt of Payment
- [C] Receipt of Export Order → Obtaining IEC → Shipment → Customs Clearance → Receipt of Payment
- [D] Customs Clearance → Shipment → Production of Goods → Receipt of Export Orders → IEC

58. Which of the following best differentiates DAGMAR from AIDA?

- [A] DAGMAR focuses on communication objectives while AIDA explains consumer response stages
- [B] DAGMAR emphasizes pricing while AIDA emphasizes distribution
- [C] DAGMAR is for sales promotion while AIDA is for advertising
- [D] DAGMAR is outdated while AIDA is modern

59. Smartphone companies continuously improving camera quality and technical specifications while ignoring changing consumer preferences, are following the

- [A] selling concept
- [B] product concept
- [C] marketing concept
- [D] societal concept

60. A new startup launches a premium water purifier targeting health-conscious urban households. They price it at ₹ 25,000 — significantly above competitors' ₹ 8,000–₹ 12,000 range. Which pricing factor best justifies this decision?

- [A] Government regulations mandated this minimum price
- [B] Competition forces the price up in the water purifier market
- [C] The company's pricing objective is to position the product as a premium, high-quality and aspirational brand
- [D] The high price is due to excessive production costs that cannot be reduced

61. The five elements of the promotion mix are

- [A] product, price, place, promotion and people
- [B] advertising, personal selling, sales promotion, public relations and direct marketing
- [C] people, radio, newspaper, internet and outdoor
- [D] personal selling, persuading, reminding, educating and entertaining

62. Public Relations (PR) differs from Advertising in which fundamental way?

- [A] PR targets only Government officials; Advertising targets consumers
- [B] PR is paid for directly by the company for each placement; Advertising is free coverage
- [C] PR involves building goodwill through earned, often unpaid media coverage and activities; Advertising is paid, controlled communication
- [D] PR is used only in times of crisis; Advertising is used for regular product promotion

63. The 7Ps of Marketing Mix extends the original 4Ps by adding three more elements that are especially important for Services Marketing. The three additional Ps are

- [A] People, Process and Physical evidence
- [B] Positioning, Packaging and Publicity
- [C] Profit, Performance and Productivity
- [D] Planning, Politics and Persuasion

64. Which of the following best describes the difference between Marketing and Selling?

- [A] Marketing is done by large companies; Selling is done by small businesses
- [B] Marketing starts with the customer's needs and works backward to create the right product; Selling starts with an existing product and tries to convince customers to buy it
- [C] Marketing only involves advertising; Selling only involves distribution
- [D] Marketing and Selling are identical activities with the same objective and approach

65. Read **Assertion (A)** and **Reason (R)** and choose the **correct** option :

Assertion (A) : During the introduction stage of the PLC, profits are usually negative or very low even if a product is being well received by consumers.

Reason (R) : The introduction stage involves high costs for research and development, production setup, heavy advertising to build awareness and distribution channel establishment.

- [A] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

66. Which of the following is the assembling manufacturing industries?

- [A] Insurance industries
- [B] Automobile industries
- [C] Tourism industries
- [D] Film industries

67. Which of the following is **not** the economic objectives of business?

- [A] Earning profits
- [B] Creation of customers
- [C] Best possible use of resources
- [D] Selection of judges

68. Consider the following two statements and choose the **correct** option :

Statement I : Innovation can be achieved by introducing new products.

Statement II : Innovation can be achieved by introducing new methods of distribution.

- [A] Both statements I and II are correct
[B] Only statement I is correct
[C] Only statement II is correct
[D] Both statements I and II are incorrect

69. How can the welfare of employees be achieved?

- [A] Quality recruitment
[B] Fair remuneration
[C] Non-payment of overtime
[D] Exclusion of women at workplace

70. Which statement is **not correct** with reference to the human objectives of business?

- [A] To provide fair remuneration to employees.
[B] To provide better working conditions to employees.
[C] To provide growth opportunities to employees.
[D] Avoidance of slums and pollution.

71. Match **List—I** (Manufacturing Industries) with **List—II** (Types of Goods Manufactured) :

List—I (Manufacturing Industries)	List—II (Types of Goods Manufactured)
(a) Consumer industries	(i) Bread, butter and cheese
(b) Intermediary industries	(ii) Chemical, steel and cement
(c) Capital goods industries	(iii) Machinery, tools and equipments
(d) Construction industries	(iv) Dams, roads and canals

Choose the **correct** answer from the options given below :

- (a) (b) (c) (d)
[A] (i) (ii) (iii) (iv)
[B] (ii) (iii) (i) (iv)
[C] (iii) (iv) (i) (ii)
[D] (i) (ii) (iv) (iii)

72. Match **List—I** (Products of Extractive Industries) with **List—II** (Example) :

List—I (Products of Extractive Industries)	List—II (Example)
(a) Cotton/Jute	(i) Textile industry
(b) Iron-ore	(ii) Steel industry
(c) Sugarcane	(iii) Sugar industry
(d) Timber from forests	(iv) Furniture industry

Choose the **correct** answer from the options given below :

- (a) (b) (c) (d)
[A] (ii) (iii) (i) (iv)
[B] (iii) (iv) (i) (ii)
[C] (i) (ii) (iv) (iii)
[D] (i) (ii) (iii) (iv)

73. Match **List—I** (Group of Society) with **List—II** (Social Responsibilities) :

List—I (Group of Society)	List—II (Social Responsibilities)
(a) Investors	(i) Fair and adequate rate of return on their capital
(b) Employees	(ii) Fair remuneration
(c) Consumers	(iii) Supply goods of right quality
(d) Government	(iv) Abating pollution

Choose the **correct** answer from the options given below :

(a)	(b)	(c)	(d)
[A] (ii)	(iii)	(i)	(iv)
[B] (i)	(ii)	(iii)	(iv)
[C] (iii)	(iv)	(i)	(ii)
[D] (i)	(ii)	(iv)	(iii)

74. Match **List—I** (Types of Industries) with **List—II** (Example of Business Activities) :

List—I (Types of Industries)	List—II (Example of Business Activities)
(a) Construction Industries	(i) Construction of buildings, roads and canals
(b) Trade Industries	(ii) Wholesale trade and retail trade
(c) Manufacturing Industries	(iii) Manufacturing of steel, cement and fertilizers
(d) Extractive Industries	(iv) Fishing and mining

Choose the **correct** answer from the options given below :

(a)	(b)	(c)	(d)
[A] (i)	(ii)	(iii)	(iv)
[B] (ii)	(iii)	(i)	(iv)
[C] (iii)	(iv)	(i)	(ii)
[D] (i)	(ii)	(iv)	(iii)

75. Match **List—I** (Types of Insurance) with **List—II** (Types of Risk) :

List—I (Types of Insurance)	List—II (Types of Risk)
(a) Life Insurance	(i) Risk of death or old age
(b) Fire Insurance	(ii) Risk of loss or damage to property due to fire
(c) Marine Insurance	(iii) Risk of loss or damage to cargo or ship
(d) General Insurance	(iv) Risks of loss of damage due to theft or burglary

Choose the **correct** answer from the options given below :

(a)	(b)	(c)	(d)
[A] (ii)	(iii)	(i)	(iv)
[B] (iii)	(iv)	(i)	(ii)
[C] (i)	(ii)	(iv)	(iii)
[D] (i)	(ii)	(iii)	(iv)

76. Which of the following is **not** a part of tertiary industries?

- [A] Banking
- [B] Insurance
- [C] Warehousing
- [D] Chemicals and fertilizers

77. Which Financial Institution is the part of Governing body of the Entrepreneurship Development Institute of India (EDII)?

- [A] IDBI Bank
- [B] HDFC Bank
- [C] SIDBI
- [D] Bandhan Bank

78. Which flagship initiative of the Government of India intended to catalyse startup culture and build a strong and inclusive ecosystem for innovation and entrepreneurship in India?

- [A] Startup India
- [B] Skill India
- [C] Make in India
- [D] Stand up India

79. Under which method of financing, the general public is invited to deposit their savings with the company?

- [A] Public deposit
- [B] Preference share
- [C] Retained earnings
- [D] American Depositary Receipts

80. Match **List—I** (Institutions) with **List—II** (Objects) :

List—I (Institutions)	List—II (Objects)
(a) IFCI	(i) Provision of medium and long-term financial assistance to industries
(b) SFCs	(ii) Provision for medium and long-term finance to small and medium-sized industries at State level
(c) ICICI	(iii) Assisting in the creation of new, and expansion and modernisation of existing enterprises in the private sector
(d) IDBI	(iv) Assisting supplementing and coordinating the financial developments of institutions in both private and public sectors

Choose the **correct** answer from the options given below :

- (a) (b) (c) (d)
- [A] (i) (ii) (iii) (iv)
- [B] (ii) (iii) (i) (iv)
- [C] (iii) (iv) (i) (ii)
- [D] (i) (ii) (iv) (iii)

81. Who said “Management is an art of knowing what to do, and seeing that it is done in the best and cheapest way”?

- [A] F. W. Taylor
- [B] Henri Fayol
- [C] Joseph Schumpeter
- [D] F. W. Ford

82. What is the acronym for SWOT analysis?

- [A] Strength, Weakness, Opportunity, Threats
- [B] Sustainability, Weakness, Opportunity, Threats
- [C] Strength, Weakness, Operation, Task
- [D] Strength, Warranty, Opportunity, Threats

83. Scalar chain is known as the

- [A] chain of command
- [B] span of control
- [C] unity of command
- [D] division of labor

84. Match **List—I** (Decision-making technique) with **List—II** (Features) :

List—I (Decision-making technique)	List—II (Features)
(a) Linear programming	(i) Allocating scarce resource to maximise benefits
(b) Probability analysis	(ii) Rational decision
(c) Break-even analysis	(iii) Reduce costs and operate profitably
(d) Capital budgeting	(iv) Best alternative among investment proposition

Choose the **correct** answer from the options given below :

- (a) (b) (c) (d)
- [A] (i) (ii) (iii) (iv)
 - [B] (ii) (iii) (i) (iv)
 - [C] (iii) (iv) (i) (ii)
 - [D] (i) (ii) (iv) (iii)

85. Which is the first step in the organizing process?

- [A] Departmentalization
- [B] Task assignment
- [C] Identification and work division
- [D] Provision of resources to members

86. Douglas McGregor's participation theory of motivation is also known as

- [A] Theory X and Theory Y
- [B] Theory A and Theory B
- [C] Theory XYZ
- [D] Theory X and Theory A

87. Which leadership style develops a vision based on identified needs and inspire and motivate their teams to work toward a common goal?

- [A] Transformational leadership
- [B] Charismatic leadership
- [C] Bureaucratic leadership
- [D] Transactional leadership

88. Match **List—I** (Leadership Styles) with **List—II** (Characteristics) :

List—I (Leadership Styles)	List—II (Characteristics)
(a) Autocratic leadership	(i) Top-down approach
(b) Transactional leadership	(ii) System of rewards and punishment
(c) Charismatic leadership	(iii) Very inspiring and motivating
(d) Bureaucratic leadership	(iv) A highly visible set of procedures and rules

Choose the **correct** answer from the options given below :

- (a) (b) (c) (d)
- [A] (ii) (iii) (i) (iv)
 - [B] (i) (ii) (iii) (iv)
 - [C] (iii) (iv) (i) (ii)
 - [D] (i) (ii) (iv) (iii)

89. Which leadership is known as participative leadership?

- [A] Democratic leadership
- [B] Coaching leadership
- [C] Bureaucratic leadership
- [D] Autocratic leadership

90. Match **List—I** (Small Retail Shops) with **List—II** (Attributes) :

List—I	List—II
(Small Retail Shops)	(Attributes)
(a) General stores	(i) FMCG products
(b) Single-line stores	(ii) Book stores
(c) Speciality stores	(iii) Ladies' garments only
(d) Second shops	(iv) Old book stores

Choose the **correct** answer from the options given below :

- | | | | |
|-----------|-------|-------|-------|
| (a) | (b) | (c) | (d) |
| [A] (ii) | (iii) | (i) | (iv) |
| [B] (i) | (ii) | (iii) | (iv) |
| [C] (iii) | (iv) | (i) | (ii) |
| [D] (i) | (ii) | (iv) | (iii) |

91. What is a large-scale retail store in which a wide variety of products are sold through separate departments under one roof?

- [A] Departmental stores
- [B] Super Bazar
- [C] Multiple shops
- [D] Mail order business

92. Consider the following two statements and choose the **correct** option :

Statement I : Multiple chain stores are owned and controlled by a single organisation.

Statement II : Multiple chain stores deal in the uniform line of products.

- [A] Both statements I and II are correct
- [B] Only statement I is correct
- [C] Only statement II is correct
- [D] Both statements I and II are incorrect

93. Which insurance protects the ships that may sink due to storm or may be captured by enemies?

- [A] General Insurance
- [B] Fire Insurance
- [C] Marine Insurance
- [D] Health Insurance

94. Match **List—I** (The evolution of Marketing Era) with **List—II** (Prevailing Attitude) :

List—I	List—II
(The evolution of Marketing Era)	(Prevailing Attitude)
(a) Production	(i) Consumers favor products that are available and highly affordable
(b) Product	(ii) Consumers favor products that offer the most quality, performance and innovative feature
(c) Sales	(iii) Consumers will buy products only if the company promotes/sells these products
(d) Marketing	(iv) The consumer is king! Find a need and fill it

Choose the **correct** answer from the options given below :

- | | | | |
|-----------|-------|-------|-------|
| (a) | (b) | (c) | (d) |
| [A] (ii) | (iii) | (i) | (iv) |
| [B] (i) | (ii) | (iii) | (iv) |
| [C] (iii) | (iv) | (i) | (ii) |
| [D] (i) | (ii) | (iv) | (iii) |

95. Match **List—I** (Elements of Marketing Mix) with **List—II** (Sub-Elements) :

List—I (Elements of Marketing Mix)	List—II (Sub-elements)
(a) Product	(i) Design, name and branding
(b) Price	(ii) Discount and bidding tactics
(c) Place	(iii) Mail, catalog and trade shows
(d) Promotion	(iv) Length and breadth of channel

Choose the **correct** answer from the options given below :

- (a) (b) (c) (d)
- [A] (ii) (iii) (i) (iv)
- [B] (i) (ii) (iii) (iv)
- [C] (iii) (iv) (i) (ii)
- [D] (i) (ii) (iv) (iii)

96. Who proposed the 4Ps of Marketing Mix?

- [A] E. Jerome McCarthy
- [B] Philip Kotler
- [C] Christopher Lovelock
- [D] Barbara Lewis

97. Match **List—I** (4Ps of Service Marketing) with **List—II** (Attributes) :

List—I (4Ps of Service Marketing)	List—II (Attributes)
(a) People	(i) Training and skills
(b) Physical Evidence	(ii) Ambience and appearance
(c) Process	(iii) Efficiency of human and non-human capitals
(d) Productivity	(iv) Quality Management and delivery process

Choose the **correct** answer from the options given below :

- (a) (b) (c) (d)
- [A] (ii) (iii) (i) (iv)
- [B] (i) (ii) (iii) (iv)
- [C] (iii) (iv) (i) (ii)
- [D] (i) (ii) (iv) (iii)

98. Which of the following is **not** a type of trade?

- [A] Wholesale trade
- [B] Retail trade
- [C] Entrepot trade
- [D] Auxiliary trade

99. Where is the office of the Director General of Foreign Trade located?

- [A] New Delhi
- [B] Kolkata
- [C] Chennai
- [D] Mumbai

100. What does DIC stand for in the context of small-scale industries?

- [A] Department of Industrial Commerce
- [B] District Industries Centre
- [C] Directorate of Industrial Credit
- [D] Division of Industrial Corporations

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1. Which of the following discoveries first contradicted Dalton's postulate that atoms are indivisible?
 - [A] Electron
 - [B] Proton
 - [C] Isotope
 - [D] Neutron

2. Which one of the following is an **incorrect** statement about isotopes?
 - [A] They have same number of protons but different numbers of neutrons
 - [B] They have same number of protons but different mass numbers
 - [C] They have same number of electrons and atomic mass
 - [D] They have same atomic number but different atomic masses

3. X-rays can be produced when
 - [A] electrons strike the cathode
 - [B] neutrons strike a metal target
 - [C] high-speed electrons strike a metal target
 - [D] protons strike the cathode

4. Which has the largest energy involved comparatively in the electron transitions?
 - [A] Pfund series
 - [B] Paschen series
 - [C] Balmer series
 - [D] Lyman series

5. Which of the following electrons in an atom will have the highest angular momentum?
 - [A] The electron with highest velocity with smallest radius of orbit
 - [B] The electron with smallest principal quantum number and smallest radius of orbit
 - [C] The electron with largest principal quantum number with smallest radius of orbit
 - [D] The electron with largest principal quantum number and largest radius of orbit

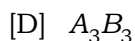
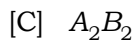
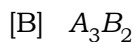
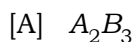
6. Choose the **correct** one about the energy of an electron in an atom.
 - [A] It has always +ve value
 - [B] It has either -ve or +ve value
 - [C] It depends on the atom
 - [D] It has zero value at infinite distance

7. The quantum number which gives the shapes of the orbitals is
 - [A] spin quantum number
 - [B] magnetic quantum number
 - [C] azimuthal quantum number
 - [D] principal quantum number

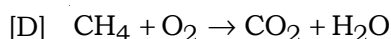
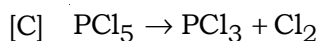
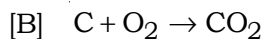
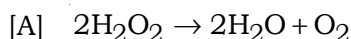
8. During the ionization of an iron atom, the loss of electrons occurs from
 - [A] $2s^2$
 - [B] $2p^6$
 - [C] $4s^2$
 - [D] $3d^6$

9. The spin quantum number arises due to the
- [A] Aufbau Principle
- [B] Pauli's Exclusion Principle
- [C] Hund's Rule
- [D] Schrodinger Equation
10. The 1st ionization enthalpy (IE_1) and 2nd ionization enthalpy (IE_2) of N and O-atoms have the relation
- [A] $IE_1(N) > IE_1(O)$ and $IE_2(N) > IE_2(O)$
- [B] $IE_1(N) = IE_1(O)$ and $IE_2(N) = IE_2(O)$
- [C] $IE_1(N) > IE_1(O)$ and $IE_2(N) < IE_2(O)$
- [D] $IE_1(N) = IE_1(O) = IE_2(N) = IE_2(O)$
11. Which factor is primarily responsible for the decrease in atomic size from left to right across a period?
- [A] Increase in effective nuclear charge
- [B] Increase in number of shells
- [C] Increase in shielding effect
- [D] Decrease in nuclear charge
12. The noble gas which forms the maximum number of compounds is
- [A] xenon
- [B] argon
- [C] krypton
- [D] neon
13. Which pair of elements has five valence electrons?
- [A] Manganese and Boron
- [B] Nitrogen and Phosphorus
- [C] Boron and Phosphorus
- [D] Nitrogen and Manganese
14. The radioactive isotope(s) of hydrogen is/are
- [A] protium
- [B] deuterium
- [C] tritium
- [D] deuterium and tritium
15. The element which undergoes sublimation is
- [A] fluorine
- [B] chlorine
- [C] bromine
- [D] iodine
16. The valency of sulphur in H_2S is
- [A] 6
- [B] 4
- [C] 2
- [D] 1

17. The atoms A and B have $+3$ and -2 oxidation states. Choose the **correct** molecular formula.



18. Which of the following reactions undergoes a disproportionation reaction?



19. Choose the **correct** one about the redox reaction.

[A] It is possible to undergo oxidation only

[B] It is possible to undergo reduction only

[C] It depends on the type of redox reaction

[D] Both oxidation and reduction always occur simultaneously

20. The conversion of glucose to fructose is an example of

[A] chain isomerization

[B] position isomerization

[C] functional isomerization

[D] geometrical isomerization

21. When 2 moles of methane undergoes a combustion reaction with excess oxygen

[A] 2 moles of CO_2 are formed

[B] 2 moles of water are formed

[C] 1 mole of CO_2 is formed

[D] 1 mole of water is formed

22. The mass of sodium hydroxide required in grams to react with 2 moles of HCl in a solution is

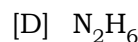
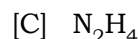
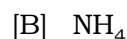
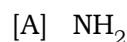
[A] 40 grams

[B] 80 grams

[C] 20 grams

[D] 60 grams

23. If the empirical formula is NH_2 and the molecular mass is 32, the molecular formula is



24. The total amount of nitrogen in two gram-molecular masses of ammonia is

[A] 1 mole of nitrogen atoms

[B] 14 grams of N-atoms

[C] Avogadro's number of atoms

[D] 2 gram-atomic mass of nitrogen

25. Which of the following is an endothermic process?

- [A] Combustion of fuel
- [B] Reaction of methane and oxygen
- [C] Respiration
- [D] Photosynthesis

26. Choose the **incorrect** one about photochemical reaction.

- [A] It requires photons
- [B] It occurs usually at lower temperature
- [C] It requires light energy for initiation
- [D] It requires thermal energy

27. In the electrolysis of an aqueous sodium chloride solution, the correct one is

- [A] the formation of NaOH occurs in the solution
- [B] chlorine gas is released at the cathode
- [C] hydrogen gas is released at the anode
- [D] sodium is deposited at the cathode

28. During electrolysis of acidified water, the gas released at the cathode is

- [A] hydrogen
- [B] oxygen
- [C] SO_2 gas due to added dilute H_2SO_4
- [D] H_2S

29. Which molecule is **not** applicable to VSEPR theory of molecular shapes?

- [A] Carbon dioxide molecule
- [B] Ammonia molecule
- [C] Carbon tetrachloride molecule
- [D] Nitrogen molecule

30. Conjugate base of a strong acid is

- [A] a weak base
- [B] a strong base
- [C] a weak acid
- [D] neutral

31. When the pH of a solution changes from 3 to 6, hydrogen ion concentration

- [A] increases 1000 times
- [B] decreases 1000 times
- [C] increases 3 times
- [D] decreases 3 times

32. Which of the following is a weak electrolyte?

- [A] KCl
- [B] NH_4Cl
- [C] NaOH
- [D] NH_4OH

- 33.** Ostwald's dilution law is applicable to
- [A] strong electrolytes
 - [B] weak electrolytes
 - [C] non-electrolytes
 - [D] strong as well as weak electrolytes
- 34.** In the reaction $\text{HCl} + \text{NH}_3 \rightarrow \text{NH}_4\text{Cl}$, the acid-base concept is/are applicable for
- [A] Arrhenius only
 - [B] Bronsted-Lowry only
 - [C] Lewis only
 - [D] both Lewis and Bronsted-Lowry
- 35.** Which relation is **not correct** for pK_w ?
- [A] $pK_w = [\text{pH}][\text{pOH}]$
 - [B] $pK_w = -\log K_w$
 - [C] $pK_w = 14$
 - [D] $pK_w = -\log[\text{H}^+] - \log[\text{OH}^-]$
- 36.** Which of the following is **correct** about pH in our day-to-day life affairs?
- [A] pH of normal rainwater is slightly acidic due to dissolved CO_2
 - [B] Gastric juice contains sulphuric acids
 - [C] Normal blood pH is slightly below 7
 - [D] Tooth decay is due to pH around 6.5
- 37.** The salt of a weak acid and a strong base has a pH
- [A] below 7
 - [B] above 7
 - [C] equal to 7
 - [D] Depends on pK_a and pK_b
- 38.** Which one **doesn't** involve the use of NaOH?
- [A] Saponification of fats and oils
 - [B] Bayer process
 - [C] Contact process
 - [D] Paper industry
- 39.** Which one can be used in a fire extinguisher?
- [A] Bleaching powder
 - [B] Washing soda
 - [C] Baking soda
 - [D] Plaster of Paris
- 40.** Which can represent the chemical formula of Plaster of Paris?
- [A] $\text{CaSO}_4 \cdot 3\text{H}_2\text{O}$
 - [B] $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
 - [C] $\frac{1}{2}\text{CaSO}_4 \cdot \text{H}_2\text{O}$
 - [D] $2\text{CaSO}_4 \cdot \text{H}_2\text{O}$

41. Choose the **correct** one about the electrons in a multi-electron atom and their sets of quantum numbers.

- [A] All will have different sets of quantum numbers
- [B] Two can have same sets of quantum numbers
- [C] More than two can have same sets of quantum numbers
- [D] It depends on the atom whether electrons can have the same sets or not

42. Choose the largest atom.

- [A] B
- [B] C
- [C] N
- [D] O

43. Which atom was predicted as 'Eka-Silicon' by Mendeleev?

- [A] Gallium
- [B] Germanium
- [C] Titanium
- [D] Tin

44. How many lone pair(s) of electrons is/are there in an ammonia molecule?

- [A] 0
- [B] 1
- [C] 2
- [D] 3

45. According to Bronsted-Lowry concept of acid-bases

- [A] acid donates H^+ and base donates OH^-
- [B] acid accepts H^+ and base accepts OH^-
- [C] acid donates H^+ and base accepts H^+
- [D] acid accepts $-e$ and base donates $-e$

46. Choose the element having the maximum number of different oxidation states.

- [A] Chromium
- [B] Cobalt
- [C] Iron
- [D] Manganese

47. Which contains the maximum number of radioactive elements in the periodic table?

- [A] *p*-block
- [B] *d*-block
- [C] 4*f*-series
- [D] 5*f*-series

48. Choose the compound having an electrovalent bond.

- [A] NH_4Cl
- [B] CCl_4
- [C] $SOCl_2$
- [D] BH_3

49. Which chemical is known as King of Chemicals?

- [A] Hydrochloric acid
- [B] Nitric acid
- [C] Sulphuric acid
- [D] Phosphoric acid

50. Which pair is an **incorrect** one?

- [A] Citric acid—lemon
- [B] Malic acid—apple
- [C] Ascorbic acid—vitamin C
- [D] Acetic acid—tamarind

51. Which metal is the most reactive metal?

- [A] Sodium
- [B] Potassium
- [C] Magnesium
- [D] Zinc

52. In a reaction, $A + BSO_4 \rightarrow ASO_4 + B$,

- [A] A is more reactive
- [B] A is less reactive
- [C] B is more reactive
- [D] A and B are in +1 oxidation state

53. Which metal oxide is amphoteric in nature?

- [A] MgO
- [B] Na₂O
- [C] Al₂O₃
- [D] CaO

54. Which non-metal exists as a liquid at room temperature?

- [A] Sulphur
- [B] Iodine
- [C] Phosphorous
- [D] Bromine

55. Which metal is used for the galvanization of iron?

- [A] Zn
- [B] Al
- [C] Cu
- [D] Ag

56. The order of decreasing reactivity is

- [A] Zn > Fe > Cu
- [B] Cu > Zn > Fe
- [C] Fe > Zn > Cu
- [D] Cu > Fe > Zn

57. Which of the following is **not** the property of an electrovalent compound?

- [A] It has high melting and boiling point
- [B] It exists in crystalline state
- [C] It conducts electricity at solid state
- [D] It is composed of ions rather than molecules

58. Which ores are, in general, subjected to roasting?

- [A] Carbonate ores
- [B] Sulphide ores
- [C] Oxide ores
- [D] Native ores

59. During calcination,

- [A] sulphides are converted into oxides
- [B] carbonates are converted into oxides
- [C] oxides are converted into sulphides
- [D] metals are refined

60. The substance added to remove gangue during smelting is called

- [A] native ore
- [B] catalyst
- [C] slag
- [D] flux

61. Slag is formed by the reaction of

- [A] ore and gangue
- [B] metal and water
- [C] metal and oxygen
- [D] flux and gangue

62. Which metal is extracted by electrolytic reduction?

- [A] Lead
- [B] Copper
- [C] Aluminium
- [D] Iron

63. The easiest metallurgical process is involved for the metal

- [A] copper
- [B] iron
- [C] silver
- [D] aluminium

64. Which process is used for purification of copper?

- [A] Froth flotation
- [B] Electrolytic refining
- [C] Roasting
- [D] Calcination

65. Oxygen is industrially prepared by

- [A] fractional distillation of liquefied air
- [B] Contact process
- [C] Frasch process
- [D] Solvay process

66. Silicon is extracted by reduction of

- [A] SiO_2
- [B] SiCl_4
- [C] SiH_4
- [D] SiS_2

67. Which acid attacks silica and glass?

- [A] HCl
- [B] HNO_3
- [C] HF
- [D] H_2SO_4

68. White phosphorus is stored under water because

- [A] it reacts vigorously with nitrogen
- [B] it reacts vigorously with CO_2
- [C] it is soluble in water
- [D] it reacts vigorously with air

69. Which allotrope of phosphorus is used in safety matches?

- [A] White phosphorous
- [B] Mixed phosphorous
- [C] Red phosphorous
- [D] Black phosphorous

70. Sulphur is commercially extracted by

- [A] Hall process
- [B] Frasch process
- [C] Solvay process
- [D] Bayer process

71. Which allotrope of sulphur is stable at room temperature?

- [A] Rhombic sulphur
- [B] Plastic sulphur
- [C] Monoclinic sulphur
- [D] Colloidal sulphur

72. Which property is **not** directly related with catenation of carbon?

- [A] Variable C-chain length
- [B] Formation of cyclic compounds
- [C] $\text{C}-\text{C}$ strong and stable bonds
- [D] Covalent bonding

73. Why are single bond carbons called saturated?

- [A] No more new bonds can be added
- [B] They can change into multiple bonds
- [C] They are not soluble in water
- [D] They are in gaseous state

74. Which of the following is **not** a member of the alkane homologous series?

- [A] CH_4
- [B] C_2H_6
- [C] C_3H_8
- [D] C_3H_6

75. The general formula of alkyl radicals is

- [A] $\text{C}_n\text{H}_{2n-2}$
- [B] C_nH_{2n}
- [C] $\text{C}_n\text{H}_{2n+1}$
- [D] $\text{C}_n\text{H}_{2n+2}$

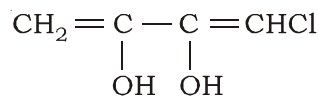
76. The successive alkyl radicals in the homologous series differ by

- [A] CH units
- [B] CH_2 units
- [C] CH_3 units
- [D] H_2 units

77. Choose the mismatched pair of common name-IUPAC name.

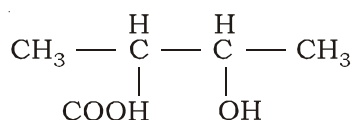
- [A] Acetone—Propanone
- [B] Carbon tetrachloride—Tetrachloromethane
- [C] Acetic acid—Ethanoic acid
- [D] Acetaldehyde—Methanal

78. The IUPAC name of the following structure is



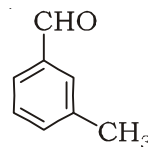
- [A] 1-chloro-2,3-dihydroxy-2,3-butene
- [B] 1-chloro-but-1,3-diene-2,3-diol
- [C] 4-chloro-2,3-dihydroxy-2,3-butene
- [D] 1-chloro-but-1,3-ene-2,3-diol

79. The IUPAC name of the chemical structure is



- [A] 3-hydroxy-2-methylbutan-2-oic acid
- [B] 3-hydroxy-2-methylbutan-1-oic acid
- [C] 3-methyl-2-hydroxybutan-4-oic acid
- [D] 2-carboxy-3-hydroxybutane

80. The IUPAC name of the chemical structure is



- [A] 3-methylbenzaldehyde
- [B] 3-formyltoluene
- [C] 3-formyl-1-methylbenzene
- [D] 3-methylbenzen-1-al

81. How many structural isomers are there for pentene molecule?
- [A] 4
[B] 6
[C] 5
[D] 8
82. What are the expected chemical products when ethanol undergoes combustion?
- [A] CO_2 and C-particles
[B] Carbon particles
[C] CO_2 and water
[D] Methane and water
83. What will be the likely product when alcohols undergo oxidation?
- [A] Alkanes are formed
[B] Aldehydes or ketones
[C] CO_2 and water
[D] Aromatic compounds are formed
84. Which of the following is **incorrect** about methanol and ethanol?
- [A] Both are used as solvents
[B] Both are freely soluble in water
[C] Both are used as fuel
[D] Ethanol is more toxic than methanol
85. Nylon is a
- [A] biopolymer
[B] copolymer
[C] natural polymer
[D] synthetic polymer
86. Natural rubber is a polymer of
- [A] ethene
[B] propene
[C] styrene
[D] isoprene
87. Vulcanization of rubber involves heating rubber with
- [A] sulfur
[B] chlorine
[C] nitrogen
[D] oxygen
88. Polyester is formed by condensation between
- [A] alcohol and acid
[B] alkene and alkane
[C] amine and alcohol
[D] acid and amine
89. Soap is generally the sodium or potassium salt of
- [A] mineral acids
[B] carboxylic acids
[C] fatty acids
[D] amino acids
90. Which chemical is commonly used in soap manufacture?
- [A] HCl
[B] NH_4OH
[C] HNO_3
[D] NaOH

91. Detergents work effectively in

- [A] soft water only
- [B] both soft and hard water
- [C] hard water only
- [D] distilled water only

92. Which of the following is an advantage of detergents over soaps?

- [A] Cheaper
- [B] Natural origin
- [C] Work in hard water
- [D] Produce more scum

93. Which of the following is **not** a fossil fuel?

- [A] Hydrogen
- [B] Natural Gas
- [C] Coal
- [D] Petroleum

94. Natural gas consists mainly of

- [A] ethane
- [B] methane
- [C] butane
- [D] propane

95. Which coal is commonly used in thermal power plants?

- [A] Anthracite
- [B] Lignite
- [C] Peat
- [D] Bituminous

96. Which fuel produces the least air pollution?

- [A] Coal
- [B] Natural Gas
- [C] Wood
- [D] Coke

97. Which fuel has the highest calorific value among the following?

- [A] Wood
- [B] Charcoal
- [C] Hydrogen
- [D] Coal

98. Water extinguishes fire because

- [A] it reacts with oxygen
- [B] it burns itself
- [C] it increases ignition temperature
- [D] it lowers the temperature below ignition temperature

99. An ideal fuel should have

- [A] moderate ignition temperature
- [B] extremely high ignition temperature
- [C] zero ignition temperature
- [D] high ignition temperature

100. Which of the following is closest to an ideal fuel?

- [A] Wood
- [B] Coal
- [C] Peat
- [D] Natural Gas

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1. The central problem of Economics arises due to
 - [A] abundance of resources
 - [B] scarcity of resources
 - [C] equal income distribution
 - [D] central planning
2. Which branch of Economics studies aggregate employment and national income?
 - [A] Welfare Economics
 - [B] Managerial Economics
 - [C] Microeconomics
 - [D] Macroeconomics
3. The Production Possibility Curve (PPC) is based on the assumption of
 - [A] unlimited resources
 - [B] constant technology
 - [C] zero opportunity cost
 - [D] absence of scarcity
4. The concept of 'Invisible hand' is associated with
 - [A] John Maynard Keynes
 - [B] Karl Marx
 - [C] Adam Smith
 - [D] Pigou
5. 'What ought to be' statements in economics belong to
 - [A] welfare economics
 - [B] positive economics
 - [C] normative economics
 - [D] descriptive statistics
6. What causes Production Possibility Curve (PPC) to shift inwards?
 - [A] Unemployment
 - [B] Inflation
 - [C] Technological advancement
 - [D] Resource depletion
7. If resources are shifted from production of good X to production of good Y, then sacrificed output of good X measures
 - [A] explicit cost
 - [B] consumer surplus
 - [C] opportunity cost
 - [D] marginal cost
8. Which of the following is **not** a basic economic activity?
 - [A] Consumption
 - [B] Migration
 - [C] Distribution
 - [D] Production
9. Economic efficiency means
 - [A] equal income distribution
 - [B] minimum utilization of resources
 - [C] maximum output from given resources
 - [D] zero unemployment
10. Which of the following statements belongs to positive economics?
 - [A] Inequality should be reduced
 - [B] Food subsidies ought to be decreased
 - [C] Unemployment increased by 5% last year
 - [D] Tax rates are too low

11. What is the difference between human resource and human capital?

- [A] Gender composition
- [B] Age
- [C] Size
- [D] Quality and productivity

12. Which indicator(s) is/are currently used to measure the 'knowledge' dimension of HDI?

- [A] Adult Literacy Rate and Primary Gross Enrolment Ratio
- [B] Mean Years of Schooling and Expected Years of Schooling
- [C] Total public expenditure on higher education as a percentage of GDP
- [D] The proportion of STEM graduates in the total workforce

13. Workforce Participation Rate (WPR) is mathematically calculated as the

- [A] percentage of the total labour force that is currently unemployed
- [B] ratio of the total number of employed persons to the total population, multiplied by 100
- [C] proportion of the population aged 15-59 that is actively looking for a job
- [D] total number of hours worked by an average labourer in a week

14. The term Literacy Rate, in the Indian Census refers to the percentage of the population that can read and write with understanding in any language, is calculated for which age group?

- [A] All individuals from birth onward
- [B] Population aged 5 years and above
- [C] Population aged 7 years and above
- [D] Population explicitly between the ages of 15 and 49

15. The NEP 2020 aims to increase higher education GER to

- [A] 30% by 2030
- [B] 40% by 2032
- [C] 50% by 2035
- [D] 60% by 2047

16. If a country achieves a 10 percentage increase in its Income Index but suffers an equal percentage drop in its Life Expectancy Index, the overall HDI will

- [A] remain unchanged for any absolute base value of the Education Index
- [B] decrease
- [C] increase
- [D] shift unpredictably depending on the initial absolute base value of the Education Index

17. According to the Mincerian Wage Equation, the economic return to human capital is evaluated by modelling an individual's log-earnings as a function of

- [A] the physical capital stock of the employing firm and current consumer price index inflation
- [B] years of formal schooling and a quadratic function of labour market experience
- [C] the ratio of public education expenditure to regional gross domestic product
- [D] the inverse of the national workforce participation rate

18. The child sex ratio in India as per Census 2011 was

- [A] 110 males per 100 females
- [B] 103.5 males per 100 females
- [C] 104.5 males per 100 females
- [D] 108.8 males per 100 females

19. Which of the following best defines the shape of India's Female Labour Force Participation Rate (FLFPR) with respect to female literacy?

- [A] Inverse U-shape
- [B] U-shape
- [C] Upward sloping
- [D] Rectangular hyperbola

20. The Net Reproduction Rate (NRR) is best defined as

- [A] the total number of live births per 1000 individuals in the population during a specific calendar year
- [B] the average number of children born alive to a woman during her entire reproductive lifetime
- [C] the average number of daughters that a woman would give birth to during her lifetime who survive to the reproductive age
- [D] the mathematical ratio of total births to total deaths within a closed demographic cohort

21. What is the maximum number of days of guaranteed wage employment provided per fiscal year to eligible rural households under Viksit Bharat - Guarantee for Rozgar and Aajeevika Mission (Gramin) (VB-G RAM G)?

- [A] 100 days
- [B] 150 days
- [C] 120 days
- [D] 125 days

22. Gini coefficient measures

- [A] employment rate
- [B] inflation
- [C] income inequality
- [D] fiscal deficit

23. The Current Weekly Status (CWS) approach measures a person as employed if they worked for

- [A] at least 8 hours every single day during the entire preceding week
- [B] at least 1 hour on any one day during the reference period of the last 7 days
- [C] exactly 40 hours within a fixed 30-day retrospective consumption window
- [D] at least 183 days over the preceding 365 days

24. The closer the Lorenz curve lies to the 45° line, the

- [A] higher the value of the Gini coefficient
- [B] higher the level of income inequality in the economy
- [C] lower the level of income inequality in the economy
- [D] lower the total national income of the country

25. Which institution releases multidimensional poverty estimates globally?

- [A] OECD
- [B] NITI Aayog
- [C] UNDP and OPHI
- [D] World Bank

26. Based on the recent Economic Survey data using the revised line, what is India's estimated lower-middle-income poverty rate for the recent reference period?

- [A] 5.3%
- [B] 11.2%
- [C] 23.9%
- [D] 34.1%

27. Which of the following situations best represents disguised unemployment?
- [A] A worker unwilling to work at prevailing wages
 - [B] Workers producing zero marginal product despite being employed
 - [C] Temporary unemployment during seasonal changes
 - [D] Unemployment caused by technological change
28. One major criticism of MGNREGA is that while it supports rural incomes, it may **not** always
- [A] create durable productive assets
 - [B] increase rural demand
 - [C] support consumption smoothing
 - [D] reduce food consumption
29. According to the Tendulkar Committee estimates (2009-10), a person spending less than approximately
- [A] ₹ 22 per day in rural areas and ₹ 28 per day in urban areas was considered poor
 - [B] ₹ 15 per day in rural areas and ₹ 20 per day in urban areas was considered poor
 - [C] ₹ 32 per day in rural areas and ₹ 47 per day in urban areas was considered poor
 - [D] ₹ 50 per day in both rural and urban areas was considered poor
30. India's National Education Policy (NEP) 2020 reiterated the long-standing target of public expenditure on education at approximately
- [A] 4% of GDP
 - [B] 6% of GDP
 - [C] 10% of GDP
 - [D] 8% of GDP
31. The introduction of High Yielding Variety (HYV) seeds during the Green Revolution in India was most closely associated with the work of
- [A] Verghese Kurien
 - [B] M. Visvesvaraya
 - [C] Norman Borlaug
 - [D] Amartya Sen
32. Which of the following best describes the concept of 'price scissors' in development economics?
- [A] Simultaneous fall in prices of agricultural and industrial goods
 - [B] Rising agricultural prices relative to industrial prices benefiting farmers
 - [C] Industrial prices rising faster than agricultural prices, worsening terms of trade for agriculture
 - [D] Government fixing equal prices for industrial and agricultural products
33. 'Apna Khet Apna Kaam' is a scheme associated primarily with
- [A] promotion of organic farming in Punjab
 - [B] distribution of free agricultural land to marginal farmers
 - [C] crop insurance against natural disasters
 - [D] providing financial assistance for on-farm water conservation and irrigation works
34. Which of the following States is the largest producer of wheat in India?
- [A] Punjab
 - [B] Haryana
 - [C] Uttar Pradesh
 - [D] Madhya Pradesh

- 35.** Which of the following best describes intensive cultivation in agriculture?
- [A] Cultivation using large land area with low input use per hectare
 - [B] Cultivation with high use of inputs on limited land
 - [C] Cultivation dependent entirely on monsoon rainfall
 - [D] Cultivation involving shifting agriculture and fallowing
- 36.** Minimum Support Price is announced by
- [A] FAO
 - [B] CACP
 - [C] RBI
 - [D] Ministry of Finance
- 37.** Which of the following features of the 'One Nation One Ration Card' system most directly distinguishes it from the earlier Public Distribution System framework?
- [A] Centralised procurement of food grains by the Union Government
 - [B] Interoperability of ration cards through electronic point of sale devices
 - [C] Universal distribution of food grains without beneficiary identification
 - [D] Replacement of subsidised grains with nutritional vouchers
- 38.** Which of the following indicators is most appropriate for identifying chronic nutritional deprivation among children?
- [A] Stunting
 - [B] Wasting
 - [C] Underweight
 - [D] BMI fluctuation
- 39.** According to the Global Hunger Index 2025, India's hunger situation was classified under which category?
- [A] Moderate
 - [B] Serious
 - [C] Alarming
 - [D] Extremely alarming
- 40.** The PM POSHAN Scheme primarily attempts to improve
- [A] school attendance and child nutrition simultaneously
 - [B] capital formation in agriculture
 - [C] export competitiveness of food grains
 - [D] digital literacy among rural youth
- 41.** Which of the following functions is **not** performed by NITI Aayog?
- [A] Policy advocacy and strategic planning
 - [B] Promoting innovation and entrepreneurship
 - [C] Direct allocation of plan funds to states
 - [D] Monitoring development programmes
- 42.** According to Karl Marx, a rise in the 'organic composition of capital' implies
- [A] increase in variable capital relative to constant capital
 - [B] increase in constant capital relative to variable capital
 - [C] equal growth of wages and profits
 - [D] decline in mechanisation of production
- 43.** Which Five-Year Plan in India is often referred to as the 'Gadgil Yojana' because of its emphasis on growth with stability and self-reliance?
- [A] Second Five-Year Plan
 - [B] Sixth Five-Year Plan
 - [C] Fourth Five-Year Plan
 - [D] Seventh Five-Year Plan

44. Which of the following was the principal objective of the First Five-Year Plan?
- [A] Development of agriculture and irrigation
 - [B] Rapid industrialisation (Mahalanobis plan)
 - [C] Expansion of service sector exports
 - [D] Privatisation of public sector enterprises
45. NITI Aayog replaced the Planning Commission and came into existence on
- [A] 15th August, 2015
 - [B] 1st January, 2015
 - [C] 26th January, 2015
 - [D] 2nd October, 2015
46. *Capital in the Twenty-First Century* is authored by
- [A] Joseph Stiglitz
 - [B] Thomas Piketty
 - [C] Amartya Sen
 - [D] Paul Robin Krugman
47. The term 'laissez-faire' is associated with
- [A] socialism
 - [B] market freedom
 - [C] State control
 - [D] protectionism
48. Which of the following is **not** generally considered a primary objective of taxation in public finance?
- [A] Revenue collection for the Government
 - [B] Redistribution of income and wealth
 - [C] Reallocation of resources to correct market failures
 - [D] Direct provision of goods and services to citizens
49. Which of the following best describes club goods?
- [A] Rivalry and excludability
 - [B] Non-rivalry and non-excludability
 - [C] Excludability and non-rivalry
 - [D] Rivalry and non-excludability
50. Which of the following is **not** generally regarded as a cause of market failure?
- [A] Presence of external costs and benefits not reflected in market prices
 - [B] Imperfect competition resulting in market power
 - [C] Asymmetric information between buyers and sellers
 - [D] Complete information and perfectly competitive markets
51. Which component constitutes the largest share of India's foreign exchange reserves?
- [A] Gold Holdings
 - [B] Special Drawing Rights (SDRs)
 - [C] Foreign Currency Assets (FCAs)
 - [D] Reserve Tranche Position in IMF
52. India adopted the Sustainable Development Goals (SDGs) as part of the UN's 2030 Agenda in
- [A] 2012
 - [B] 2014
 - [C] 2015
 - [D] 2016
53. The inverted U-shaped relationship between environmental degradation and per capita income is represented by the
- [A] Kuznets Curve
 - [B] Environmental Kuznets Curve
 - [C] Green GDP Curve
 - [D] Ecological Footprint Curve

54. Which of the following sequences most accurately reflects the demographic changes accompanying long-term economic development?

- [A] High birth rate and high death rate
→ Low birth rate and high death rate
→ Low birth rate and low death rate
- [B] High birth rate and high death rate
→ High birth rate and low death rate
→ Low birth rate and low death rate
- [C] High birth rate and low death rate
→ Low birth rate and high death rate
→ Low birth rate and low death rate
- [D] Low birth rate and high death rate
→ High birth rate and low death rate
→ Low birth rate and low death rate

55. In an economy operating close to full employment, economic growth is accompanied by

- [A] deflation
- [B] inflation
- [C] stagflation
- [D] falling aggregate demand

56. Which of the following is **not** included in the estimation of GDP?

- I. Production and income generated in the underground economy
 - II. Unpaid household services performed within the family
 - III. Environmental degradation caused by production activities
 - IV. Purchase of a newly produced machine by a firm
- [A] I and II only
 - [B] I, II and III only
 - [C] II, III and IV only
 - [D] I, II, III and IV

57. The concept of the Human Development Index (HDI) was primarily developed by

- [A] Mahbub ul Haq
- [B] Paul Samuelson
- [C] Gunnar Myrdal
- [D] Jagdish Bhagwati

58. Employment elasticity of output measures

- [A] the percentage change in output resulting from a 1% change in employment
- [B] the percentage change in employment associated with a 1% change in output
- [C] the ratio of labour force to total population
- [D] the responsiveness of wages to changes in employment

59. *Development as Freedom* was written by

- [A] Mahbub ul Haq
- [B] Jean Dreze
- [C] Amartya Sen
- [D] Prabhat Patnaik

60. Which of the following characteristics best describes Sovereign Green Bonds?

- I. Issued by the Government and backed by its sovereign guarantee
 - II. Proceeds are earmarked exclusively for environmentally sustainable projects
 - III. Can be used to finance renewable energy, clean transport and climate-resilient infrastructure
 - IV. Issued only by multilateral development banks
- [A] I and II only
 - [B] I, II and III only
 - [C] II, III and IV only
 - [D] I, II, III and IV

- 61.** The Mission LiFE (Lifestyle for Environment) initiative launched by India emphasizes
- [A] behavioural changes promoting sustainable consumption
 - [B] large-scale afforestation by Government agencies
 - [C] privatization of natural resources
 - [D] controlling expansion of mining activities
- 62.** Which SDG specifically relates to climate action?
- [A] SDG-5
 - [B] SDG-7
 - [C] SDG-13
 - [D] SDG-16
- 63.** Immiserizing growth is most likely to occur when export-led growth results in
- [A] a fall in export volumes and a rise in export prices
 - [B] a rise in export volumes and an improvement in terms of trade
 - [C] a rise in export volumes and a sharp deterioration in terms of trade
 - [D] a decline in import demand and stable terms of trade
- 64.** Which of the following platforms was launched by the Government of India to create a national database of unorganised workers?
- [A] PM Gati Shakti Portal
 - [B] e-Shram Portal
 - [C] Udyam Portal
 - [D] National Career Service Portal

- 65.** Which of the following enterprises would qualify as a Small Enterprise under the current MSME definition?
- [A] Investment $\leq$ ₹ 25 crore; Turnover $\leq$ ₹ 100 crore
 - [B] Investment $\leq$ ₹ 30 crore; Turnover $\leq$ ₹ 80 crore
 - [C] Investment $\leq$ ₹ 20 crore; Turnover $\leq$ ₹ 120 crore
 - [D] Investment $\geq$ ₹ 130 crore; Turnover $\geq$ ₹ 400 crore
- 66.** Which of the following programmes focused on the holistic empowerment of women through community participation, access to credit, awareness generation and Self-Help Groups?
- [A] Swayam Siddha
 - [B] Kishori Shakti Yojana
 - [C] Sukanya Samriddhi Yojana
 - [D] Rashtriya Mahila Kosh
- 67.** The Soil Health Card Scheme seeks to address which of the following agricultural challenges?
- [A] Fragmentation of landholdings
 - [B] Imbalanced use of fertilizers
 - [C] Inadequate irrigation coverage
 - [D] Agricultural price volatility
- 68.** According to recent estimates released by MoSPI, the manufacturing sector contributes approximately what share of India's Gross Value Added (GVA)?
- [A] 8%
 - [B] 13-17%
 - [C] 22-25%
 - [D] 28-30%

69. Consider the following statements regarding e-NAM :

- I. It facilitates online trading of agricultural commodities.
- II. It aims to create a unified national market for agricultural produce.
- III. It is implemented by the Food Corporation of India.

Which of the above statements are **correct**?

- [A] I and II only
- [B] I and III only
- [C] II and III only
- [D] I, II and III

70. Which Government scheme specifically supports micro-enterprises through collateral-free loans?

- [A] PM-KISAN
- [B] PMFBY
- [C] PMEGP
- [D] MGNREGA

71. Which Ministry is associated with the national implementation of the One District One Product (ODOP) initiative?

- [A] Ministry of Commerce and Industry
- [B] Ministry of Agriculture and Farmers Welfare
- [C] Ministry of Rural Development
- [D] Ministry of Panchayati Raj

72. Consider the following statements regarding disinvestment in India :

- I. Disinvestment necessarily results in the Government losing majority ownership in a PSU.
- II. Strategic disinvestment may involve transfer of management control to a private entity.
- III. Disinvestment receipts are treated as capital receipts in the Union Budget.

Which of the statements given above is/are **correct**?

- [A] II and III only
- [B] I and II only
- [C] III only
- [D] I, II and III

73. A multinational automobile company establishes a completely new manufacturing plant on previously unused land in India. This is an example of

- [A] Portfolio Investment
- [B] Brownfield Foreign Direct Investment
- [C] Greenfield Foreign Direct Investment
- [D] Strategic Disinvestment

74. The Digital Rupee differs from bank deposits because the former is a

- [A] liability of a Commercial Bank
- [B] liability of the Central Government
- [C] liability of the Reserve Bank of India
- [D] liability of the depositor

75. Which country records the highest volume of UPI (Unified Payments Interface) transactions in the world?

- [A] China
- [B] United States
- [C] India
- [D] Singapore

76. Suppose people hold only checkable deposits. If the required reserve ratio is 20%, the money multiplier will be

- [A] 2
- [B] 4
- [C] 5
- [D] 10

77. The primary objective of India's Flexible Inflation Targeting framework is to maintain CPI inflation at

- [A] $2\% \pm 1\%$
- [B] $4\% \pm 2\%$
- [C] $5\% \pm 2\%$
- [D] $6\% \pm 2\%$

78. A major recent trend in India's fiscal policy has been

- [A] ensuring balanced budget every year
- [B] elimination of increased public debt on economy
- [C] increasing reliance on revenue expenditure and subsidies
- [D] emphasis on capital expenditure to crowd in private investment

79. What has been the recent trend in RBI's monetary policy stance?

- [A] Persistent monetary tightening through continuous repo rate hikes
- [B] Shift from inflation control to exchange rate targeting
- [C] Gradual easing/neutralization after a period of anti-inflation tightening
- [D] Adoption of a fixed exchange rate regime

80. Which of the following best characterizes exchange rate overshooting?

- [A] Short-run exchange rate adjustment is smaller than the eventual long-run adjustment
- [B] Short-run exchange rate adjustment equals the eventual long-run adjustment
- [C] Short-run exchange rate adjustment exceeds the eventual long-run adjustment
- [D] Long-run exchange rate adjustment exceeds the short-run adjustment because financial markets are sticky

81. The J-Curve effect refers to the tendency of a country's trade balance to

- [A] improve immediately after a currency depreciation and then deteriorate gradually
- [B] deteriorate initially after a currency depreciation and improve later as quantities adjust
- [C] remain unchanged after a currency depreciation because exports and imports move proportionately
- [D] improve continuously after a currency appreciation

82. Which of the following is most commonly interpreted as a signal of an inverted yield curve?

- [A] Expectations of higher inflation and rapid economic expansion
- [B] Expectations of future economic slowdown and lower interest rates
- [C] Rising Government borrowing requirements
- [D] Persistent balance of payments surplus

- 83.** As per the Union Budget 2026-27, the Central Government has targeted the fiscal deficit at approximately
- [A] 3.8% of GDP
 - [B] 4.3% of GDP
 - [C] 4.1% of GDP
 - [D] 4.8% of GDP
- 84.** Which of the following countries has one of the highest public debt-to-GDP ratios in the world currently?
- [A] Japan
 - [B] United States
 - [C] China
 - [D] India
- 85.** Which of the following components is **not** a part of the JAM Trinity?
- [A] Unified Payments Interface (UPI)
 - [B] Aadhaar
 - [C] Mobile connectivity
 - [D] Pradhan Mantri Jan Dhan Yojana
- 86.** According to the Impossible Trinity, if a country chooses a fixed exchange rate and free capital mobility, it must give up
- [A] fiscal policy autonomy
 - [B] trade openness
 - [C] current account convertibility
 - [D] monetary policy autonomy
- 87.** When the Reserve Bank of India sells US dollars from its foreign exchange reserves to limit excessive depreciation of the rupee, it is engaging in
- [A] currency board arrangement
 - [B] fixed exchange rate regime
 - [C] managed floating
 - [D] dollarization
- 88.** According to the Code on Social Security 2020, which of the following categories are explicitly recognized?
- I. Gig workers
 - II. Platform workers
 - III. Unorganized workers
- [A] I and II only
 - [B] II and III only
 - [C] I and III only
 - [D] I, II and III
- 89.** India's commitment to achieve 'Net Zero' emissions is targeted for the year
- [A] 2030
 - [B] 2047
 - [C] 2050
 - [D] 2070
- 90.** The decision to establish a Loss and Damage Fund was formally adopted at
- [A] Paris Agreement
 - [B] Glasgow Climate Pact
 - [C] United Nations Climate Change Conference (COP27)
 - [D] United Nations Climate Change Conference (COP28)
- 91.** The rapid spread of the 2008 Global Financial Crisis across countries is often viewed as evidence of
- [A] economic autarky
 - [B] import substitution
 - [C] trade protectionism
 - [D] global economic integration
- 92.** The immediate post-pandemic economic recovery where different sections of an economy recover at drastically different rates, times or directions is mainly termed as
- [A] V-shaped recovery
 - [B] K-shaped recovery
 - [C] U-shaped recovery
 - [D] L-shaped recovery

93. Which of the following global crises originated primarily in the housing and mortgage market?

- [A] Asian Financial Crisis (1997)
- [B] European Sovereign Debt Crisis (2010)
- [C] Global Financial Crisis (2008)
- [D] Great Depression (1929)

94. Which of the following was an immediate consequence of the 2013 Taper Tantrum for many emerging economies?

- [A] Appreciation of their currencies
- [B] Increase in capital inflows
- [C] Capital outflows
- [D] Decline in bond yields

95. To control demand-pull inflation, the Reserve Bank of India is most likely to

- [A] reduce the repo rate
- [B] increase the repo rate
- [C] increase Government expenditure
- [D] reduce the cash reserve ratio

96. Commercial Paper (CP) is

- [A] a long-term instrument issued by Governments to finance its spending
- [B] a short-term unsecured promissory note issued by corporation
- [C] a long-term mortgage-backed security
- [D] an equity instrument traded on stock exchanges

97. Which one of the following developments is most likely to cause bond yields to decline?

- [A] Strong selling of bonds by investors
- [B] Rising inflation expectations
- [C] Increased demand for safe Government securities
- [D] Tightening of monetary policy by the Central Bank

98. Which of the following countries has one of the highest CO₂ emissions per capita in the world?

- [A] India
- [B] China
- [C] United States
- [D] Qatar

99. Consider the following developments :

- I. Increase in money supply growth
- II. Increase in productivity
- III. Expansion of aggregate demand
- IV. Reduction in production costs

Which of the above is/are generally inflationary?

- [A] I and II only
- [B] I and III only
- [C] I only
- [D] I, II and III only

100. A lower sacrifice ratio implies that

- [A] inflation can be reduced with relatively smaller output losses
- [B] inflation control requires large unemployment increases
- [C] monetary policy is ineffective
- [D] aggregate demand is perfectly inelastic

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Instruction (Q. Nos. 1 to 12) : Read the following passage carefully and choose the **correct** answer from the options given.

Passage 1

The painter is now free to paint anything he chooses. There are scarcely any forbidden subjects and today everybody is prepared to admit that a painting of some fruit can be as important as painting of a hero. The impressionists did as much as anybody to win this previously unheard of freedom for the artist. Yet, by the next generation, painters began to abandon the subject altogether, and began to paint abstract pictures. Today, the majority of pictures painted are abstract.

Is there a connection between these two developments? Has art gone abstract because the artist is embarrassed by his freedom. Is it that, because he is free to paint anything, he doesn't know what to paint? Apologists for abstract art often talk of it as the art of maximum freedom. But could this be the freedom of the desert island? It would take too long to answer these questions properly. I believe, there is a connection. Many things have encouraged the development of abstract art. Among them has been the artists' wish to avoid the difficulties of finding subjects when all subjects are equally possible.

I raise the matter now because I want to draw attention to the fact that the painter's choice of a subject is a far more complicated question than it would at first seem. A subject does not start with what is put in front of the easel or with something which the painter happens to remember. A subject starts with the painter deciding he would like to paint such-and-such because for some reason or other he finds it meaningful. A subject begins when the artist selects something for special mention. (What makes it special or meaningful may seem to the artist to be purely visual, its colours, or its form.) When the subject has been selected, the function of the painting itself is to communicate and justify the significance of that selection.

It is often said today that subject matter is unimportant. But this is only a reaction against the excessively literary and moralistic interpretation of subject matter in

the 19th century. In truth, the subject is literally the beginning and end of a painting. The painting begins with a selection (I will paint this, and not everything else in the world); it is finished when that selection is justified (now you can see all that I saw and felt in this and how it is more than merely itself.)

Thus, for a painting to succeed it is essential that the painter and his public agree to succeed. It is essential that the painter and his public agree about what is significant. The subject may have a personal meaning for the painter or individual spectator, but there must also be the possibility of their agreement on its general meaning. It is at this point that the culture of the society and period in question precedes the artist and his art. Renaissance art would have meant nothing to the Aztecs and vice-versa. If, to some extent, a few intellectuals can appreciate them both today it is because their culture is a historical one: its inspiration is history and therefore it can include within itself, in principle if not in every particular, all known development to date.

When a culture is secure and certain of its values, it presents its artists with subjects. The general agreement about what is significant is so well established that the significance of particular subject accrues and becomes traditional. This is true, for instance of reeds and water in China, of the nude body in Renaissance, of the animal in Africa. Furthermore, in such cultures the artist is unlikely to be a free agent, he will be employed for the sake of particular subjects and problem, as we have just described it will not occur to him.

When a culture is in a state of disintegration or transition the freedom of the artist increases, but the question of subject matter becomes problematic for him as he has to choose for society. This was the basic of all the increasing crises in European art during the 19th century. It is often forgotten how many of the art scandals of the time were provoked by the choice of subject (Gericault, Courbet, Daumier, Degas, Lautrec, Van Gogh, etc).

By the end of the 19th century, there were, roughly speaking, two ways in which the painter could meet this challenge of deciding what to paint and so choosing for society. Either he identified himself with the people and so allowed their lives to dictate his subjects to him; or he had to find his subjects within himself as painter. By people, I mean everybody except the bourgeoisie. Many painters did, of course, work for the bourgeoisie according to their copy-book of approved subjects, but all of them filling the Salon and the Royal Academy year after year and now forgotten, buried the hypocrisy of those they served so sincerely.

1. According to the author, one factor that contributed to the rise of abstract art was
 - [A] the decline of artistic skill among painters
 - [B] the artists' desire to avoid choosing among equally possible subjects
 - [C] the invention of photography
 - [D] the influence of Renaissance traditions
2. The author suggests that the freedom enjoyed by modern artists
 - [A] eliminated all artistic challenges
 - [B] made artistic success easier to achieve
 - [C] created difficulties in selecting meaningful subjects
 - [D] led all artists to embrace realism
3. In the passage, a subject begins when
 - [A] the artist selects something as meaningful for representation
 - [B] an object is placed before the artist's easel
 - [C] the artist remembers a past experience
 - [D] the audience recognizes its significance

4. The author's discussion of fruit and heroes serves mainly to illustrate
 - [A] the superiority of still-life painting
 - [B] the decline of heroic themes in art
 - [C] the expanded range of acceptable artistic subjects
 - [D] the influence of impressionism on literature
5. Which of the following best describes the relationship between artist and audience in the passage?
 - [A] Their interpretations must be identical
 - [B] The artist's intentions are more important than the audience's response
 - [C] They must share some agreement about what is significant
 - [D] The audience should determine the subject matter
6. The reference to Renaissance art and Aztec art is used to demonstrate that
 - [A] Renaissance art is superior to Aztec art
 - [B] artistic appreciation depends partly on cultural context
 - [C] historical knowledge is unnecessary for understanding art
 - [D] Aztec art influenced European artists
7. According to the passage, the significance of traditional subjects in stable cultures
 - [A] is continuously debated and redefined
 - [B] depends solely on individual interpretation
 - [C] is unrelated to social values
 - [D] accumulates and becomes culturally established over time

8. The word 'accrues' in the context of significance that 'accrues and becomes traditional' most nearly means
- [A] diminishes
 - [B] separates
 - [C] fluctuates
 - [D] accumulates
9. The word 'provoked' in 'art scandals of the time were provoked' most nearly means
- [A] caused
 - [B] prevented
 - [C] concealed
 - [D] resolved
10. In the sentence "A subject begins when the artist selects something for special mention", the phrase "special mention" most nearly implies
- [A] public recognition
 - [B] focused artistic attention
 - [C] historical importance
 - [D] political endorsement
11. The word 'intellectuals' as used in the passage most nearly refers to
- [A] politicians
 - [B] scholars and educated thinkers
 - [C] wealthy patrons
 - [D] religious leaders
12. The antonym of 'appreciate' in the context of understanding art is
- [A] admire
 - [B] comprehend
 - [C] ignore
 - [D] recognize

Instruction (Q. Nos. 13 to 24) : Read the following passage carefully and choose the **correct** answer from the options given.

Passage 2

Throughout human history, the leading causes of death have been infection and trauma. Modern medicine has scored significant victories against both, and the major causes of ill health and death are now the chronic degenerative diseases, such as coronary artery disease, arthritis, osteoporosis, Alzheimer's, muscular degeneration, cataract and cancer. These have a long latency period before symptoms appear and a diagnosis is made. It follows that the majority of apparently healthy people are pre-ill.

But are these conditions inevitably degenerative? A truly preventive medicine that focused on the pre-ill, analysing the metabolic errors which lead to clinical illness, might be able to correct them before the first symptom. Genetic risk factors are known for all the chronic degenerative diseases, and are important to the individuals who possess them. At the population level, however, migration studies confirm that these illnesses are linked for the most part to lifestyle factors—exercise, smoking and nutrition. Nutrition is the easiest of these to change, and the most versatile tool for affecting the metabolic changes needed to tilt the balance away from disease.

Many national surveys reveal that malnutrition is common in developed countries. This is not the calorie and/or micronutrient deficiency associated with developing nations (Type A malnutrition); but multiple micronutrient depletion, usually combined with calorific balance or excess (Type B malnutrition). The incidence and severity of Type B malnutrition will be shown to be worse if newer micronutrient groups such as the essential fatty acids, xanthophylls and flavonoids are included in the surveys. Commonly ingested levels of these micronutrients seem to be far too low in many developed countries.

There is now considerable evidence that Type B malnutrition is a major cause of chronic degenerative diseases. If this is the case, then it is logical to treat such diseases not with drugs but with multiple micronutrient repletion, or pharmaconutrition. This can take the form of pills and capsules—‘nutraceuticals’, or food formats known as ‘functional foods’.

This approach has been neglected hitherto because it is relatively unprofitable for drug companies—the products are hard to patent—and it is a strategy which does not sit easily with modern medical interventionism. Over the last 100 years, the drug industry has invested huge sums in developing a range of subtle and powerful drugs to treat the many diseases we are subject to. Medical training is couched in pharmaceutical terms and this approach has provided us with an exceptional range of therapeutic tools in the treatment of disease and in acute medical emergencies.

However, the pharmaceutical model has also created an unhealthy dependency culture, in which relatively few of us accept responsibility for maintaining our own health. Instead, we have handed over this responsibility to health professionals who know very little about health maintenance or disease prevention.

One problem for supporters of this argument is lack of the right kind of hard evidence. We have a wealth of epidemiological data linking dietary factors to health profiles/disease risks, and a great deal of information on mechanism: how food factors interact with our biochemistry. But almost all intervention studies with micronutrients, with the notable exception of the omega 3 fatty acids, have so far produced conflicting or negative results. In other words, our science appears to have no predictive value. Does this invalidate the science? Or are we simply asking the wrong questions?

Based on pharmaceutical thinking, most intervention studies have attempted to measure the impact of a single micronutrient on the incidence of disease. The classical approach says that if you give a compound

formula to test subjects and obtain positive results, you cannot know which ingredient is exerting the benefit, so you must test each ingredient individually. But in the field of nutrition, this does not work. Each intervention on its own will hardly make enough difference to be measured. The best therapeutic response must, therefore, combine micronutrients to normalise our internal physiology.

So, do we need to analyse each individual’s nutritional status and then tailor a formula specifically for him or her? While we do not have the resources to analyse millions of individual cases, there is no need to do so. The vast majority of people are consuming suboptimal amounts of most micronutrients, and most of the micronutrients concerned are very safe. Accordingly, a comprehensive and universal program of micronutrient support is probably the most cost-effective and safest way of improving the general health of the nation.

13. The central argument of the passage is that

- [A] chronic degenerative diseases are primarily genetic in origin
- [B] drug-based treatment is the only effective response to chronic illness
- [C] micronutrient deficiencies play a significant role in chronic degenerative diseases and should be addressed through preventive nutrition
- [D] modern medicine has failed to improve public health

14. The author uses the term ‘pre-ill’ to refer to

- [A] individuals suffering from infectious diseases
- [B] apparently healthy individuals who may already possess disease-causing metabolic abnormalities
- [C] people recovering from illness
- [D] individuals genetically immune to disease

- 15.** According to the passage, migration studies suggest that chronic degenerative diseases are mainly associated with
- [A] environmental pollution
 - [B] genetic inheritance alone
 - [C] medical interventions
 - [D] lifestyle factors
- 16.** Which of the following is identified as the easiest lifestyle factor to modify?
- [A] Exercise
 - [B] Smoking
 - [C] Nutrition
 - [D] Genetics
- 17.** Type B malnutrition differs from Type A malnutrition because it involves
- [A] severe calorie deficiency
 - [B] infectious diseases
 - [C] lack of access to food
 - [D] multiple micronutrient depletion despite adequate or excessive calorie intake
- 18.** According to the author, one reason nutrition-based interventions have been neglected is that
- [A] they are scientifically disproven
 - [B] they are excessively expensive
 - [C] they are difficult to patent and therefore less profitable
 - [D] patients dislike dietary changes
- 19.** Which statement would the author most likely agree with?
- [A] Prevention should focus on correcting metabolic imbalances before symptoms appear
 - [B] Genetics completely determines disease outcomes
 - [C] Nutritional interventions should replace all conventional medicine
 - [D] Micronutrient deficiencies are rare in developed nations

- 20.** The antonym of 'degenerative' is
- [A] restorative
 - [B] progressive
 - [C] chronic
 - [D] genetic
- 21.** The antonym of 'unprofitable' is
- [A] costly
 - [B] beneficial
 - [C] lucrative
 - [D] necessary
- 22.** The word 'versatile' as used in the passage most nearly means
- [A] expensive
 - [B] adaptable
 - [C] limited
 - [D] predictable
- 23.** Which of the following would most weaken the author's argument?
- [A] Evidence that comprehensive micronutrient supplementation consistently reduces disease incidence
 - [B] Evidence that most chronic diseases occur independently of nutritional status
 - [C] Evidence that developed countries consume excessive calories
 - [D] Evidence that pharmaceutical companies seek patents
- 24.** Which of the following best summarizes the author's proposed solution?
- [A] Increased investment in pharmaceuticals
 - [B] Universal micronutrient support programs
 - [C] Greater reliance on genetic screening
 - [D] Elimination of all processed foods

25. Identify the sentence with no grammatical error.

- [A] One of the researchers have published a follow-up study.
- [B] Each of the participants were asked to maintain a diary.
- [C] Neither of the explanations seem convincing.
- [D] Every one of the participants was informed of the risks.

26. Choose the sentence with no grammatical error.

- [A] No sooner had the results been published than they were subjected to intense scrutiny by researchers who questioned whether the methodology was sufficiently rigorous.
- [B] No sooner the results had been published than they were subjected to intense scrutiny by researchers whom questioned whether the methodology was sufficiently rigorous.
- [C] No sooner had the results published than they were subjected to intense scrutiny by researchers who questioned whether the methodology were sufficiently rigorous.
- [D] No sooner had been published the results than they were subjected to intense scrutiny by researchers which questioned whether the methodology was sufficiently rigorous.

27. Which sentence expresses deduction?

- [A] You may leave now.
- [B] He must be at home; his car is outside.
- [C] You should apologize.
- [D] I can swim.

28. Choose the grammatically **correct** sentence.

- [A] Hardly had I entered the room when the phone rang.
- [B] Hardly I had entered the room when the phone rang.
- [C] Hardly had I entered the room than the phone rang.
- [D] Hardly did I entered the room when the phone rang.

29. Which of the following sentences is in the passive voice?

- [A] The committee approved the proposal.
- [B] The proposal was approved by the committee.
- [C] The committee has approved the proposal.
- [D] The committee approves the proposal.

30. Choose the **correct** connector to fill in the blank :

He worked hard; _____, he failed the examination.

- [A] therefore
- [B] nevertheless
- [C] because
- [D] moreover

31. Which of the following connectors shows contrast?

- [A] Since
- [B] Therefore
- [C] However
- [D] Consequently

32. Identify the sentence with a noun clause.

- [A] The book that I bought is expensive.
- [B] What he said surprised everyone.
- [C] When the bell rang, the students left.
- [D] The man who called you is here.

- 33.** In the sentence “She spoke eloquently”, the word ‘eloquently’ is
- [A] noun
 - [B] adjective
 - [C] preposition
 - [D] adverb
- 34.** In the sentence “The journey was arduous”, the word ‘arduous’ is
- [A] noun
 - [B] verb
 - [C] adjective
 - [D] adverb
- 35.** Choose the **correctly** punctuated sentence.
- [A] My favourite authors are Austen, Dickens, and Eliot.
 - [B] My favourite authors are Austen Dickens and Eliot.
 - [C] My favourite authors are Austen Dickens, and Eliot.
 - [D] My favourite authors are, Austen, Dickens and Eliot.
- 36.** Which sentence uses the apostrophe **correctly**?
- [A] It’s a beautiful day.
 - [B] Its a beautiful day.
 - [C] The dogs tail was wagging.
 - [D] The dogs’ tail was wagging.
- 37.** Choose the **correct** noun form of the word ‘decide’.
- [A] Decisive
 - [B] Decision
 - [C] Deciding
 - [D] Decided
- 38.** Which of the following words is formed by adding a prefix?
- [A] Happiness
 - [B] Teacher
 - [C] Beautifully
 - [D] Misunderstand
- 39.** Read the following sentence and identify the sentence type :
“The sun set, and the stars appeared.”
- [A] Simple
 - [B] Complex
 - [C] Compound
 - [D] Compound-complex
- 40.** Which of the following is a simple sentence?
- [A] The rain stopped, and the match resumed.
 - [B] Although it was raining, the match continued.
 - [C] The rain stopped, and the match resumed because the ground dried quickly.
 - [D] The rain stopped after an hour.
- 41.** Choose the **correct** indirect speech from the following reported speech :
He said, “I am busy.”
- [A] He said that he is busy.
 - [B] He says that he was busy.
 - [C] He said that I was busy.
 - [D] He said that he was busy.
- 42.** Read the following sentence. Now choose the **correct** sentence transformation from the options given below :
“No other city in the country is as populous as Mumbai.”
- [A] Mumbai is more populous than any other city in the country.
 - [B] Mumbai is a populous city.
 - [C] Mumbai is one of the most populous cities.
 - [D] Mumbai is less populous than all other cities.

43. Which of the following sentences contains a dangling modifier?

- [A] Walking through the park, I admired the flowers.
- [B] Walking through the park, the flowers looked beautiful.
- [C] I admired the flowers while walking through the park.
- [D] While I was walking through the park, I admired the flowers.

44. Which of the following sentences is **correct**?

- [A] She likes reading, writing, and to paint.
- [B] She likes reading, writing, and painting.
- [C] She likes to read, writing, and painting.
- [D] She likes reading, to write, and painting.

45. Choose the sentence that is grammatically **correct**.

- [A] She said that she was leaving the next day.
- [B] She said that she is leaving the next day.
- [C] She said that she has been leaving the next day.
- [D] She said that she leaves the next day.

46. Select the complex sentence equivalent of "In spite of his illness, he attended the meeting."

- [A] Although he was ill, he attended the meeting.
- [B] He attended the meeting and was ill.
- [C] Being ill, he attended the meeting.
- [D] He attended the meeting despite illness.

47. Choose the **correct** sentence.

- [A] The quality of the essays were impressive.
- [B] The quality of the essays are impressive.
- [C] The quality of the essays have been impressive.
- [D] The quality of the essays was impressive.

48. Choose the sentence in which the relative pronoun is used **correctly**.

- [A] This is the person which helped me.
- [B] This is the person whom helped me.
- [C] This is the person who helped me.
- [D] This is the person whose helped me.

49. Choose the **correctly** punctuated sentence.

- [A] After finishing her work she, went home.
- [B] After finishing her work, she went home.
- [C] After finishing, her work she went home.
- [D] After finishing her work she went, home.

50. Identify the type of sentence :

"While the guests were arriving, the hosts were making final preparations, and the musicians were tuning their instruments."

- [A] Simple
- [B] Compound
- [C] Complex
- [D] Compound-complex

- 51.** "Poetry is the spontaneous overflow of powerful feelings : it takes its origin from emotions recollected in tranquility." Who defines poetry in these words?
- [A] Matthew Arnold
[B] Coleridge
[C] Wordsworth
[D] Shelley
- 52.** "Poets are the unacknowledged legislators of the world." Who made this observation?
- [A] Wordsworth
[B] Coleridge
[C] Shelley
[D] Matthew Arnold
- 53.** How many sonnets in all were written by Shakespeare ?
- [A] 140
[B] 164
[C] 154
[D] 145
- 54.** During the performance of which play by Shakespeare did the Globe Theatre burn down in 1613?
- [A] *Henry IV*, Part 1
[B] *Henry V*
[C] *Henry VIII*
[D] *Richard II*
- 55.** "Was this the face that launched a thousand ships?" In which play does this line occur?
- [A] Shakespeare's *Antony and Cleopatra*
[B] Marlowe's *Doctor Faustus*
[C] Webster's *The Duchess of Malfi*
[D] John Ford's *The Broken Heart*
- 56.** Shakespeare is called the 'Bard of Avon'. Why is he so called?
- [A] 'Avon' was the surname of his family
[B] 'Avon' was the name of the town where he was born
[C] 'Avon' was the title conferred upon him by Queen Elizabeth
[D] Shakespeare was born at Stratford which was situated on the banks of the river 'Avon'
- 57.** *Life is a tale, told by an idiot,
Full of sound and fury,
Signifying nothing.*
In which play do these lines occur?
- [A] *Julius Caesar*
[B] *Hamlet*
[C] *Macbeth*
[D] *Richard II*
- 58.** For what is the phrase 'The Mousetrap' used by Shakespeare in *Hamlet*?
- [A] Hamlet's tragic flaw
[B] The ghost of Hamlet's father
[C] The play within the play
[D] Hamlet's conscience
- 59.** What is the name of the villain in *Othello*?
- [A] Iago
[B] Oswald
[C] Sebastian
[D] Caliban
- 60.** In *Julius Caesar*, which of the following conspirators addresses the plebeians after the assassination of Julius Caesar?
- [A] Casca
[B] Cassius
[C] Antony
[D] Brutus

- 61.** There is a masque within Shakespeare's play *The Tempest*. What occasion does this masque celebrate?
- [A] Prospero's safe landing on the Island
 [B] The wedding of Ferdinand and Miranda
 [C] The wedding of Ariel and Ceres
 [D] The wedding of King Alonso's daughter
- 62.** Why is the year 1798 taken to be the year of the beginning of the Romantic Movement?
- [A] Because it was the year of Wordsworth's birth
 [B] Because it was the year in which James Thomson's *The Seasons* was published
 [C] Because it was the year in which Wordsworth's *Lyrical Ballads* were published
 [D] Because it was the year in which the French Revolution started
- 63.** Wordsworth was popularly known as the poet of
- [A] Lancashire Region
 [B] Wessex Region
 [C] Lake District
 [D] Waverly Region
- 64.** *Our birth is but a sleep and a forgetting;
 The soul that rises with us, our life's star,
 Hath had elsewhere its setting
 And cometh from afar;*
 From which poem are these lines quoted?
- [A] *The Prelude*
 [B] *The Immortality Ode*
 [C] *The Excursion*
 [D] *Tintern Abbey*
- 65.** S. T. Coleridge belonged to the group of
- [A] Older Romantic poets
 [B] Younger Romantic poets
 [C] Early Victorian poets
 [D] Later Victorian Poets
- 66.** The Mariner in *The Rime of the Ancient Mariner* kills
- [A] a golden fish
 [B] a nightingale
 [C] a penguin
 [D] an albatross
- 67.** Which of the following biographical-cum-literary studies was written by Coleridge?
- [A] *Lives of the Poets*
 [B] *Eminent Victorians*
 [C] *Biographia Literaria*
 [D] *Lives*
- 68.** *Water, water, every where,
 And all the boards did shrink;
 Water, water, every where,
 Nor any drop to drink.*
 From which poem are these lines quoted?
- [A] *Dejection : An Ode*
 [B] *The Rime of the Ancient Mariner*
 [C] *Kubla Khan*
 [D] *Christabel*
- 69.** From which source did Shelley get the idea of writing the *Prometheus Unbound*?
- [A] Aeschylus
 [B] Euripides
 [C] Seneca
 [D] Sophocles

70. *If winter comes, can spring be far behind?*

Which poem of Shelley ends with this line?

- [A] *The Cloud*
- [B] *To a Skylark*
- [C] *Ode to the West Wind*
- [D] *To Night*

71. Which poem (autobiographical poem) did Shelley write on the death of John Keats?

- [A] *Alastor*
- [B] *Queen Mab*
- [C] *Adonais*
- [D] *The Cenci*

72. "A thing of beauty is a joy forever." A verse-tale by Keats begins with this line. To which of the following tales does this refer?

- [A] *Hyperion*
- [B] *Endymion*
- [C] *The Eve of St. Agnes*
- [D] *The Eve of St. Mark*

73. An American poet is hailed as the representative poet of America. Who is he?

- [A] Robert Frost
- [B] Edgar Allan Poe
- [C] R. W. Emerson
- [D] Walt Whitman

74. Whose collection of poems is called *Leaves of Grass*?

- [A] Whitman's
- [B] Emerson's
- [C] Edgar Allan Poe's
- [D] Frost's

75. What is the central theme of Whitman's famous poem *Passage to India*?

- [A] Advancement of science
- [B] Intercontinental contacts
- [C] Spirituality and Transcendentalism
- [D] Glory of America

76. Who wrote the following lines?

*But I have promises to keep
And miles to go before I sleep,
And miles to go before I sleep.*

- [A] Robert Frost
- [B] William Faulkner
- [C] Wallace Stevens
- [D] Hemingway

77. Who was the first recipient of the Sahitya Akademi Award for the best writing in English?

- [A] R. K. Narayan
- [B] Mulk Raj Anand
- [C] Raja Rao
- [D] Khushwant Singh

78. A very popular Bollywood film was made on one of the novels of R. K. Narayan. Name the novel.

- [A] *Waiting for the Mahatma*
- [B] *Malgudi Days*
- [C] *The Guide*
- [D] *Mr. Sampath*

79. A very important T. V. Serial was made on one of the novels of R. K. Narayan. Identify the novel.

- [A] *The Guide*
- [B] *Malgudi Days*
- [C] *Waiting for the Mahatma*
- [D] *The Bachelor of Arts*

80. Who is the protagonist in Anand's novel *Untouchable*?

- [A] Bakha
- [B] Lakha
- [C] Rakha
- [D] Sakha

81. Who wrote the famous poem *Enterprise*?

- [A] Kamala Das
- [B] Shiv K. Kumar
- [C] Nissim Ezekiel
- [D] Raja Rao

82. *My mother only said,
Thank God, the scorpion picked on me,
and spared my children.*

Where do these lines of Ezekiel appear?

- [A] *Enterprise*
- [B] *Philosophy*
- [C] *Night of the Scorpion*
- [D] *A Time to Change*

83. Whose autobiography is titled as *My Story*?

- [A] Nissim Ezekiel
- [B] Shiv K. Kumar
- [C] Kamala Das
- [D] R. K. Narayan

84. In which of the following novels of R. K. Narayan, 'Malgudi' was first created?

- [A] *Swami and Friends*
- [B] *The Bachelor of Arts*
- [C] *The Dark Room*
- [D] *The Man-Eater of Malgudi*

85. For which novel did R. K. Narayan receive the Sahitya Akademi Award?

- [A] *The Dark Room*
- [B] *The Guide*
- [C] *Mr. Sampath*
- [D] *The Financial Expert*

86. Which of the following is an example of oxymoron?

- [A] There is kind cruelty in the surgeon's knife
- [B] Ruin seize thee, ruthless king!
- [C] And Brutus is an honourable man!
- [D] Kalidas is the Shakespeare of India

87. In which figure of speech is there a play on the various meanings of a word?

- [A] Pun
- [B] Metaphor
- [C] Transferred Epithet
- [D] Irony

88. The first twelve lines of a Shakespearean sonnet are arranged under which one of the following patterns?

- [A] Three quatrains
- [B] Six couplets
- [C] Two quatrains and two couplets
- [D] One quatrain and four couplets

89. Who wrote the famous play *The Sleepwalkers*?

- [A] Nissim Ezekiel
- [B] Raja Rao
- [C] Kamala Das
- [D] Shiv K. Kumar

- 90.** Who is the author of *Summer in Calcutta*?
- [A] Mulk Raj Anand
[B] Anita Desai
[C] Kamala Das
[D] R. K. Narayan
- 91.** In which poem does Ezekiel call himself 'a poet-rascal-clown'?
- [A] *Background Casually*
[B] *Night of the Scorpion*
[C] *Philosophy*
[D] *Poem of the Separation*
- 92.** Who said, "If Untouchable is the microcosm, Coolie is more like the microcosm that is Indian society?"
- [A] E. M. Forster
[B] K. S. Iyengar
[C] M. K. Naik
[D] K. S. Rana
- 93.** Who wrote an Introduction to R. K. Narayan's novel *The Financial Expert*?
- [A] Graham Greene
[B] E. M. Forster
[C] Mulk Raj Anand
[D] Raja Rao
- 94.** Who called Nissim Ezekiel, "An endless explorer of the labyrinths of the mind..."?
- [A] K. S. Iyengar
[B] Linda Hess
[C] R. Parthasarathy
[D] Kamala Das
- 95.** Who among the following is called a confessional poet?
- [A] Nissim Ezekiel
[B] Kamala Das
[C] R. K. Narayan
[D] Raja Rao
- 96.** When Jawaharlal Nehru died, four lines of a poem by Frost were found written in his own hand under the glass top of his table. From which poem were they quoted?
- [A] *Birches*
[B] *Mending Wall*
[C] *Stopping by Woods on a Snowy Evening*
[D] *A Masque of Mercy*
- 97.** Which novel of Hemingway won him the Nobel Prize for Literature?
- [A] *A Farewell to Arms*
[B] *The Old Man and the Sea*
[C] *The Sun Also Rises*
[D] *For Whom the Bell Tolls*
- 98.** When did Faulkner receive the Nobel Prize?
- [A] 1948
[B] 1949
[C] 1950
[D] 1951
- 99.** Robert Frost was
- [A] a British poet settled in America
[B] an American poet settled in England
[C] a Canadian poet
[D] an Australian poet
- 100.** Whom did Frost describe as "the only brother ever I had"?
- [A] Walt Whitman
[B] E. Thomas
[C] Faulkner
[D] Emerson

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1. Which one of the following is **not correct** as per Koppen's Scheme of climatic classification of the world?

- [A] Af = Tropical rain forest
- [B] Am = Tropical monsoon
- [C] Aw = Tropical savanna
- [D] An = Hot desert

2. Which one of the following pairs is **correctly** matched?

(Tree Species)	(States)
[A] Sundari	— Karnataka
[B] Deodar	— Gujarat
[C] Khejra/ Khejri	— Rajasthan
[D] Sandalwood	— Himachal Pradesh

3. Which of the following combinations of processes constitute mass wasting?

- I. Soil creep
- II. Mud flow
- III. Granular disintegration
- IV. Landslide and rockfall

- [A] I and II only
- [B] I, II and III only
- [C] I, II and IV only
- [D] II and IV only

4. Choose the 'Terrestrial' planets among the planets of our Solar System.

- [A] Mercury, Venus, Earth and Mars
- [B] Jupiter, Saturn, Uranus and Neptune
- [C] Mercury, Venus, Jupiter and Saturn
- [D] Earth, Mars, Uranus and Neptune

5. The Mohorovicic discontinuity marks the boundary between which two layers of the Earth?

- [A] Outer Core and Inner Core
- [B] Upper Mantle and Lower Mantle
- [C] Lower Mantle and Outer Core
- [D] Lower Crust and Upper Mantle

6. What type of plate boundary is formed when two plates move towards each other, causing the denser plate to sink into the mantle?

- [A] Convergent boundary
- [B] Transform boundary
- [C] Divergent boundary
- [D] Subduction zone

7. Consider the following statements made about the sedimentary rocks :

- I. The formation of sedimentary rocks involves the weathering of pre-existing rocks.
- II. Sedimentary rocks typically occur in layers.
- III. Sedimentary rocks contain fossils.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

8. Which of the following is an example of an extrusive igneous rock?

- [A] Granite
- [B] Gabbro
- [C] Diorite
- [D] Basalt

9. Which one of the following volcanoes is known as 'Lighthouse of the Mediterranean Sea'?
- [A] Pinatubo
[B] Stromboli
[C] Vesuvius
[D] Etna
10. In which of the following areas do most of the earthquakes in the world occur?
- [A] Mediterranean Sea Belt
[B] Himalayan Belt
[C] Circum Pacific Ocean Belt
[D] Atlantic Ocean Belt
11. Consider the following statements regarding physical weathering :
- I. Frost Action on rock may result in physical weathering.
II. Salt-crystal formation within the pores of rock results in physical weathering.
- Which of the statement(s) given above is/ are **correct**?
- [A] I only
[B] II only
[C] Both I and II
[D] Neither I nor II
12. What is the term for the point on the Earth's surface directly above the origin of an earthquake?
- [A] Epicenter
[B] Hypocenter (Focus)
[C] Fault line
[D] Fault scarp
13. Which fossil plant did Wegener cite as evidence that South America, Africa, India and Australia were once connected?
- [A] Mesosaurus
[B] Cynognathus
[C] Lystrosaurus
[D] Glossopteris
14. How does a Zeugen differ from a Yardang?
- [A] Zeugen is formed by wind while Yardang is formed by water
[B] Zeugen is erosional while Yardang is depositional
[C] Zeugen develops on horizontal rock layers while Yardang is formed on vertical rock bands aligned with the wind
[D] There is no difference; they are exactly the same landform
15. Which of the following landforms is primarily formed by coastal deposition?
- [A] Sea cliff
[B] Tombolo
[C] Sea arch
[D] Sea cave
16. Which landform develops when a stalactite and a stalagmite meet and join together?
- [A] Column or Pillar
[B] Doline
[C] Polje
[D] Swallow hole

17. Which one of the following is the depositional landform created by running water?

- [A] Structural Benches
- [B] River Valley
- [C] Natural Levees
- [D] Waterfall

18. Which of the following describes the vertical temperature profile in the troposphere?

- [A] Temperature decreases with altitude
- [B] Temperature increases with altitude
- [C] Temperature remains constant
- [D] Temperature fluctuates randomly

19. Which of the following layers is **not** included in the homosphere?

- [A] Stratosphere
- [B] Troposphere
- [C] Thermosphere
- [D] Mesosphere

20. Which of the following factors **does not** affect the amount of insolation reaching the Earth's surface?

- [A] Angle of Incidence
- [B] Length of the day
- [C] Transparency of the atmosphere
- [D] Earth's magnetic field

21. Which part of the Earth's surface has the highest albedo?

- [A] Green Field Crops
- [B] Deciduous forests
- [C] Sandy desert
- [D] Fresh snow

22. How is surplus heat from lower latitudes redistributed to higher latitudes to prevent the tropics from overheating?

- [A] Through atmospheric circulation and ocean currents
- [B] Solely by longwave terrestrial radiation
- [C] Through the process of conduction alone
- [D] Through the greenhouse effect

23. What is the term used for the calm, low-pressure belt near the equator where the trade winds converge?

- [A] Horse Latitudes
- [B] Westerlies
- [C] Doldrums
- [D] Jet streams

24. What is the primary cause of the deflection of wind?

- [A] Rotational force
- [B] Pressure Gradient Force
- [C] Coriolis Force
- [D] Frictional Force

25. Which pressure belts do the trade winds connect?

- [A] Sub-tropical High to Equatorial Low
- [B] Equatorial Low to Sub-Polar High
- [C] Polar High to Sub-polar Low
- [D] Sub-polar Low to Sub-tropical High

26. Which of the following is an ideal source region for the formation of an air mass?

- [A] Mountainous regions with highly variable topography
- [B] Mid-latitude Valleys with frequent storms
- [C] Coastal zones with frequent cyclones
- [D] A vast, homogeneous area like a flat plain or ocean

27. What kind of weather front forms when a cold air mass actively overtakes and uplifts a warm air mass?

- [A] Warm front
- [B] Cold front
- [C] Stationary front
- [D] Occluded front

28. Besides the area surrounding the Mediterranean Sea, where else can the Mediterranean climate be found globally?

- [A] Eastern Asia and Eastern Australia
- [B] California, Central Chile, Capetown in South Africa and Southern Australia
- [C] Eastern Asia and Eastern United States
- [D] Northern Siberia and Northern Canada

29. Which accompanying weather phenomena are most characteristic of convectional rainfall?

- [A] Thunder and lightning
- [B] Fog
- [C] Sandstorms
- [D] Blizzards

30. Which high-altitude cloud forms small, white, wave-like patches sometimes called a mackerel sky?

- [A] Nimbostratus clouds
- [B] Altocumulus clouds
- [C] Cirrocumulus clouds
- [D] Cirrostratus clouds

31. Consider the following factors :

- I. Revolution of the Earth
- II. Planetary winds
- III. Salinity of ocean water
- IV. Rotation of the Earth

Which of the above factors influence the ocean currents?

- [A] I and II only
- [B] I, II and III only
- [C] I and IV only
- [D] II, III and IV only

32. The proportion of Earth's surface area at various elevations and depths relative to sea level is presented by

- [A] clinographic curve
- [B] altimetric frequency curve
- [C] ogive curve
- [D] hypsographic curve

33. What is the deepest known point in the Indian Ocean?

- [A] Mariana Trench
- [B] Puerto Rico Trench
- [C] Sunda Deep
- [D] Kermadec Trench

34. Consider the following statements regarding tide :

- I. A tidal bore is a wall of water that moves up certain low-lying rivers due to an incoming tide.
- II. The Bay of Fundy experiences the highest tidal range in the world.

Which of the statements given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

35. Consider the following statements :

- I. The meeting point of warm and cold ocean currents is associated with the world's best fishing grounds.
- II. The meeting of warm and cold ocean currents is beneficial for sea transportation.

Which of the statement(s) given above is/are **not correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

36. The Humboldt Oceanic Current is also known as

- [A] Labrador Current
- [B] Canary Current
- [C] Peru Current
- [D] Benguela Current

37. Consider the following soils :

- I. Lithosols (formed on scree and glacial moraines, usually on steep slopes)
- II. Regosols (on dry sands and gravels in deserts)
- III. Alluvial soils (on lowlands prone to flooding)

Which of the aforementioned soils is/are included in azonal soils?

- [A] I and II only
- [B] II only
- [C] III only
- [D] I, II and III

38. In which soil horizon does illuviation primarily take place?

- [A] A-horizon
- [B] B-horizon
- [C] E-horizon
- [D] O-horizon

39. Which group of organisms is responsible for breaking down dead organic matter into simple inorganic substances?

- [A] Herbivores
- [B] Decomposers
- [C] Carnivores
- [D] Producers

40. Which biome is characterized by low temperatures, permafrost and flora like mosses and lichens?

- [A] Tundra Biome
- [B] Taiga Biome
- [C] Savanna Biome
- [D] Temperate Deciduous Forest Biome

41. Consider the following statements :

- I. IUCN (International Union for Conservation of Nature) was established in 1948.
- II. The IUCN Red List of Threatened Species was established in 1971.

Which of the statements given above is/are **not correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

42. Consider the following statements :

- I. WWF (World Wide Fund for Nature) was established in 1961.
- II. The giant panda is the logo for WWF.

Which of the statements given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

43. **Assertion (A)** : The difference in local time between Saurashtra and Arunachal Pradesh is two hours.

Reason (R) : The longitudinal difference between Saurashtra and Arunachal Pradesh is about thirty degrees.

- [A] Both **(A)** and **(R)** are individually true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are individually true, but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true, but **(R)** is false
- [D] **(A)** is false, but **(R)** is true

44. Which of the following is the longest regional division of the Himalayas?

- [A] Punjab Himalayas
- [B] Kumaon Himalayas
- [C] Assam Himalayas
- [D] Nepal Himalayas

45. Consider the following pairs :

[**Lake Name**] [**Location (States)**]

- I. Vembanad Lake Kerala
- II. Renuka Lake Himachal Pradesh
- III. Loktak Lake Tripura
- IV. Sasthamkotta Lake Tamil Nadu

How many pair(s) given above is/are **correctly** matched?

- [A] Only one pair
- [B] Only two pairs
- [C] Only three pairs
- [D] All four pairs

46. Consider the following pairs :

[**Peak Name**] [**Height above Sea Level (in metres)**]

- I. Kanchenjunga 8598
- II. Annapurna 8078
- III. Nanda Devi 8013
- IV. Namcha Barwa 7138

Which of the above pairs are **correctly** matched?

- [A] I and II only
- [B] II and III only
- [C] II, III and IV only
- [D] I, II, III and IV

47. The Kemmangundi mine is primarily known for which type of mineral?

- [A] Manganese
- [B] Bauxite
- [C] Iron Ore
- [D] Chromite

48. Consider the following pairs :

(**Name of Atomic Power Station**) (**State**)

- | | |
|--------------|---------------|
| I. Kaiga | Karnataka |
| II. Kakrapar | Gujarat |
| III. Narora | Uttar Pradesh |
| IV. Tarapur | Maharashtra |

Which of the above pairs are **correctly** matched?

- [A] I and II only
- [B] II and III only
- [C] II, III and IV only
- [D] I, II, III and IV

49. In which one of the following States are Namchik-Namphuk Coalfields located?

- [A] Assam
- [B] Meghalaya
- [C] Himachal Pradesh
- [D] Arunachal Pradesh

50. Consider the following pairs :

(**Name of Biosphere Reserve**) (**State**)

- | | |
|-------------------|-------------------|
| I. Manas | Assam |
| II. Dihang-Dibang | Arunachal Pradesh |
| III. Nokrek | Meghalaya |
| IV. Simlipal | Madhya Pradesh |

Which of the above pairs are **correctly** matched?

- [A] I, II and IV only
- [B] II, III and IV only
- [C] I, II and III only
- [D] I, II, III and IV

51. Which one of the following major ports is **not** located on the west coast of India?

- [A] Marmagao
- [B] Mangalore
- [C] Paradeep
- [D] Kandla

52. Which of the following stretches is covered by National Waterway Number-3 (NW-Three)?

- [A] Talcher to Dhamra
- [B] Haldia to Allahabad
- [C] Kakinada to Puducherry
- [D] Kottapuram to Kollam

53. Where is the headquarters of the Northeast Frontier Railway Zone?

- [A] Kolkata
- [B] Hajipur
- [C] Maligaon (Guwahati)
- [D] Gorakhpur

54. **Assertion (A)** : Thumba near Thiruvananthapuram was chosen as an international facility for launching sound rockets to study the atmosphere.

Reason (R) : The magnetic equator passes remarkably close to Thumba.

- [A] Both **(A)** and **(R)** are individually true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are individually true, but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true, but **(R)** is false
- [D] **(A)** is false, but **(R)** is true

55. Which of the following highway sections in the Golden Quadrilateral is the longest?

- [A] Delhi - Mumbai
- [B] Kolkata - Delhi
- [C] Mumbai - Chennai
- [D] Kolkata - Chennai

56. The Sindri Fertilizer Plant was established during which Five-Year Plan?

- [A] Fourth Five-Year Plan
- [B] Third Five-Year Plan
- [C] Second Five-Year Plan
- [D] First Five-Year Plan

57. Which of the following integrated steel plants was **not** established in the Second Five-Year Plan?

- [A] Durgapur Steel Plant
- [B] Bokaro Steel Plant
- [C] Bhilai Steel Plant
- [D] Rourkela Steel Plant

58. Consider the following statements regarding the Integrated Rural Development Programme (IRDP) :

- I. District Rural Development Agencies (DRDA) and Block-level Agencies (BLA) were implementing agencies of IRDP at the grassroots level.
- II. The funding pattern of the DRDA administration is in the ratio of 90:10 between the Centre and the States for the North Eastern States.

Which of the statements given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

59. What is Warabandi in the context of the Command Area Development Programme (CADP) launched in 1974-75?

- [A] Construction of field channels and field drains to reduce the pilferage and misuse of water
- [B] A rotational system for the equitable distribution of irrigation water among all farmers
- [C] Giving proper shape to fields and their boundaries through consolidation of holdings
- [D] Updating land records

60. In which type of desert ecosystems, the Desert Development Programme (1977-78) was implemented?

- [A] Hot Desert Areas only
- [B] Cold Desert Areas only
- [C] Plateau Areas only
- [D] Both Hot and Cold Desert Areas

61. The major thrust of the Hill Area Development Programme is to promote the

- I. horticulture, especially banana, apple, grapes and citrus fruits
- II. animal husbandry, poultry, bee-keeping and pig farming
- III. conservation of soil and forest resources
- IV. encouraging Jhum cultivation

Which of the statements given above is/are **not correct**?

- [A] I only
- [B] II, III and IV only
- [C] I, II and III only
- [D] IV only

62. What was the primary objective of launching the EDUSAT satellite?

- [A] Providing distant classroom education
- [B] Meteorological weather forecasting
- [C] Cartographic applications and stereo imaging
- [D] Astronomical deep-space observation

63. Consider the following statements regarding the Visakhapatnam Steel Plant :

- I. The foundation stone of this steel plant was laid in 1971.
- II. This steel plant was established by the Rashtriya Ispat Nigam Limited.
- III. It obtains iron ore from Hospet (Karnataka).

Which of the statements given above is/are **not correct**?

- [A] I only
- [B] II only
- [C] III only
- [D] I and II only

64. Which of the following factors mainly affect the location of the cotton textile industry?

- [A] Availability of raw cotton
- [B] Moist weather
- [C] Availability of skilled, efficient and cheap labour
- [D] All of the above

65. Where was the India's first modern jute mill set up?

- [A] Uluberia
- [B] Titagarh
- [C] Bansberia
- [D] Rishra

66. Consider the following statements regarding the difference between the sugar Industries of Northern and Peninsular India :

- I. Peninsular India has a tropical climate, which gives a higher yield per unit area as compared to North India.
- II. The crushing season is much longer in northern India than in Peninsular India.

Which of the statements given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

67. Where is the main manufacturing plant of Hindustan Antibiotics Limited (HAL) located?

- [A] Rishikesh, Uttarakhand
- [B] Pimpri, Pune, Maharashtra
- [C] Gurugram, Haryana
- [D] Chennai, Tamil Nadu

68. Where was the first cement plant established in India in 1904?

- [A] Chennai, Tamil Nadu
- [B] Porbandar, Gujarat
- [C] Lakheri, Rajasthan
- [D] Katni, Madhya Pradesh

69. Which one of the following industrial regions is considered the Ruhr of India?

- [A] Visakhapatnam Guntur Industrial Region
- [B] Chotanagpur Industrial Region
- [C] Hugli Industrial Region
- [D] Gujarat Industrial Region

70. Which of the following industrial regions gets the hydroelectric power from Mettur, Sivasamudram, Papanasam, Paykara and Saravati?

- [A] Mumbai-Pune Industrial Region
- [B] Visakhapatnam-Guntur Industrial Region
- [C] Kollam-Thiruvananthapuram Industrial Region
- [D] Bangalore-Tamil Nadu Industrial Region

71. What is India's position in the global production of tea in 2022?

- [A] First
- [B] Second
- [C] Third
- [D] Fourth

72. Which one of the following is the **correct** sequence in ascending order of production (in million tonnes) of the given food grains in India during 2024-25?

- [A] Pulses- Coarse cereals- Wheat- Rice
- [B] Rice- Wheat- Pulses- Coarse cereals
- [C] Wheat- Rice- Coarse cereals-Pulses
- [D] Rice- Wheat- Coarse cereals- Pulses

73. Consider the following crops :

- I. Wheat
- II. Mustard
- III. Barley
- IV. Gram

Which of the above are Rabi crops?

- [A] I and III only
- [B] II and IV only
- [C] I and IV only
- [D] I, II, III and IV

74. Select the **correct** sequence in decreasing order of the four sugarcane-producing states in India during 2024-25.

- [A] Maharashtra, Uttar Pradesh, Gujarat, Karnataka
- [B] Uttar Pradesh, Maharashtra, Karnataka, Gujarat
- [C] Maharashtra, Uttar Pradesh, Karnataka, Gujarat
- [D] Uttar Pradesh, Maharashtra, Gujarat, Karnataka

75. Which of the following is the chief characteristic of mixed farming?

- [A] Growing the same crop year after year on the same plot
- [B] Rearing of animals and cultivation of crops together
- [C] Growing a cash crop followed by a food crop
- [D] None of the above

76. Consider the following statements :

- I. The main reason for small and fragmented land-holdings is inheritance laws in India.
- II. Mixed cropping is one of the chief characteristics of Indian agriculture, particularly in the rain-fed areas.

Which of the statements given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

77. With reference to the growth conditions of Rubber cultivation, which one of the following statements is **not correct**?

- [A] It requires hot and humid climate with a temperature of 25 °C-35 °C and annual rainfall of over 200 cm
- [B] Dry spell and low temperatures are useful
- [C] Daily rainfall followed by strong sun is very useful
- [D] Deep, well-drained loamy soils on the hill slopes ranging from 300 to 450 metres above sea level provide the best conditions for its growth

78. Match the following shifting cultivation names with the region :

(Local Name)	(Region)
(a) Jhum Cultivation	(i) Congo and Central Africa
(b) Masole	(ii) North East India
(c) Roca	(iii) Brazil
(d) Conuco	(iv) Venezuela

Which of the following options is **correctly** matched?

- | | | | | |
|-----|------|-------|-------|------|
| | (a) | (b) | (c) | (d) |
| [A] | (i) | (ii) | (iii) | (iv) |
| [B] | (ii) | (iv) | (iii) | (i) |
| [C] | (ii) | (i) | (iii) | (iv) |
| [D] | (ii) | (iii) | (i) | (iv) |

79. Which type of agriculture involves cultivating a single cash crop on a large estate?

- [A] Plantation agriculture
- [B] Extensive farming
- [C] Sedentary agriculture
- [D] Horticulture

80. Consider the following statements about alluvial soils in the Indo-Gangetic Plain :

- I. The Tarai soils are rich in nitrogen and organic matter but are deficient in phosphate.
- II. The Khadar soils are found in the low areas of the valley bottom, which are flooded almost every year.

Which of the statements given above is/ are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

81. Consider the following statements about soils found in India :

- I. The local terms Reh, Kallar, Usar, Thur, Rakar, Karl and Chopan are used to describe Saline and Alkaline Soils.
- II. Peaty and Marshy Soils are found in Kottayam and Alappuzha districts of Kerala called as *Regur*.

Which of the statements given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

82. Which is the busiest inland waterway in the world?

- [A] The Nile River
- [B] The Orinoco River
- [C] The Rhine River
- [D] The Brahmaputra River

83. Which two major South American cities are connected by the Trans-Andean railway?

- [A] Quito and Montevideo
- [B] Lima and Georgetown
- [C] Brasilia and Bogota
- [D] Buenos Aires and Santiago

84. Which concept is referred to as Stop-and-Go Determinism?

- [A] Environmental Determinism
- [B] Possibilism
- [C] Neo-Determinism
- [D] Probabilism

85. To which major human racial group do the Eskimos, Inuits, Yakuts and Chukchi belong?

- [A] Negroid
- [B] Mongoloid
- [C] Caucasoid
- [D] Australoid

86. Which human race is characterized primarily by pale reddish white to olive brown skin colour, light blue to dark brown eyes and slender to rugged body build?

- [A] Caucasoid
- [B] Mongoloid
- [C] Negrito
- [D] Australoid

87. The Ainu sub-race is traditionally grouped in which primary human race?

- [A] Mongoloid
- [B] Negroid
- [C] Australoid
- [D] Caucasoid

88. Which country had the second-largest population in the world in 2025?

- [A] China
- [B] United States
- [C] Indonesia
- [D] India

89. Consider the following statements describing the global pattern of population distribution :

- I. Population is evenly distributed across all seven continents.
- II. The rugged and folded mountains are sparsely populated.
- III. Nearly 90% of the world's population resides in the Northern Hemisphere.
- IV. Desert regions hold the highest population densities.

Which of the statements given above are **correct**?

- [A] I, II and III only
- [B] II, III and IV only
- [C] II and III only
- [D] I, II, III and IV

90. Which of the following is a pull factor for rural-to-urban migration?

- [A] Poverty in urban areas
- [B] Better employment opportunities in cities
- [C] Frequent natural disasters
- [D] Socio-economic backwardness

91. Which of the following is the most dominant reason for female internal migration in India?

- [A] Employment
- [B] Education
- [C] Marriage
- [D] Natural disaster

- 92.** Match the following North East Indian States with their respective Population Density (per sq.km) as per the 2011 Census :

List—I	List—II
(State)	(Density per sq.km)
(a) Manipur	(i) 350
(b) Nagaland	(ii) 17
(c) Tripura	(iii) 122
(d) Arunachal Pradesh	(iv) 119

Which of the following options is **correct**?

- (a) (b) (c) (d)
- [A] (iii) (iv) (i) (ii)
- [B] (iii) (i) (iv) (ii)
- [C] (i) (iv) (iii) (ii)
- [D] (iv) (iii) (i) (ii)

- 93.** Dispersed rural settlements are most frequently found in which of the following areas?

- [A] Highly fertile alluvial plains
- [B] Densely populated coastal deltas
- [C] Hilly areas and dense forests
- [D] Highly populated urban centres

- 94.** Which of the following settlement patterns is typically formed along a road, edge of a valley, river or canal?

- [A] Nebular
- [B] Triangular
- [C] Linear
- [D] Star-shaped

- 95.** The Kuznetsk coal basin is located in which country?

- [A] Germany
- [B] China
- [C] Russia
- [D] Ukraine

- 96.** Match **List—I** with **List—II** :

List—I	List—II
(Oil Production Centre)	(Country)
(a) Ghawar	(i) Iran
(b) Kirkuk	(ii) Venezuela
(c) Masjid-i-Sulaiman	(iii) Saudi Arabia
(d) Gulf of Maracaibo	(iv) Iraq

Choose the **correct** answer from the options given below :

- (a) (b) (c) (d)
- [A] (ii) (i) (iii) (iv)
- [B] (iii) (iv) (i) (ii)
- [C] (i) (ii) (iv) (iii)
- [D] (iii) (iv) (ii) (i)

- 97.** The Flin Flon copper mine is located in which country?

- [A] Germany
- [B] USA
- [C] Russia
- [D] Canada

- 98.** In which country is the famous Krivoy Rog iron and steel industrial region located?

- [A] Russia
- [B] Poland
- [C] Ukraine
- [D] Armenia

- 99.** Which city is known as the Manchester of Japan?

- [A] Nagoya
- [B] Tokyo
- [C] Osaka
- [D] Kyoto

- 100.** Which mineral is mined extensively in the Postmasburg region of South Africa?

- [A] Manganese
- [B] Uranium
- [C] Silver
- [D] Copper

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1. रचना या बनावट के आधार पर शब्दों के तीन भेद होते हैं :
रूढ़, यौगिक और योगरूढ़। इसके अनुसार, 'जलज' शब्द को किस वर्ग में रखा जाएगा ?

- [A] यौगिक शब्द
- [B] तद्भव शब्द
- [C] योगरूढ़ शब्द
- [D] रूढ़ शब्द

2. निम्नलिखित में से कौन-सा शब्द-युग्म 'अविकारी' (अव्यय) शब्द का उदाहरण है ?

- [A] लड़का, धीरे-धीरे
- [B] वह, सुंदर
- [C] और, शाबाश
- [D] पढ़ना, अचानक

3. उत्पत्ति या स्रोत के आधार पर शब्दों के पाँच भेद (तत्सम, तद्भव, देशज, विदेशी, संकर) होते हैं। इस आधार पर 'अग्नि' और 'आग' क्रमशः किस वर्ग के अंतर्गत आते हैं ?

- [A] तत्सम और तद्भव
- [B] देशज और विदेशी
- [C] यौगिक और रूढ़
- [D] तद्भव और तत्सम

4. निम्नलिखित में से 'तरणि' और 'तरणी' शब्द-युग्म का सही अर्थ-भेद क्या है ?

- [A] किरण और नवयुवक
- [B] नाव और सूर्य
- [C] युवती और नदी
- [D] सूर्य और नाव

5. 'जो सब कुछ जानता हो' — वाक्यांश के लिए एक शब्द क्या होगा तथा उसका सही विपरीतार्थक (विलोम) शब्द कौन-सा है ?

- [A] बहुज्ञ और सर्वज्ञ
- [B] विज्ञ और अज्ञ
- [C] सर्वज्ञ और अल्पज्ञ
- [D] सर्वज्ञ और कृतघ्न

6. 'यदि तुम पढ़ते, तो परीक्षा में उत्तीर्ण हो जाते।' यह वाक्य किस काल का बोध कराता है ?

- [A] हेतुहेतुमद् भूतकाल
- [B] पूर्ण भूतकाल
- [C] आसन्न भूतकाल
- [D] हेतुहेतुमद् भविष्यत् काल

7. निम्नलिखित में से किस शब्द में 'उपसर्ग' और 'प्रत्यय' दोनों का प्रयोग हुआ है और उसका सही संधि-विच्छेद क्या होगा ?

- [A] अलौकिकता (अ + लौकिक + ता)
- [B] अत्याचार (अति + आचार)
- [C] परमेश्वर (परम + ईश्वर)
- [D] अभिमानी (अभि + मान + ई)

8. निम्नलिखित वाक्य में वर्तनी और व्याकरण, दोनों की दृष्टि से अशुद्ध शब्द कौन-सा है ?

'विद्यार्थी ने अपना होमवर्क पूरा कर दिया।'

- [A] विद्यार्थी
- [B] होमवर्क
- [C] अपना
- [D] पूरा

9. 'राजपुत्र' में कौन-सा समास है और 'पुत्र' शब्द का स्त्रीलिंग रूप क्या होगा ?

- [A] तत्पुरुष समास और पुत्री
- [B] द्विगु समास और पुत्रि
- [C] अव्ययीभाव समास और कन्या
- [D] कर्मधारय समास और आत्मजा

10. निम्नलिखित में से 'शुद्ध वर्तनी' वाला वाक्य चुनिए जिसमें कारक और वचन का सही प्रयोग किया गया हो।

- [A] पेड़ों पर कवे बैठे हैं
- [B] पेड़ों पर कौवा बैठे हैं
- [C] पेड़ों पर कौवे बैठे हैं
- [D] वृक्षों में कौवे बैठे हैं

11. दो विरोधी पक्षों के बीच आपसी सहमति से कुछ समय के लिए लड़ाई रोक दिए जाने पर निम्नलिखित में से कौन-सा मुहावरा या वाक्यांश सबसे सटीक बैठता है?

- [A] हथियार डालना
- [B] तलवारें खींचना
- [C] ठंडे बस्ते में डालना
- [D] मूँछ नीची होना

12. कहावत 'दुश्मन की दुश्मनी गई, पर दाग रह गया' — युद्धविराम की किस परिस्थिति को सबसे बेहतर तरीके से बयां करती है?

- [A] युद्धविराम की घोषणा होते ही पूरी तरह शांति स्थापित हो जाना
- [B] युद्धविराम के बाद दोनों देशों में व्यापार शुरू होना
- [C] दोनों देशों द्वारा एक-दूसरे के बंदियों को रिहा करना
- [D] औपचारिक रूप से युद्ध रुकने के बाद भी तबाही के निशान और अविश्वास का कायम रहना

13. 'छोटा सा आदमी, बड़ा-सा घमंड', यह वाक्य किस व्याकरण-प्रकार का उदाहरण है?

- [A] मुहावरा
- [B] लोकोक्ति
- [C] कहावत
- [D] युद्धविराम

14. निम्नलिखित में से कौन-सा शब्द भेद 'विकारी शब्द' के अंतर्गत नहीं आता है?

- [A] सर्वनाम
- [B] क्रिया विशेषण
- [C] विशेषण
- [D] क्रिया

15. निम्नलिखित में से कौन-सा वाक्यांश अविकारी शब्दों (अव्यय) का उदाहरण है?

- [A] लड़कियाँ खेल रही हैं
- [B] तेज़ दौड़ना
- [C] आगे बढ़ो, तुरंत
- [D] राम का घर

16. वाक्य में किसी शब्द पर विशेष बल देने के लिए किस अविकारी शब्द का प्रयोग किया जाता है (जैसे 'ही', 'भी', 'तक')?

- [A] समुच्चयबोधक
- [B] विस्मयादिबोधक
- [C] क्रिया विशेषण
- [D] निपात

17. 'रोहन धीरे-धीरे चलता है।' उक्त पद का पद-परिचय क्या होगा?

- [A] सकर्मक क्रिया, एकवचन, पुल्लिङ्ग
- [B] रीतिवाचक क्रिया विशेषण, 'चलता है' क्रिया की विशेषता
- [C] जातिवाचक संज्ञा, कर्ता कारक, एकवचन
- [D] गुणवाचक विशेषण, पुल्लिङ्ग

18. 'मुझसे यह भारी सामान नहीं उठाया जाता।' वाक्य में कौन-सा वाच्य है?

- [A] कर्मवाच्य
- [B] कर्तृवाच्य
- [C] भाववाच्य
- [D] मिश्रित वाच्य

19. 'बंगले के पीछे लगा पेड़ गिर गया।' उक्त पद का सही पदबंध भेद चुनिए।

- [A] सर्वनाम पदबंध
- [B] विशेषण पदबंध
- [C] संज्ञा पदबंध
- [D] क्रिया पदबंध

20. 'सैनिकों द्वारा देश की रक्षा की जाती है।' इस वाक्य को कर्तृवाच्य में बदलने पर सही रूप क्या होगा?

- [A] सैनिकों से देश की रक्षा होती है।
- [B] सैनिक देश की रक्षा करते हैं।
- [C] सैनिकों ने देश की रक्षा की थी।
- [D] सैनिक द्वारा देश की रक्षा की जाएगी।

21. 'दशरथ-पुत्र राम ने रावण को मारा।' इस वाक्य में रेखांकित भाग (दशरथ-पुत्र राम) में कौन-सा पदबंध है?

- [A] क्रिया पदबंध
- [B] विशेषण पदबंध
- [C] संज्ञा पदबंध
- [D] क्रिया विशेषण पदबंध

22. 'चलो, अब सोया जाए।' यह वाक्य किस वाच्य का उदाहरण है?

- [A] कर्तृवाच्य
- [B] भाववाच्य
- [C] कर्मवाच्य
- [D] उपर्युक्त में से कोई नहीं

23. 'पद परिचय' के अंतर्गत किसी संज्ञा पद का परिचय देते समय क्या बताना आवश्यक नहीं है?

- [A] संज्ञा का भेद
- [B] लिंग और वचन
- [C] कारक
- [D] क्रिया का काल

24. वाच्य परिवर्तन में निम्नलिखित में से कौन-सा वाच्य कर्मवाच्य का उदाहरण है?

- [A] सीता ने पत्र लिखा।
- [B] पत्र सीता द्वारा लिखा गया।
- [C] सीता पत्र को लिखती है।
- [D] सीता पत्र लिख रहा है।

25. वाक्य "इस समय खाना खाया जा रहा है" में किस वाच्य का उदाहरण है?

- [A] कर्तृवाच्य
- [B] कर्मवाच्य
- [C] भाववाच्य
- [D] अकर्मक कर्तृवाच्य

26. सार्थक शब्दों का वह व्यवस्थित समूह जिससे एक निश्चित अर्थ या भाव प्रकट होता है, व्याकरण में क्या कहलाता है?

- [A] मुहावरा
- [B] वाक्य
- [C] पदबंध
- [D] शब्द-युग्म

27. वाक्य के मुख्य रूप से कितने अनिवार्य तत्वों (लक्षण) माने जाते हैं, जिनके बिना वाक्य का स्वरूप पूर्ण नहीं होता?

- [A] छः
- [B] आठ
- [C] चार
- [D] तीन

28. 'परिश्रमी छात्र परीक्षा में सफल होते हैं।' इस वाक्य में 'उद्देश्य' का विस्तार क्या है?

- [A] सफल होते हैं
- [B] परिश्रमी
- [C] छात्र
- [D] परीक्षा में

29. 'सफेद गाय हरी घास चर रही है।' इस वाक्य में 'विधेय' अंश कौन-सा है?

- [A] चर रही है
- [B] सफेद गाय
- [C] हरी घास
- [D] हरी घास चर रही है

30. 'जैसे ही सूर्यास्त हुआ, चारों ओर अंधेरा छा गया।' इस मिश्रित वाक्य का सही सरल (साधारण) वाक्य रूपांतरण क्या होगा?

- [A] जब सूर्यास्त होता है, तब चारों ओर अंधेरा छा जाता है
- [B] सूर्यास्त होते ही चारों ओर अंधेरा छा गया
- [C] सूर्यास्त हुआ और चारों ओर अंधेरा छा गया
- [D] क्योंकि सूर्यास्त हुआ था, इसलिए चारों ओर अंधेरा छा गया

31. 'वह बीमार था, इसलिए विद्यालय नहीं आ सका।' यह किस प्रकार का वाक्य है और इसका मिश्रित वाक्य में सही रूप क्या होगा?

- [A] मिश्रित वाक्य; वह बीमार था और विद्यालय नहीं आ सका
- [B] सरल वाक्य; बीमार होने के कारण वह विद्यालय नहीं आया
- [C] संयुक्त वाक्य; बीमार होकर वह विद्यालय नहीं आ सका
- [D] संयुक्त वाक्य; चूंकि वह बीमार था, इसलिए विद्यालय नहीं आ सका

32. निम्नलिखित में से व्याकरण की दृष्टि से 'शुद्ध वाक्य' का चयन कीजिए।

- [A] यह बात कहने में किसी को संकोच न होगा
- [B] यहाँ शुद्ध गाय का दूध मिलता है
- [C] साहित्य और जीवन का घोर संबंध है
- [D] एक पानी का गिलास दीजिये

33. 'कृपया आज का अवकाश देने की कृपा करें।' इस वाक्य में किस प्रकार की अशुद्धि है और इसका शुद्ध रूप क्या होगा?

- [A] पुनरुक्ति दोष; शुद्ध रूप — 'आज का अवकाश देने की कृपा करें।'
- [B] वचन संबंधी दोष; शुद्ध रूप — 'कृपया आज के अवकाश देने की कृपा करें।'
- [C] पदक्रम दोष; शुद्ध रूप — 'आज का अवकाश कृपया देने की कृपा करें।'
- [D] लिंग संबंधी दोष; शुद्ध रूप — 'कृपया आज की अवकाश देने की कृपा करें।'

34. शब्द की वह शक्ति जिससे उसके मुख्य अर्थ (वाच्यार्थ) का बोध होता है, वह क्या कहलाती है?

- [A] व्यंजना
- [B] अभिधा
- [C] तात्पर्या
- [D] लक्षणा

35. 'तुम तो कोरे गधे हो' — वाक्य में कौन-सी शब्दशक्ति का प्रयोग हुआ है?

- [A] अभिधा-लक्षणा
- [B] अभिधा
- [C] लक्षणा
- [D] व्यंजना

36. सूर्यास्त के समय किसी के द्वारा यह कहना कि 'सांझ हो गई', जहाँ सुनने वाले अपनी-अपनी परिस्थिति के अनुसार अलग-अलग अर्थ लेते हैं, वहाँ कौन-सी शब्दशक्ति होती है?

- [A] रसध्वनि
- [B] व्यंजना
- [C] अभिधा
- [D] लक्षणा

37. शृंगार, करुण और शांत रस की कविताओं में मुख्य रूप से कौन-सा काव्य गुण पाया जाता है?

- [A] प्रसाद गुण
- [B] ओज गुण
- [C] माधुर्य गुण
- [D] निर्वेद गुण

38. निम्नलिखित में से कौन-सा एक 'वर्णिक छंद' का उदाहरण है?

- [A] इंद्रवज्रा
- [B] रोला
- [C] चौपाई
- [D] दोहा

39. जहाँ उपमेय और उपमान में कोई भेद न रखकर दोनों को एक ही मान लिया जाता है, वहाँ कौन-सा अलंकार होता है?

- [A] भ्रांतिमान अलंकार
- [B] रूपक अलंकार
- [C] उपमा अलंकार
- [D] विभावना अलंकार

40. एक औपचारिक पत्र में 'विषय' का क्या महत्व होता है?

- [A] यह केवल व्यावसायिक पत्रों में जरूरी होता है, कार्यालयी पत्रों में नहीं
- [B] यह लेखक के व्यक्तिगत परिचय को दर्शाने के लिए लिखा जाता है
- [C] यह प्राप्तकर्ता को पत्र के मुख्य उद्देश्य और संदर्भ की तुरंत जानकारी देता है
- [D] यह पत्र को लंबा और अधिक विस्तृत बनाने के लिए लिखा जाता है

41. अनौपचारिक पत्र के संदर्भ में कौन-सा कथन सही है?

- [A] ये पत्र मित्रों, रिश्तेदारों और परिचितों को लिखे जाते हैं तथा इनमें आत्मीयता होती है।
- [B] इन पत्रों में केवल व्यावसायिक और कार्यालयी समस्याओं का समाधान होता है।
- [C] इनकी भाषा अत्यंत कठोर, नपी-तुली और औपचारिक होनी चाहिए।
- [D] इनमें सेवा में, महोदय और विषय लिखना अनिवार्य होता है।

42. एक अच्छे 'अनुच्छेद लेखन' की प्रमुख विशेषता क्या होनी चाहिए?

- [A] सभी वाक्य एक-दूसरे से स्वतंत्र होने चाहिए और उनका आपस में कोई संबंध नहीं होना चाहिए
- [B] विचारों में बिखराव होना चाहिए और उसे जितना संभव हो लंबा खींचना चाहिए
- [C] वह किसी एक मुख्य विचार या भाव को सीमित शब्दों में प्रभावशाली ढंग से व्यक्त करता हो
- [D] उसमें विषय से हटकर काल्पनिक और अनावश्यक प्रसंगों का अधिक समावेश होना चाहिए

43. समाचार पत्र में 'सम्पादकीय' का क्या महत्व होता है और इसे कौन लिखता है?

- [A] यह किसी कंपनी द्वारा अपने नए उत्पादों के प्रचार के लिए दिया गया एक विज्ञापन होता है
- [B] यह केवल खेलकूद के मैचों का आंखों देखा हाल और स्कोरबोर्ड होता है
- [C] यह जनता द्वारा अपनी निजी समस्याओं की शिकायत करने के लिए लिखा गया एक शिकायती पत्र होता है
- [D] यह समाचार पत्र के मुख्य संपादक या सह-संपादक द्वारा लिखा जाता है, जो किसी महत्वपूर्ण विषय पर समाचार पत्र की अपनी राय व्यक्त करता है

44. एक आदर्श सम्पादकीय लेख की भाषा और शैली कैसी होनी चाहिए?

- [A] उसे बिना किसी पैराग्राफ या विराम चिन्हों के लगातार एक ही वाक्य में लिखा जाना चाहिए
- [B] उसमें केवल गालियों और अभद्र भाषा का प्रयोग होना चाहिए ताकि लोग उसे ध्यान से पढ़ें
- [C] भाषा संतुलित, तर्कपूर्ण, निष्पक्ष और प्रभावशाली होनी चाहिए जो पाठकों को सोचने पर मजबूर करें
- [D] भाषा अत्यंत बचकानी, मजाकिया और आधारहीन अफवाहों पर टिकी होनी चाहिए

निर्देश (प्रश्नसंख्या 45-50): निम्न के आधार पर दिये गए प्रश्नों के सही उत्तर चुनें।

श्रद्धा, प्रेम और भक्ति, ये तीनों मानव चेतना के सबसे पावन और सूक्ष्म आयाम हैं। यद्यपि सतही दृष्टि से ये एक जैसे प्रतीत होते हैं, किंतु इनके आंतरिक स्वरूप, अभिव्यक्ति और गहराई में सूक्ष्म अंतर होता है। 'श्रद्धा' का उद्गम बुद्धि और विवेक के समन्वय से होता है। जब हम किसी व्यक्ति, विचार या समष्टि के प्रति आदर का भाव रखते हैं, तो वह श्रद्धा है। आचार्य रामचंद्र शुक्ल के अनुसार, 'किसी मनुष्य में जन-कल्याण की असाधारण क्षमता देखकर उसके प्रति जो पूज्य भाव उत्पन्न होता है, उसे श्रद्धा कहते हैं।' श्रद्धा में पूज्य के प्रति सम्मान का भाव प्रधान होता है। यह एक मानसिक स्वीकृति है, जो किसी के गुणों, ज्ञान या चरित्र की श्रेष्ठता को देखकर स्वतः जागृत होती है। श्रद्धा का क्षेत्र व्यापक और सामाजिक होता है, जहाँ व्यक्ति स्वयं को छोटा और सामने वाले को महान स्वीकार करता है।

इसके विपरीत, 'प्रेम' का संबंध सीधे हृदय से है। प्रेम में कोई दूरी नहीं होती, यह परस्पर निकटता और एकात्मता की मांग करता है। प्रेम का आधार आकर्षण और आत्मीयता है। जहाँ श्रद्धा में केवल 'आदर' होता है, वहीं प्रेम में 'अधिकार' और 'समर्पण' दोनों का मिश्रण होता है। प्रेम सगुण भी हो सकता है और निर्गुण भी; यह व्यक्ति, प्रकृति या किसी अमूर्त विचार से भी हो सकता है। प्रेम की परिणति 'अद्वैत' में होती है, जहाँ प्रेमी और प्रियतम का भेद मिट जाता है।

जब श्रद्धा और प्रेम का मिलन होता है, तब 'भक्ति' का जन्म होता है। दूसरे शब्दों में, 'श्रद्धा + प्रेम = भक्ति'। भक्ति में श्रद्धा का आदर-भाव और प्रेम की अनन्यता दोनों समाहित होती हैं। भक्ति केवल एक भावना नहीं, बल्कि एक साधना है। इसमें भक्त अपने आराध्य के प्रति पूर्णतः समर्पित हो जाता है। श्रद्धा जहाँ व्यक्ति को किसी के सामने सिर झुकाने की प्रेरणा देता है, और प्रेम जहाँ गले लगाने को व्याकुल करता है, वहीं भक्ति में भक्त अपने अस्तित्व को ही आराध्य के चरणों में विलीन कर देता है। भक्ति ईश्वर या किसी परम तत्व के प्रति वह परम अनुराग है, जिसमें भक्त का 'अहंकार' पूरी तरह नष्ट हो जाता है। यही कारण है कि भक्ति को मोक्ष का सबसे सुलभ और आनंदमयी मार्ग माना गया है।

45. उपर्युक्त गद्यांश के आलोक में 'श्रद्धा' और 'प्रेम' के मध्य मूल अंतर को किस प्रकार रेखांकित किया जा सकता है?

- [A] श्रद्धा हृदय की विवशता है, जबकि प्रेम बुद्धि का तार्किक निर्णय है
- [B] श्रद्धा में पूज्य के प्रति सम्मानजनक दूरी होती है, जबकि प्रेम एकात्मता और निकटता की आकांक्षा करता है
- [C] श्रद्धा संकुचित और व्यक्तिगत होती है, जबकि प्रेम का दायरा सदैव सामाजिक होता है
- [D] श्रद्धा केवल निर्गुण तत्व के प्रति होती है, जबकि प्रेम अनिवार्य रूप से सगुण होता है

46. आचार्य रामचंद्र शुक्ल के मत को ध्यान में रखते हुए, श्रद्धा की उत्पत्ति का मुख्य कारण क्या है?

- [A] किसी व्यक्ति के रूप और सौंदर्य के प्रति अंध-आकर्षण
- [B] स्वयं के अहंकार को तुष्ट करने की भावना
- [C] किसी मनुष्य में जन-कल्याण की असाधारण क्षमता और श्रेष्ठता का बोध
- [D] भय और असुरक्षा की भावना से उपजा पूज्य भाव

47. गद्यांश के अनुसार, 'भक्ति' को किस समीकरण या वैचारिक संयोजन के रूप में परिभाषित किया गया है?

- [A] ज्ञान और कर्म का व्यावहारिक संतुलन
- [B] भय और विवशता का चरम बिंदु
- [C] बुद्धि और तर्क का आध्यात्मिक निषेध
- [D] श्रद्धा और प्रेम का अनूठा सम्मिश्रण

48. "प्रेम की परिणति 'अद्वैत' में होती है।" इस कथन का गद्यांश के संदर्भ में क्या निहितार्थ है?

- [A] प्रेमी और प्रियतम के बीच दो पृथक सत्ताओं या भेदभाव का सर्वथा समाप्त हो जाना
- [B] प्रेम में तर्क और बुद्धि का पूरी तरह से नष्ट हो जाना
- [C] दो व्यक्तियों के बीच सामाजिक दूरी का अत्यधिक बढ़ जाना
- [D] प्रेम का केवल ईश्वर तक ही सीमित हो जाना

49. भक्ति की साधना में 'अहंकार' की क्या स्थिति होती है?

- [A] अहंकार और अधिक सुदृढ़ होकर भक्त को आत्मविश्वासी बनाता है
- [B] भक्ति में अहंकार पूरी तरह नष्ट हो जाता है और भक्त पूर्णतया समर्पित हो जाता है
- [C] अहंकार अस्थायी रूप से दमित होता है, जो बाद में पुनः जाग्रत हो जाता है
- [D] भक्ति की शुरुआत ही अत्यधिक अहंकार के साथ होती है

50. निम्नलिखित कथनों पर विचार कीजिए :

- I. श्रद्धा का उद्गम केवल अज्ञानता से होता है।
- II. भक्ति को मोक्ष का सबसे कठिन और दुर्गम मार्ग माना गया है।
- III. प्रेम में केवल अधिकार की भावना होती है, समर्पण की नहीं।

उपरोक्त में से गद्यांश के आधार पर कौन-सा/से कथन/कथनें असत्य (गलत) है/हैं?

- [A] केवल I
- [B] केवल I और II
- [C] केवल II और III
- [D] I, II और III सभी असत्य हैं

51. 'इस्तवार द ला लितरेत्यूर ऐंदुई ऐ ऐंदुस्तानी' ग्रंथ किस भाषा में लिखा गया है?

- [A] हिन्दी
- [B] अंग्रेजी
- [C] फ्रेंच
- [D] उर्दू

52. 'तबाकातुशशुअरा' के लेखक कौन हैं?

- [A] इंशा अल्ला खाँ
- [B] अमीर खुसरो
- [C] नूर मोहम्मद
- [D] मौलवी करीमुद्दीन

53. हिन्दी साहित्य के इतिहास का प्रथम काल विभाजन करने वाले इतिहासकार कौन हैं?

- [A] आचार्य रामचंद्र शुक्ल
- [B] जॉर्ज ग्रियर्सन
- [C] मिश्रबंधु
- [D] पं० हजारी प्रसाद द्विवेदी

54. 'मिश्रबंधु विनोद' में काल विभाजन का मुख्य आधार क्या बनाया गया है?

- [A] राजाओं का शासनकाल
- [B] केवल साहित्यिक प्रवृत्तियाँ
- [C] पद्धतियुक्त कालक्रम
- [D] राष्ट्रीय चेतना

55. निम्नलिखित में से 'प्रियप्रवास' महाकाव्य के रचनाकार कौन हैं?

- [A] मैथिलीशरण गुप्त
- [B] अयोध्यासिंह उपाध्याय 'हरिऔध'
- [C] जयशंकर प्रसाद
- [D] सुमित्रानंदन पंत

56. निम्नलिखित में से 'छायावाद' की प्रमुख प्रवृत्ति कौन-सी है?

- [A] दरबारी संस्कृति का वर्णन
- [B] उपदेशात्मकता और इतिवृत्तात्मकता
- [C] व्यक्तिगत भावना, प्रकृति का मानवीकरण और रहस्यवाद
- [D] शोषित वर्ग के प्रति सहानुभूति

57. 'काव्यशोभाकरान् धर्मान् अलंकारान् प्रचक्षते' उक्ति के लेखक कौन हैं?

- [A] आचार्य भामह
- [B] आचार्य मम्मट
- [C] आचार्य विश्वनाथ
- [D] आचार्य दण्डी

58. 'स्मृति की रेखाएँ' और 'पथ के साथी' महादेवी वर्मा की किस विधा की प्रसिद्ध रचनाएँ हैं?

- [A] जीवनी
- [B] संस्मरण
- [C] उपन्यास
- [D] नाटक

59. हिन्दी की प्रथम प्रामाणिक 'आत्मकथा' किसे माना जाता है?

- [A] 'क्या भूलूँ क्या याद करूँ' (हरिवंशराय बच्चन)
- [B] 'अर्धकथानक' (बनारसीदास जैन)
- [C] 'मेरी आत्म-कहानी' (श्यामसुंदर दास)
- [D] 'अपनी खबर' (पांडेय बेचन शर्मा 'उग्र')

60. 'राहुल सांकृत्यायन' को हिन्दी साहित्य में किस विधा का अनन्य प्रतिष्ठापक या प्रणेता माना जाता है?

- [A] आत्मकथा
- [B] रेखाचित्र
- [C] यात्रा वृत्तांत
- [D] जीवनी

61. निम्नलिखित में से 'विनय पत्रिका' का विषय क्या है?

- [A] भक्ति और अध्यात्म
- [B] योगभावना
- [C] ज्ञान प्राप्ति का साधन
- [D] देवस्तुति

62. निम्नलिखित में से सूर के 'भ्रमरगीत सार' रचना की मौलिक विशेषता क्या है?

- [A] ज्ञान एवं योग पर प्रेम और भक्ति की विजय मार्मिकता एवं काव्यात्मकता
- [B] गोपिकाओं का वाक् चातुर्य
- [C] उद्धव के उपदेश का ज्ञान पक्ष
- [D] विरह वर्णन

63. निम्नलिखित में से किसे 'अवधूत' माना जाता है?

- [A] निम्बार्क के वैरागियों को
- [B] चैतन्य के संन्यासियों को
- [C] रामानंद के वैरागियों को
- [D] मध्वाचार्य के अनुयायियों को

64. निम्नलिखित में से हिन्दी में सतसई परम्परा की प्रथम कृति क्या है?

- [A] 'हिततरंगिणी'
- [B] 'बिहारी सतसई'
- [C] 'वीर सतसई'
- [D] 'मतिराम सतसई'

65. निम्नलिखित में से कौन-सी शौरसेनी अपभ्रंश की बोली नहीं है?

- [A] बुंदेली
- [B] गढ़वाली
- [C] बघेली
- [D] कौरवी

66. वर्ष 1955 में राष्ट्रपति द्वारा नियुक्त राजभाषा आयोग में कितने सदस्य थे?

- [A] 24
- [B] 21
- [C] 23
- [D] 22

67. निम्नलिखित में से कौन-सा 'कामायनी' का सर्ग नहीं है?

- [A] ईर्ष्या
- [B] लज्जा
- [C] श्रद्धा
- [D] इच्छा

68. 'नई कहानी आंदोलन' का सूत्रपात कब हुआ था?

- [A] 1955 ई० में
- [B] 1956 ई० में
- [C] 1960 ई० में
- [D] 1959 ई० में

69. निम्नलिखित में से हिन्दी में गद्यकाव्य के जनक कौन हैं?

- [A] ब्रजनंदन सहाय
- [B] विष्णु प्रभाकर
- [C] रामवृक्ष बेनीपुरी
- [D] रायकृष्णदास

70. निम्नलिखित में से कौन-सा महावीर प्रसाद द्विवेदी द्वारा रचित निबंध नहीं है?

- [A] 'कवियों की उर्मिला-विषयक उदासीनता'
- [B] 'साहित्य देवता'
- [C] 'लेखांजली'
- [D] 'आत्म निवेदन'

71. निम्नलिखित में से कौन-सा युग्म असंगत है?

- [A] 'श्रावकाचार' — स्वयंभू
- [B] 'महापुराण' — पुष्पदंत
- [C] 'योगसार' — जोड़ु
- [D] 'भरतेश्वर बाहुबली रास' — शालिभद्र सूरि

72. निम्नलिखित में से कौन-सा युग्म सुमेलित नहीं है?

- [A] 'हम विषपायी जनम के' — 'नवीन'
- [B] 'हल्दीघाटी' — सुभद्राकुमारी चौहान
- [C] 'स्वप्न' — रामनरेश त्रिपाठी
- [D] 'चोखे चौपदे' — 'हरिऔध'

73. निम्नलिखित में से कौन-सा युग्म असंगत युग्म है?

- [A] 'बाकी सब खैरियत है' — मृदुला गर्ग
- [B] 'आओ पेपे घर चलें' — प्रभा खेतान
- [C] 'रुकोगी नहीं राधिका' — उषा प्रियवंदा
- [D] 'बेघर' — ममता कालिया

74. निम्नलिखित में से कौन-सा युग्म असंगत युग्म है?

- [A] 'साहित्य समन्वय' — 'निराला'
- [B] 'कर्मवीर' — माखनलाल चतुर्वेदी
- [C] 'मतवाला' — गुलाब राय
- [D] 'हिन्दी नवजीवन' — महात्मा गाँधी

75. निम्नलिखित में से कौन-सा युग्म असंगत है?

- [A] 'तिरस्कृत' — मोहनदास नैमिशराय
- [B] 'जूठन' — ओमप्रकाश वाल्मीकि
- [C] 'हादसे' — रमणिका गुप्ता
- [D] 'अन्या से अनन्या' — प्रभा खेतान

76. कथन (A) : आचार्य मम्मट के अनुसार "शब्द और अर्थ का सुसंयोग" काव्य कहलाता है।

कारण (R) : काव्य में केवल शब्दों की सुंदरता ही महत्वपूर्ण होती है, अर्थ का कोई महत्व नहीं होता।

- [A] कथन (A) और कारण (R) दोनों सत्य हैं तथा कारण (R), कथन (A) की सही व्याख्या है
- [B] कथन (A) और कारण (R) दोनों सत्य हैं परन्तु कारण (R), कथन (A) की सही व्याख्या नहीं है
- [C] कथन (A) सत्य है पर कारण (R) असत्य है
- [D] कथन (A) असत्य है पर कारण (R) सत्य है

77. कथन (A) : अरस्तू के अनुसार त्रासदी का उद्देश्य दर्शकों के मन का विरेचन करना है।

कारण (R) : विरेचन सिद्धान्त में करुणा और भय के भावों का शुद्धिकरण होता है।

- [A] कथन (A) और कारण (R) दोनों सत्य हैं तथा कारण (R), कथन (A) की सही व्याख्या है
- [B] कथन (A) और कारण (R) दोनों सत्य हैं परन्तु कारण (R), कथन (A) की सही व्याख्या नहीं है
- [C] कथन (A) सत्य है पर कारण (R) असत्य है
- [D] कथन (A) असत्य है पर कारण (R) सत्य है

78. कथन (A) : प्लेटो ने कला और काव्य को अनुकरण माना है।

कारण (R) : प्लेटो के अनुसार कवि सत्य का प्रत्यक्ष चित्रण करता है।

- [A] कथन (A) और कारण (R) दोनों सत्य हैं तथा कारण (R), कथन (A) की सही व्याख्या है
- [B] कथन (A) और कारण (R) दोनों सत्य हैं परन्तु कारण (R), कथन (A) की सही व्याख्या नहीं है
- [C] कथन (A) सत्य है पर कारण (R) असत्य है
- [D] कथन (A) असत्य है पर कारण (R) सत्य है

79. कथन (A) : बोली का क्षेत्र भाषा की अपेक्षा सीमित होता है।

कारण (R) : बोली का अपना स्वतंत्र व्याकरण और साहित्य नहीं होता।

- [A] कथन (A) और कारण (R) दोनों सत्य हैं तथा कारण (R), कथन (A) की सही व्याख्या है
- [B] कथन (A) और कारण (R) दोनों सत्य हैं परन्तु कारण (R), कथन (A) की सही व्याख्या नहीं है
- [C] कथन (A) सत्य है पर कारण (R) असत्य है
- [D] कथन (A) असत्य है पर कारण (R) सत्य है

80. कथन (A) : देवनागरी लिपि को वैज्ञानिक लिपि माना जाता है।

कारण (R) : देवनागरी में जैसा बोला जाता है, वैसा ही लिखा जाता है।

- [A] कथन (A) और कारण (R) दोनों सत्य हैं तथा कारण (R), कथन (A) की सही व्याख्या है
- [B] कथन (A) और कारण (R) दोनों सत्य हैं परन्तु कारण (R), कथन (A) की सही व्याख्या नहीं है
- [C] कथन (A) सत्य है पर कारण (R) असत्य है
- [D] कथन (A) असत्य है पर कारण (R) सत्य है

81. प्रकाशन काल की दृष्टि से सही अनुक्रम है :

- [A] उद्धव शतक, मिलन, प्रियप्रवास, साकेत
- [B] मिलन, प्रियप्रवास, साकेत, उद्धव शतक
- [C] साकेत, उद्धव शतक, प्रियप्रवास, मिलन
- [D] प्रियप्रवास, मिलन, उद्धव शतक, साकेत

82. 'कामायनी' के सर्गों का सही अनुक्रम है :

- [A] स्वप्न, इड़ा, ईर्ष्या, कर्म, लज्जा
- [B] लज्जा, कर्म, ईर्ष्या, इड़ा, स्वप्न
- [C] कर्म, ईर्ष्या, लज्जा, स्वप्न, इड़ा
- [D] इड़ा, कर्म, लज्जा, ईर्ष्या, स्वप्न

83. सही अनुक्रम ज्ञात कीजिए :

- [A] 'बीजक', 'अंगवधू', 'अखरावट', 'सतबानी'
- [B] 'बीजक', 'अखरावट', 'सतबानी', 'अंगवधू'
- [C] 'सतबानी', 'अंगवधू', 'अखरावट', 'बीजक'
- [D] 'बीजक', 'सतबानी', 'अंगवधू', 'अखरावट'

84. निम्नलिखित कवियों का कालक्रमानुसार सही सुमेलन है :

- [A] केशव, बिहारी, सेनापति, कृपाराम
- [B] बिहारी, सेनापति, केशव, कृपाराम
- [C] कृपाराम, केशव, सेनापति, बिहारी
- [D] सेनापति, कृपाराम, केशव, बिहारी

85. कालक्रमानुसार सही अनुक्रम है :

- [A] रहीम, देव, पद्माकर, प्रताप साही
- [B] देव, पद्माकर, रहीम, प्रताप साही
- [C] प्रताप साही, रहीम, देव, पद्माकर
- [D] पद्माकर, देव, रहीम, प्रताप साही

86. सूफी मत में वर्णित साधक की चार अवस्थाओं की चार शरीयत, तरीकत, मारिकत, हकीकत की भारतीय भक्तिमार्ग के साथ सही क्रम में संगति क्या होगी ?

- [A] आचरण, उपासना, सिद्धावस्था, सत्यबोध
- [B] उपासना, सिद्धावस्था, आचरण, सत्यबोध
- [C] सत्यबोध, उपासना, आचरण, सिद्धावस्था
- [D] आचरण, सत्यबोध, सिद्धावस्था, उपासना

87. मुंशी प्रेमचंद के उपन्यासों का प्रकाशन काल की दृष्टि से सही अनुक्रम कौन-सा है ?

- [A] 'गबन', 'कर्मभूमि', 'निर्मला', 'गोदान'
- [B] 'गबन', 'निर्मला', 'गोदान', 'कर्मभूमि'
- [C] 'कर्मभूमि', 'गोदान', 'गबन', 'निर्मला'
- [D] 'निर्मला', 'गबन', 'कर्मभूमि', 'गोदान'

88. प्रकाशन काल के अनुसार पत्रिकाओं का सही अनुक्रम है :

- [A] 'हंस', 'आलोचना', 'रविवार', 'सरस्वती'
- [B] 'सरस्वती', 'हंस', 'आलोचना', 'रविवार'
- [C] 'आलोचना', 'सरस्वती', 'रविवार', 'हंस'
- [D] 'रविवार', 'हंस', 'सरस्वती', 'आलोचना'

89. निम्नलिखित उपन्यासों का सही अनुक्रम कौन-सा है ?

- [A] 'अलग-अलग वैतरणी', 'बलचनमा', 'जुलूस', 'आधा गाँव'
- [B] 'आधा गाँव', 'अलग-अलग वैतरणी', 'बलचनमा', 'जुलूस'
- [C] 'बलचनमा', 'जुलूस', 'आधा गाँव', 'अलग-अलग वैतरणी'
- [D] 'जुलूस', 'आधा गाँव', 'अलग-अलग वैतरणी', 'बलचनमा'

90. निम्नलिखित को सुमेलित कीजिए :

सूची—I

सूची—II

- | | |
|--------------------|------------------|
| (a) बीसलदेव रासो | (i) जगनिक |
| (b) पृथ्वीराज रासो | (ii) नरपति नाल्ह |
| (c) परमाल रासो | (iii) दलपति विजय |
| (d) खुम्माण रासो | (iv) चंदबरदाई |
| | (v) मधुकर |

कूट :

- | | | | |
|-----------|-------|-------|-------|
| (a) | (b) | (c) | (d) |
| [A] (ii) | (iv) | (i) | (iii) |
| [B] (i) | (ii) | (iii) | (v) |
| [C] (iv) | (iii) | (ii) | (i) |
| [D] (iii) | (i) | (v) | (ii) |

91. निम्नलिखित को सुमेलित कीजिए :

सूची—I	सूची—II
(a) 'बाजरे हुस्न'	(i) रंगभूमि
(b) 'गोशा-ए-आफ़ियत'	(ii) वरदान
(c) 'जज़्बा-ए-ईसार'	(iii) प्रेमाश्रम
(d) 'चौगाने हस्ती'	(iv) सेवासदन
	(v) कर्मभूमि

कूट :

(a)	(b)	(c)	(d)
[A] (i)	(v)	(iii)	(ii)
[B] (ii)	(i)	(iv)	(v)
[C] (iv)	(iii)	(ii)	(i)
[D] (iii)	(ii)	(iv)	(i)

92. निम्नलिखित को सुमेलित कीजिए :

सूची—I	सूची—II
(a) साठोत्तरी कविता	(i) रवीन्द्र भ्रमर
(b) अकविता	(ii) लक्ष्मीकांत वर्मा
(c) ताजी कविता	(iii) जगदीश चतुर्वेदी
(d) सहज कविता	(iv) सलिल गुप्त

कूट :

(a)	(b)	(c)	(d)
[A] (i)	(ii)	(iii)	(iv)
[B] (ii)	(i)	(iv)	(iii)
[C] (iv)	(iii)	(ii)	(i)
[D] (iii)	(iv)	(i)	(ii)

93. निम्नलिखित को सुमेलित कीजिए :

सूची—I	सूची—II
(a) अब अभिव्यक्ति के सारे खतरे उठाने ही होंगे	(i) 'अज्ञेय'
(b) सबने भी अलग-अलग संगीत सुना	(ii) महादेवी वर्मा
(c) नयन में जिसके जलद वह तृषित चातक हूँ	(iii) 'निराला'
(d) अशनि-पात से शायित उन्नत शत-शत वीर	(iv) 'मुक्तिबोध'
	(v) कुँवर नारायण

कूट :

(a)	(b)	(c)	(d)
[A] (iv)	(i)	(ii)	(iii)
[B] (i)	(ii)	(iii)	(v)
[C] (iv)	(iii)	(ii)	(i)
[D] (iv)	(iii)	(i)	(v)

94. निम्नलिखित को सुमेलित कीजिए :

सूची—I	सूची—II
(a) केशवदास	(i) ललित ललाम
(b) मतिराम	(ii) रसिकप्रिया
(c) भूषण	(iii) भाव विलास
(d) देव	(iv) आर्यासप्तशती
	(v) शिवबावनी

कूट :

(a)	(b)	(c)	(d)
[A] (i)	(ii)	(iii)	(v)
[B] (ii)	(i)	(v)	(iii)
[C] (ii)	(i)	(iii)	(v)
[D] (v)	(iii)	(ii)	(i)

95. “बिछुरे मिलै मीन पतंग दशा,
कहाँ मो जिय गति को परसै।” — यह पंक्ति किसकी है?

[A] रसलीन

[B] आलम

[C] घनानंद

[D] बोधा

96. “देसिल बअना सबजन मिट्ठा, ते तैसन जपओ अवहट्टा।”
— यह पंक्ति किसकी है?

[A] गोरखनाथ

[B] चर्पटनाथ

[C] सरहपा

[D] विद्यापति

97. “जिस प्रकार ‘रामचरित’ का गान करने वाले भक्त कवियों
में गोस्वामी तुलसीदास का स्थान सर्वश्रेष्ठ है, उसी प्रकार
‘कृष्णचरित’ का गान करने वाले कवियों में महात्मा सूरदास
का। वास्तव में ये काव्य-गगन के सूर्य और चंद्र हैं।” —
यह कथन किसका है?

[A] पं० हजारी प्रसाद द्विवेदी

[B] आचार्य रामचंद्र शुक्ल

[C] महावीर प्रसाद द्विवेदी

[D] डॉ० राम स्वरूप चतुर्वेदी

98. “रीतिकाल का सम्यक प्रवर्तन केशवदास द्वारा भक्ति काल
में ही हो गया था।” — यह कथन किसका है?

[A] आचार्य रामचंद्र शुक्ल

[B] पं० हजारी प्रसाद द्विवेदी

[C] डॉ० वासुदेव सिंह

[D] विश्वनाथ प्रसाद मिश्र

99. “शब्दार्थ का सार काव्य है और काव्य का सार रस है।”
— यह कथन किसका है?

[A] केशवदास

[B] कवि देव

[C] मतिराम

[D] चिंतामणि

100. “प्रगतिशील कविता वास्तव में छायावाद की ही एक धारा
है, दोनों स्वरों में जागरण का उदात्त संदेश मिलता है। एक
में मानवीय जागरण का, दूसरे में लोक जागरण का।” —
यह कथन किसका है?

[A] आचार्य रामचंद्र शुक्ल

[B] पं० हजारी प्रसाद द्विवेदी

[C] जयशंकर प्रसाद

[D] सुमित्रानंदन पंत

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1. Match the following authors with their respective books :

(Authors)		(Books)	
(a) Patanjali	(i) Tolkappiyam		
(b) Panini	(ii) Prakrita Prakasha		
(c) Tolkapiyar	(iii) Mahabhashya		
(d) Vararuchi	(iv) Ashtadhyayi		
(a)	(b)	(c)	(d)
[A] (i)	(iii)	(ii)	(iv)
[B] (iii)	(ii)	(i)	(iv)
[C] (iv)	(i)	(iii)	(ii)
[D] (iii)	(iv)	(i)	(ii)

2. Consider the following statements regarding Hindu sacred texts :

- The *Veda*-s are classified as *Shruti* because they are believed to be eternal truths composed by the rishis through rational inquiry.
- Texts such as the *Purana*-s, Epics and *Dharmashastra*-s fall under the category of *Smriti*.

Which of the statement(s) given above is/are **correct**?

- [A] I only
[B] II only
[C] Both I and II
[D] Neither I nor II

3. Pitakas Content

(a) Sutta Pitaka	Buddha's discourses in dialogue form
(b) Vinaya Pitaka	Includes the Pati-mokkha
(c) Abhidhamma Pitaka	Rules for monks and nuns of the Sangha
(d) Vinaya Pitaka	Systematic study via lists, summaries and Q&A

Which of the above pair(s) is/are **correctly** matched?

- [A] (a) only
[B] (c) and (d)
[C] (a) and (b)
[D] (b) and (d)

4. Consider the following statements about Palaeo-pathology :

- It is the study of diseases ancient people suffered from by analysing their bones.
- Diseases such as arthritis and tuberculosis leave their mark on bones and can be identified.

Which of the statement(s) given above is/are **correct**?

- [A] I only
[B] II only
[C] Both I and II
[D] Neither I nor II

5. According to the *Rabatak Inscription*, which of the following cities were part of Kanishka's empire?

- Ujjayini
- Pataliputra
- Kaushambi
- Kannauj

Select the **correct** answer using the codes given below :

Codes :

- [A] I, II and III only
[B] II, III and IV only
[C] I, III and IV only
[D] I, II, III and IV

6. The *Periplus of the Erythraean Sea* is considered an important source for understanding

- [A] maritime trade networks in the Indian Ocean during the early centuries CE
[B] the political history of the Gupta Empire
[C] the monastic organization of Buddhism in India
[D] the development of Vedic sacrificial rituals

7. Which one of the following pairs of Persian texts and their subjects is **correctly** matched?
- [A] *Chach Nama* — Indian Ocean trade routes
 [B] *Gulistan* — Arab conquest of Sindh
 [C] *Shahnameh* — Classic of Persian poetry by Firdausi
 [D] *Tahqiq-i-Hind* — Persian account of the Gupta Dynasty
8. Consider the following statements regarding the geographical extent of the Harappan Civilization :
- I. The Harappan culture extended from Jammu in the north to the Narmada estuary in the south.
 II. The westernmost limit of the Harappan Civilization was the Makran coast of Balochistan.
 III. The easternmost limit of the Harappan Civilization was Pataliputra in the north-east.
- Which of the statement(s) given above is/are **not correct**?
- [A] I only
 [B] I and II only
 [C] III only
 [D] II and III only
9. Which site provides the most complete archaeological evidence of the Mature Harappan urban phase, including a planned grid layout, standardized weights and measures and a Great Bath?
- [A] Mehrgarh
 [B] Kalibangan
 [C] Mohenjo-daro
 [D] Lothal
10. The standard Harappan brick ratio was
- [A] 1 : 1 : 2
 [B] 1 : 2 : 3
 [C] 1 : 2 : 4
 [D] 2 : 3 : 4
11. The Harappan Civilization is often cited as a remarkable example of urban planning in the ancient world. Which of the following features most distinctively reflects the advanced civic consciousness of the Harappan people?
- [A] Development of iron technology for construction
 [B] Elaborate underground drainage and sewage disposal system
 [C] Existence of a well-established coinage system
 [D] Construction of monumental temples as centres of social bonding
12. Which one of the following statements about the decline of Harappan cities is **not correct**?
- [A] The decline of the cities was once ascribed to invading Aryans
 [B] Analysis of skeletons at Mohenjo-daro revealed that most people died of diseases such as severe anaemia
 [C] Archaeological evidence strongly supports a massive Aryan invasion as the primary cause of urban decline
 [D] Environmental changes such as severe flooding and climate change have been suggested as factors in urban decline
13. Which of the following scholars argued that the decline of Harappan-Mesopotamian trade was a reason for the decline of the Harappan Civilization itself?
- [A] Shereen Ratnagar
 [B] Jim G. Shaffer
 [C] Dilip Kumar Chakrabarti
 [D] Nayanjot Lahiri

14. The event known as *Dhammacakka-ppavattana* refers to

- [A] the Buddha's enlightenment at Bodh Gaya
- [B] the establishment of the Sangha
- [C] the Buddha's first sermon at Sarnath
- [D] the Buddha's *Mahaparinibbana*

15. Consider the following statements :

- I. The Sangha included both monks and nuns.
- II. The Laity played an important role in supporting the Sangha through donations.
- III. Buddhist monasteries depended entirely on State patronage.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

16. The doctrine of *Patichcha-samuppada* refers to

- [A] the theory of divine creation
- [B] the law of dependent origination
- [C] the doctrine of non-violence
- [D] the worship of relics

17. Consider the following two statements :

Assertion (A) : The enormous wealth of Buddhist monasteries led to their degeneration and eventual destruction.

Reason (R) : Wealth attracted Turkish invaders who plundered the monasteries and killed the monks.

Which of the following is **correct**?

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

18. Consider the following statements regarding the Jaina tradition :

- I. Mahavira was regarded as the founder of Jainism.
- II. Jain tradition recognizes 24 Tirthankaras in each half-cycle of time.
- III. Parsvanatha is regarded as the 23rd Tirthankara.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

19. Mahavira attained perfect knowledge (kaivalya) at the age of

- [A] 30 years
- [B] 40 years
- [C] 42 years
- [D] 45 years

20. The Jains contributed significantly to the growth of which of the following languages?

- I. Prakrit (Ardhamagadhi)
- II. Apabhramsa
- III. Kannada
- IV. Pali

Select the **correct** answer using the codes given below :

Codes :

- [A] I and II only
- [B] II and IV only
- [C] II, III and IV only
- [D] I, II and III only

21. Consider the following statements regarding the territorial expansion of the Mauryan Empire under Chandragupta :

- I. He first acquired the throne of Magadha, then exploited the power vacuum created by Alexander's departure to move into the north-west.
- II. He campaigned against Seleucus Nicator in 305 BC and was decisively defeated.
- III. After the treaty of 303 BC, Mauryan control extended to eastern Afghanistan, Balochistan and Makran.
- IV. He never ventured into central India and remained confined to the Ganges Plain.

Which of the statements given above are **correct**?

- [A] I and III only
[B] I, II and III only
[C] II and IV only
[D] I, III and IV only

22. With reference to Megasthenes' *Indica*, consider the following statements :

- I. The original text of *Indica* is no longer surviving and exists only through references in later classical works.
- II. Differences among the accounts of later authors necessitate a critical evaluation of the evidence by historians.
- III. The information contained in *Indica* can be accepted uncritically as an authentic record of Mauryan India.

Which of the statement(s) given above is/are **not correct**?

- [A] I and II only
[B] II only
[C] III only
[D] II and III only

23. Consider the following statements regarding the *Arthashastra* of Kautilya :

- I. The *Arthashastra* consists of 15 books, of which the first five deal with internal administration and the next eight with inter-State relations.
- II. Kautilya, the author of the *Arthashastra*, is also known as Chanakya and Vishnugupta.
- III. Thomas Trautmann's statistical analysis conclusively proved that Kautilya was the sole author of the entire *Arthashastra*.

Which of the statements given above are **correct**?

- [A] I and II only
[B] II and III only
[C] I and III only
[D] I, II and III

24. Consider the following statements regarding Ashokan Inscriptions and their locations :

- I. The bilingual Greek-Aramaic Inscription was found at Shar-i-Kuna near Kandahar in Afghanistan.
- II. At Dhauli and Jaugada, Separate Rock Edicts 1 and 2 replace Major Rock Edicts 11-13.
- III. The Delhi-Topra pillar originally stood at Topra in the Ambala district and contains seven edicts.
- IV. The Minor Rock Edicts have the widest distribution with a noticeable clustering in the Punjab-Haryana area.

Which of the statement(s) given above is/are **not correct**?

- [A] I only
[B] I and II only
[C] I and IV only
[D] IV only

25. Match the following :

(Officers)	(Functions)
(a) Panyadhyaksha	(i) Inspector of coins
(b) Rupadarshaka	(ii) Superintendent of markets
(c) Pautavadhyaksha	(iii) Ensuring the use of standardized weights and measures
(d) Sansthadhyaksha	(iv) In charge of trade and price fixation
(a) (b) (c) (d)	
[A] (ii) (i) (iii) (iv)	
[B] (ii) (iv) (iii) (i)	
[C] (iv) (i) (iii) (ii)	
[D] (iii) (i) (iv) (ii)	

26. Consider the following statements about Ashoka's Dhamma :

- I. Rock Edict 1 announces ban on animal sacrifices and certain festive gatherings involving the killing of animals.
- II. Pillar Edict 5 refers to sweeping prohibitions promulgated 26 years after Ashoka's coronation.
- III. The Dhamma Mahamatras were created by Ashoka 26 years after his coronation.

Which of the statement(s) given above is/are **not correct**?

- [A] I only
[B] II only
[C] I and II only
[D] III only

27. Samudragupta ruled approximately from

- [A] 320-335 AD
[B] 335-380 AD
[C] 380-412 AD
[D] 412-455 AD

28. Consider the following statements regarding the Allahabad Prashasti of Samudragupta :

- I. The *Prashasti* was composed by Harisena, who held the title of Sandhivigrahika.
- II. The inscription is carved on the same pillar that also carries inscriptions of Ashoka and Mughal Emperor Jahangir.
- III. The *Prashasti* describes Samudragupta only as a military conqueror with no mention of his personal qualities.

Which of the statement(s) given above is/are **not correct**?

- [A] I only
[B] II and III only
[C] III only
[D] I and III only

29. Which of the following pairs are **correctly** matched?

Southern King	Kingdom
(a) Vishnugopa	Vengi
(b) Hastivarman	Kanchi
(c) Mahendra	Pishtapura
(d) Ugrasena	Palakka
[A] (c) and (d) only	
[B] (a) and (b) only	
[C] (b) and (d) only	
[D] (a), (c) and (d) only	

30. Which Gupta ruler conquered western Malwa and Gujarat from the Sakas?

- [A] Chandragupta-I
[B] Samudragupta
[C] Chandragupta-II
[D] Skandagupta

31. Consider the following statements about the Huna invasions :

- I. The Hunas, known as Hephthalites, became powerful in the Oxus valley in the mid-5th century.
- II. Toramana's son and successor, Mihirakula, had his capital at Sakala, identified with modern Sialkot.
- III. Mihirakula was never defeated and successfully conquered all of North India.

Which of the statement(s) given above is/are **not correct**?

- [A] I only
[B] III only
[C] II only
[D] I and II only

32. Consider the following statements regarding Gupta art :

- I. Gupta art is characterized by a balance between sensuality and spirituality.
- II. The Gupta style was confined exclusively to the political boundaries of the Gupta Empire.
- III. Art historians identify a remarkable degree of uniformity in Gupta period sculpture and temple architecture.

Which of the statements given above are **correct**?

- [A] I and II only
[B] II and III only
[C] I and III only
[D] I, II and III

33. Which of the following temples is regarded as one of the earliest examples of a temple with a Shikhara (spire)?

- [A] Vishnu Temple, Tigawa
[B] Dashavatara Temple, Deogarh
[C] Buddhist Temple, Sanchi
[D] Shiva Temple, Bhumara

34. Consider the following two statements :

Assertion (A) : Iltutmish must be regarded as the real consolidator of the Turkish conquests in North India rather than Aibak.

Reason (R) : At the time of Iltutmish's accession, the Delhi Sultanate faced challenges from Ali Mardan Khan in Bengal, Qubacha in Multan, Rajput reassertion in eastern Rajasthan and the Khwarizmi threat from the north-west — all of which he successfully addressed.

Which of the following is **correct**?

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
[B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
[C] **(A)** is true but **(R)** is false
[D] **(A)** is false but **(R)** is true

35. After consolidating his power, Balban assumed the grand title of

- [A] *Tuti-e-Hind*
[B] *Kaiser-i-Hind*
[C] *Zil-i-Ilahi*
[D] *Din-i Ilahi*

36. Which one of the following best describes the *Chahalgani* during the Delhi Sultanate period?

- [A] A powerful group of Turkish nobles that played a significant role in succession politics
[B] A special force created to defend the north-western frontier
[C] A court ritual introduced by Balban to enhance royal prestige
[D] A council of religious scholars advising the Sultan

37. Consider the following statements regarding Alauddin Khalji's rise to power :

- I. Alauddin Khalji came to the throne by murdering his uncle and father-in-law, Jalaluddin Khalji.
- II. As Governor of Awadh, Alauddin had accumulated vast treasure by invading Deogir in the Deccan.
- III. Jalaluddin had taken his entire army with him when he went to meet Alauddin at Kara.

Which of the statement(s) given above is/are **not correct**?

- [A] I only
- [B] III only
- [C] II only
- [D] I and II only

38. Arrange the following Tughlaq rulers in chronological order :

- I. Firuz Shah Tughlaq
- II. Ghiyas ud-Din Tughlaq
- III. Muhammad bin Tughlaq

- [A] II → III → I
- [B] III → II → I
- [C] I → II → III
- [D] II → I → III

39. Consider the following statements regarding the consolidation of Mughal rule under Akbar :

- I. The victory at the Second Battle of Panipat ensured immediate and undisputed Mughal control over North India.
- II. The rebellions of the Uzbeks and Mirzas represented challenges from within the Mughal nobility.
- III. Akbar's dismissal of Bairam Khan marked the beginning of his personal rule.

Which of the statement(s) given above is/are **correct**?

- [A] II and III only
- [B] I and II only
- [C] III only
- [D] I, II and III

40. The new currency of silver and copper introduced by Sher Shah is called

- [A] Tanka and Jital
- [B] Dam and Jital
- [C] Rupiya and Dam
- [D] None of the above

41. Consider the following statements regarding Sher Shah's architectural contributions :

- I. His mausoleum at Sasaram is regarded as a masterpiece of pre-Mughal architecture.
- II. His mosque in the Purana Qila at Delhi marks the transition from pre-Mughal to Mughal architecture.

Which of the statement(s) given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

42. The decorative technique known as *Pietra Dura* reached its highest development under

- [A] Jahangir
- [B] Shah Jahan
- [C] Aurangzeb
- [D] Humayun

43. Which Mughal prince translated the *Bhagavad Gita* into Persian and described the *Upanishads* as conforming with the *Quran*?

- [A] Murad
- [B] Aram Shah
- [C] Shah Shuja
- [D] Dara Shikoh

44. Which of the following painters were in Jahangir's Court?

- I. Abdus Samad
- II. Abul Hasan
- III. Mir Sayyid Ali
- IV. Ustad Mansur

Choose the **correct** option :

- [A] I and II
- [B] I and III
- [C] II and IV
- [D] I and IV

45. The symbol(s) of the 1857 Independence Struggle was/were

- [A] lotus and chapatis
- [B] eagle
- [C] scarf
- [D] two swords

46. The largest number of soldiers who participated in the Struggle of 1857 came from

- [A] Bengal
- [B] Oudh
- [C] Bihar
- [D] Rajasthan

47. Consider the following statements about changes in the military policy after 1857 :

- I. European troops were strategically placed at key areas.
- II. Punjabis, Gorkhas and Pathans were declared martial.
- III. Regiments were formed based on equality to prevent the accumulation of grievances.

Which of the above statement(s) is/are **true**?

- [A] I only
- [B] I and II only
- [C] I and III only
- [D] I, II and III

48. Which one of the following Commissions is associated with the army reorganization after the suppression of the Revolt of 1857?

- [A] The Public Service Commission
- [B] The Simon Commission
- [C] The Hunter Commission
- [D] The Peel Commission

49. With reference to the Government of India Act, 1858, which of the following was the supreme legislative authority governing British India?

- [A] The British Parliament
- [B] Queen Victoria
- [C] The British Cabinet
- [D] The Secretary of State for India

50. The first European to be elected as President of the Indian National Congress was

- [A] A. O. Hume
- [B] George Yule
- [C] Alfred Webb
- [D] Annie Besant

51. Which one of the following Governors-General earned the epithet of 'Clemency'?

- [A] Lord Canning
- [B] Lord Ripon
- [C] Lord Mayo
- [D] Lord Irwin

52. After the sentence of B. G. Tilak, who among the following had pleaded for mercy and said, "My interest in Tilak is that of a Sanskrit scholar"?

- [A] Rabindranath Tagore
- [B] Max Müller
- [C] Bipin Chandra Pal
- [D] William Jones

53. Which of the following social classes **did not** participate in the Non-Cooperation Movement?

- [A] Students and teachers
- [B] Peasants and labourers
- [C] Landlords and merchants
- [D] Big capitalists and industrialists

54. Which one of the following sessions of Indian National Congress was for the first time attended by M. K. Gandhi?

- [A] The Lucknow Session, 1916
- [B] The Calcutta Session, 1901
- [C] The Amritsar Session, 1919
- [D] The Nagpur Session, 1920

55. Which newspaper converted itself overnight into an English newspaper to escape the Vernacular Press Act?

- [A] The *Kesari*
- [B] The *Bengalee*
- [C] The *Amrita Bazar Patrika*
- [D] The *Indian Mirror*

56. Match the following :

(Newspaper) **(Founder/Editor)**

- | | |
|-------------------------------|---------------------------|
| (a) The <i>Kesari</i> | (i) Surendranath Banerjee |
| (b) The <i>Bengalee</i> | (ii) Bal Gangadhar Tilak |
| (c) The <i>Voice of India</i> | (iii) Dadabhai Naoroji |
| (d) The <i>Sudharak</i> | (iv) Gopal Ganesh Agarkar |

- | | | | |
|----------|-------|-------|-------|
| (a) | (b) | (c) | (d) |
| [A] (ii) | (i) | (iii) | (iv) |
| [B] (i) | (ii) | (iv) | (iii) |
| [C] (ii) | (iii) | (i) | (iv) |
| [D] (iv) | (i) | (ii) | (iii) |

57. Which one of the following parties was in power in the U.K. when India got Independence?

- [A] The Conservative Party
- [B] The Labour Party
- [C] The Liberal Party
- [D] The Socialist Party

58. Who led the Salt Satyagraha in Tamil Nadu?

- [A] K. Kelappan
- [B] Tanguturi Prakasam
- [C] C. Rajagopalachari
- [D] S. Satyamurti

59. The Gandhi-Irwin Pact was signed on

- [A] 31st January, 1930
- [B] 5th March, 1931
- [C] 31st March, 1931
- [D] 5th January, 1930

60. The last opportunity to avoid the Partition of India was lost with the rejection of

- [A] The Cripps Mission
- [B] The Rajagopalachari Formula
- [C] The Cabinet Mission
- [D] The Wavell Plan

61. What is the **correct** chronological sequence of the following events in the political life of Mahatma Gandhi?

- I. Champaran Satyagraha
- II. Ahmedabad Mill Strike
- III. Kheda Satyagraha
- IV. Non-Cooperation Movement

- [A] II → IV → III → I
- [B] I → II → III → IV
- [C] IV → II → III → I
- [D] III → IV → II → I

62. Louis XVI ascended the throne of France in

- [A] 1774
- [B] 1775
- [C] 1773
- [D] 1776

63. Which event is generally regarded by historians as marking the beginning of the French Revolution?

- [A] The Execution of Louis XVI (1793)
- [B] The Formation of the National Assembly (1789)
- [C] The Storming of the Bastille (1789)
- [D] The Tennis Court Oath (1789)

64. Which of the following was the most immediate financial cause of the French Revolution?
- [A] Industrial decline in France
 - [B] Heavy expenditure on wars and royal extravagance
 - [C] Failure of colonial trade
 - [D] Rise of socialism
65. Consider the following statements :
- I. The First Estate consisted mainly of the clergy.
 - II. The Second Estate consisted mainly of nobles.
 - III. The Third Estate enjoyed significant political privileges.
- Which of the statements given above are **correct**?
- [A] I and II only
 - [B] II and III only
 - [C] I and III only
 - [D] I, II and III
66. The Reign of Terror (1793-1794) is most closely associated with the leadership of
- [A] Georges Danton
 - [B] Napoleon Bonaparte
 - [C] Maximilien Robespierre
 - [D] Louis XVI
67. Consider the following two statements :
- Assertion (A) :** The French Revolution promoted the ideas of liberty and equality.
- Reason (R) :** The French Revolution restored feudal privileges and strengthened the power of the clergy and nobility.
- Which of the following is **correct**?
- [A] Both (A) and (R) are true and (R) is the correct explanation of (A)
 - [B] Both (A) and (R) are true but (R) is not the correct explanation of (A)
 - [C] (A) is true but (R) is false
 - [D] (A) is false but (R) is true
68. Which document became a landmark in the history of human rights during the French Revolution?
- [A] The *Magna Carta*
 - [B] The *Declaration of the Rights of Man and of the Citizen*
 - [C] The *Bill of Rights* (1689)
 - [D] The *Communist Manifesto*
69. Consider the following two statements :
- Assertion (A) :** The Russian Revolution transformed global politics in the twentieth century.
- Reason (R) :** It led to the emergence of a socialist State that challenged capitalist systems worldwide.
- Which of the following is **correct**?
- [A] Both (A) and (R) are true and (R) is the correct explanation of (A)
 - [B] Both (A) and (R) are true but (R) is not the correct explanation of (A)
 - [C] (A) is true but (R) is false
 - [D] (A) is false but (R) is true
70. Which of the following was a major economic cause of the Russian Revolution?
- [A] Excessive industrial prosperity
 - [B] Agrarian distress and peasant dissatisfaction
 - [C] Abolition of serfdom in 1917
 - [D] Rapid growth of democracy
71. The immediate trigger for the February Revolution of 1917 was
- [A] assassination of Rasputin
 - [B] food shortages and worker strike in Petrograd
 - [C] Bolshevik seizure of power
 - [D] civil war
72. Who led the Bolsheviks during the October Revolution?
- [A] Stalin
 - [B] Trotsky
 - [C] Lenin
 - [D] Kerensky

- 73.** Consider the following two statements :
Assertion (A) : The Bolsheviks gained popular support in 1917.
Reason (R) : They promised peace, land and bread.
 Which of the following is **correct**?
 [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
 [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
 [C] **(A)** is true but **(R)** is false
 [D] **(A)** is false but **(R)** is true
- 74.** Which one of the following best explains the global significance of the Russian Revolution?
 [A] It encouraged colonial expansion
 [B] It inspired socialist and communist movements worldwide
 [C] It ended nationalism in Europe
 [D] It restored feudalism in Asia
- 75.** Before the outbreak of World War I, Germany was a member of which alliance?
 [A] The Triple Entente
 [B] The Triple Alliance
 [C] The Warsaw Pact
 [D] The League of Nations
- 76.** Consider the following two statements :
Assertion (A) : The assassination of Archduke Franz Ferdinand was the sole cause of World War I.
Reason (R) : Militarism, imperialism, nationalism and alliances had already created tensions in Europe before 1914.
 Which of the following is **correct**?
 [A] Both **(A)** and **(R)** are true
 [B] **(A)** is true but **(R)** is false
 [C] **(A)** is false but **(R)** is true
 [D] Both **(A)** and **(R)** are false
- 77.** Which of the following events is regarded as a major example of the policy of appeasement?
 [A] The German Invasion of Poland (1939)
 [B] The Munich Agreement (1938)
 [C] The Pearl Harbor Attack (1941)
 [D] The Russian Revolution (1917)
- 78.** Which one of the following decided the post-war division of Germany into occupation zones?
 [A] The Munich Agreement
 [B] The Yalta Conference
 [C] The Locarno Treaties
 [D] The Washington Naval Conference
- 79.** Which traditional institution among the Adis functioned as a village council and judicial body?
 [A] Kebang
 [B] Buliang
 [C] Nyele
 [D] Memba
- 80.** The traditional political institution known as 'Buliang' was primarily associated with which tribe?
 [A] Monpa
 [B] Nyishi
 [C] Apatani
 [D] Adi
- 81.** The Inner Line Regulation was introduced by the British in
 [A] 1858
 [B] 1873
 [C] 1853
 [D] 1857
- 82.** The McMahon Line was delineated during which event?
 [A] The Treaty of Yandabo
 [B] The Simla Convention
 [C] The Treaty of Sugauli
 [D] The Delhi Durbar
- 83.** The Anglo-Abor Conflict of 1911-12 was primarily triggered by
 [A] the imposition of house tax
 [B] the construction of tea gardens
 [C] the killing of British officer Noel Williamson and his party
 [D] forced recruitment into the British army

84. When did Arunachal Pradesh officially attain the status of a full-fledged Indian State?

- [A] 20th January, 1972
- [B] 15th August, 1947
- [C] 20th February, 1987
- [D] 26th January, 1950

85. What does the word 'Arunachal' translate to in Sanskrit?

- [A] The Land of the Eternal Peace
- [B] The Land of the Dawn-Lit Mountains
- [C] The Land of the Blue Hills
- [D] The Land of Orchids

86. Which prominent freedom fighter from Arunachal Pradesh established a Congress Committee at Pasighat in 1947, distributed anti-British pamphlets and is widely regarded as 'Border Gandhi' of the region?

- [A] Tagi Raja
- [B] Moje Riba
- [C] Meyong Tamuk
- [D] Khupa Chang

87. Which 17th-century historical monument is considered the largest Buddhist monastery in India?

- [A] The Namdroling Monastery
- [B] The Rumtek Monastery
- [C] The Tawang Monastery
- [D] The Thiksey Monastery

88. The ancient archaeological site of 'Ita Fort', which gave the capital its name, was built by rulers of which dynasty?

- [A] Ahom Dynasty
- [B] Chutiya Dynasty
- [C] Pala Dynasty
- [D] Kachari Dynasty

89. During the 1962 Sino-Indian War, which major pass in Arunachal Pradesh witnessed fierce battles between Indian and Chinese forces?

- [A] Bum La
- [B] Sela
- [C] Zoji La
- [D] Nathu La

90. Which of the following is **not** a dating technique of archaeological remains?

- [A] Thermoluminescence method
- [B] Sonar sensing technique
- [C] Accelerated mass spectrometry
- [D] Electron spin resonance method

91. The longest known Harappan Inscription contains approximately

- [A] 10 signs
- [B] 15 signs
- [C] 26 signs
- [D] 50 signs

92. Which of the following is **not** a part of the Eightfold Path (Astangika Marga) as mentioned in the text?

- [A] Right speech
- [B] Right action
- [C] Right sacrifice
- [D] Right meditation

93. Consider the following statements regarding Syadvada :

- I. Every statement about reality is conditionally true.
- II. Absolute knowledge of reality is impossible from a single perspective.
- III. Syadvada rejects the possibility of any truth.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

94. The Digambara and Shvetambara traditions differ fundamentally on the question of women's capacity for salvation. Which of the following statements best represents the Digambara position?

- [A] Women can attain moksha in their lifetime and can become Tirthankaras, as exemplified by Malli
- [B] Women can become nuns (aryika or sadhvi) and achieve significant spiritual progress, but must be reborn as a man before attaining final liberation (moksha)
- [C] Women are completely excluded from the monastic order and cannot take any vows
- [D] Women are inherently incapable of any spiritual progress because their bodies attract more karma particles than men's bodies

95. Consider the following statements regarding Ashokan Inscriptions :

- I. Most of Ashoka's Inscriptions are in the Prakrit language and Brahmi script.
- II. The Inscriptions at Mansehra and Shahbazgarhi are in the Prakrit language and Kharosthi script.
- III. Ashoka is referred to by his personal name in all his Major Rock Edicts.

Which of the statement(s) given above is/are **correct**?

- [A] I only
- [B] I and II only
- [C] II and III only
- [D] I, II and III

96. According to the *Arthashastra*, which Mauryan officer was in charge of maintaining accounts and collecting revenue?

- [A] Samnidhatri
- [B] Samahartri
- [C] Dauvarika
- [D] Akshapatala

97. With reference to revenue administration during the Mauryan period, the term 'Udakabhaga' refers to

- [A] tax levied on trade and commerce
- [B] water rate charged for the use of irrigation facilities
- [C] the king's share of agricultural produce
- [D] tax imposed on forest produce

98. Consider the following statements about the decline of the Maurya Empire :

- I. Hara Prasad Shastri suggested that Pushyamitra Shunga's coup represented a Brahmanical revolution instigated by anti-Brahmana policies of Ashoka.
- II. Ashoka disbanded the army as part of his pacifist policy, contributing directly to the empire's military weakness.
- III. The last Maurya king, Brihadratha, was killed by his military commander, Pushyamitra, who founded the Shunga dynasty in c. 187 BCE.

Which of the statement(s) given above is/are **correct**?

- [A] I only
- [B] I and III only
- [C] II and III only
- [D] I, II and III

99. Which Sultan introduced the token currency experiment?

- [A] Muhammad bin Tughlaq
- [B] Firuz Shah Tughlaq
- [C] Bahlul Lodi
- [D] Sikandar Lodi

100. What was the name of Arunachal Pradesh before it was granted Union Territory status?

- [A] Eastern Frontier Province
- [B] North-East Frontier Agency (NEFA)
- [C] Assam Hill Tracts
- [D] Lohit Province

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1. Fruit type of mango is

- [A] drupe
- [B] berry
- [C] capsule
- [D] siliqua

2. The word Horticulture is derived from two words *Hortus* and *Cultura* meaning 'garden' and 'cultivation', respectively. These words are from which language?

- [A] Roman
- [B] Greek
- [C] Persian
- [D] Latin

3. Golden Revolution is related to

- [A] agricultural production
- [B] horticulture and honey production
- [C] fertilizer production
- [D] egg production

4. Type of pollination in okra is

- [A] self-pollination
- [B] cross-pollination
- [C] often cross-pollination
- [D] geitonogamy

5. The concept of centre of origin of crop plants was proposed by

- [A] C. Linnaeus
- [B] N. I. Vavilov
- [C] Darwin
- [D] Mendel

6. Which portion of the plant is considered free from viruses?

- [A] Cambium
- [B] Embryo
- [C] Meristem
- [D] Xylem

7. The method of inducing early flowering in plants by pretreatment of their seeds at very low temperature is termed as

- [A] scarification
- [B] stratification
- [C] photoperiodism
- [D] vernalization

8. National Horticulture Board (NHB) was established in the year

- [A] 1984
- [B] 1990
- [C] 2005
- [D] 1983

9. Vellaikolamban is a dwarfing rootstock of
- [A] citrus
 - [B] mango
 - [C] guava
 - [D] apple
10. The major problem in breeding of pineapple is
- [A] heterostyly
 - [B] poor flowering
 - [C] self-incompatibility
 - [D] excessive seed formation
11. CAM cycle is found in which fruit crop?
- [A] Mango
 - [B] Banana
 - [C] Guava
 - [D] Pineapple
12. The tag colour of breeder seed is
- [A] white
 - [B] golden yellow
 - [C] green
 - [D] azure blue
13. Marmelosin is present in which fruit crop?
- [A] Karonda
 - [B] Jackfruit
 - [C] Mangosteen
 - [D] Bael
14. Removal of plant parts, especially shoots, roots, buds etc. to obtain better quality and yield is termed as
- [A] pruning
 - [B] mulching
 - [C] pollarding
 - [D] training
15. The mechanism that favours self-pollination is
- [A] dichogamy
 - [B] herkogamy
 - [C] cleistogamy
 - [D] self-incompatibility
16. 'Gold fleck' is a physiological disorder of
- [A] potato
 - [B] cauliflower
 - [C] carrot
 - [D] tomato

17. Bower system (also known as Pandal, Arbour or Pergola) is commonly practiced in

- [A] mango
- [B] grapes
- [C] guava
- [D] apple

18. Metaxenia is observed in

- [A] cucumber
- [B] pumpkin
- [C] tomato
- [D] cabbage

19. Notching is commonly practiced in

- [A] mango
- [B] grape
- [C] date palm
- [D] fig

20. Hexagonal system of planting accommodates _____ more plants than the square system.

- [A] 5%
- [B] 15%
- [C] 10%
- [D] 20%

21. Which fruit crop has problem of jelly seed disorder?

- [A] Mango
- [B] Papaya
- [C] Apple
- [D] Guava

22. Multigerm seed is found in

- [A] carrot
- [B] radish
- [C] turnip
- [D] beetroot

23. Calyx splitting disorder is found in

- [A] gladiolus
- [B] carnation
- [C] dahlia
- [D] rose

24. Choose the appropriate matches for the following :

- | | |
|---------------|-----------------------------|
| (a) Beriberi | (i) Vitamin E |
| (b) Blindness | (ii) Vitamin B ₁ |
| (c) Scurvy | (iii) Vitamin C |
| (d) Sterility | (iv) Vitamin A |
- (a) (b) (c) (d)
- [A] (ii) (iv) (iii) (i)
- [B] (i) (ii) (iii) (iv)
- [C] (iii) (iv) (ii) (i)
- [D] (ii) (iii) (iv) (i)

25. Sindhu, a hybrid of mango, has been developed by backcrossing between

- [A] Alphonso × Neelam
- [B] Dashehari × Ratna
- [C] Ratna × Alphonso
- [D] Dashehari × Alphonso

26. Which of the following standard planting distances is kept in meadow orchard system of guava?

- [A] 2 m × 2 m
- [B] 3 m × 3 m
- [C] 2 m × 1 m
- [D] 4 m × 1 m

27. Which of the following phytohormones is used for inducing rooting?

- [A] IBA
- [B] Kinetin
- [C] TIBA
- [D] GA₃

28. Improper bunch filling in banana is mainly due to

- [A] nitrogen deficiency
- [B] calcium deficiency
- [C] zinc deficiency
- [D] potassium deficiency

29. M-27 is an ultra-dwarf rootstock of apple which has been developed through a cross between

- [A] M-26 × M-7
- [B] M-25 × M-26
- [C] M-12 × M-16
- [D] M-13 × M-9

30. Kinnow is a hybrid of King × Willow leaf mandarin. It was developed at Davis, California in 1935 by

- [A] Robert Frost
- [B] Swingle and Tanaka
- [C] H. B. Frost
- [D] John Smith

31. Which is a pink-fleshed variety of papaya?

- [A] Pusa Nanha
- [B] Hortus Gold
- [C] Washington
- [D] Sunrise Solo

32. 'Chicken tongue' a physiological disorder in fruit is due to embryo abortion. It is found in which fruit crop?

- [A] *Mangifera indica*
- [B] *Malus domestica*
- [C] *Litchi chinensis*
- [D] *Musa paradisiaca*

33. Persimmon belongs to which family?

- [A] Rosaceae
- [B] Rutaceae
- [C] Ebenaceae
- [D] Moraceae

34. 'D-leaf' is the best indicator of nutrient status for which fruit crop?

- [A] Pineapple
- [B] Apple
- [C] Litchi
- [D] Banana

35. The 'Arka' series of varieties are released from which institute?

- [A] IARI, New Delhi
- [B] NBPGR, New Delhi
- [C] IIHR, Bengaluru
- [D] CISH, Lucknow

36. 'Akashin', a disorder in radish, is due to the deficiency of

- [A] Mn
- [B] B
- [C] Ca
- [D] Mg

37. Which banana variety is most suitable for making chips?

- [A] Dwarf Cavendish
- [B] Robusta
- [C] Nendran
- [D] Rasthali

38. Choose the appropriate combination from the following matches :

- | | |
|------------|-------------------|
| (a) Banana | (i) Greening |
| (b) Citrus | (ii) Soft nose |
| (c) Guava | (iii) Panama wilt |
| (d) Mango | (iv) Wilt |
-
- | | | | |
|-----------|-------|------|-------|
| (a) | (b) | (c) | (d) |
| [A] (iv) | (i) | (ii) | (iii) |
| [B] (ii) | (iii) | (iv) | (i) |
| [C] (iv) | (ii) | (i) | (iii) |
| [D] (iii) | (i) | (iv) | (ii) |

39. Who proposed the modern system of citrus classification?

- [A] Swingle and Tanaka
- [B] Linnaeus
- [C] Cheema and Dhani
- [D] Gregor Johann Mendel

40. Which fruit is also known as the “Poor Man’s Apple”?

- [A] Custard Apple
- [B] Guava
- [C] Ber
- [D] Apple

41. Which of the following fruits is botanically called as ‘Hesperidium’?

- [A] Jackfruit
- [B] Orange
- [C] Litchi
- [D] Apple

42. Arkavati is a hybrid variety of grape developed by which of the following crosses?

- [A] Bangalore Blue × Anab-e-Shahi
- [B] Bangalore Blue × Black Champa
- [C] Black Champa × Thomson Seedless
- [D] Black Champa × Bangalore Blue

43. Which of the following is a mutant variety of papaya?

- [A] Pusa Delicious
- [B] Pusa Giant
- [C] Pusa Nanha
- [D] Coorg Honey Dew

44. Which is known as ‘God-sent vegetable’?

- [A] Winged bean
- [B] Pea
- [C] French bean
- [D] Cluster bean

45. Which State is the largest producer of walnut in India?

- [A] Jammu and Kashmir
- [B] Sikkim
- [C] Uttarakhand
- [D] Arunachal Pradesh

46. The fruit of okra is botanically known as

- [A] berry
- [B] pod
- [C] capsule
- [D] silique

47. NBPGR, New Delhi has established a gene sanctuary for the conservation of wild citrus in which State?

- [A] Garo Hills, Meghalaya
- [B] Darjeeling Hills, West Bengal
- [C] Nilgiri Hills, Tamil Nadu
- [D] West Siang Hills, Arunachal Pradesh

48. Self-incompatibility is found in which vegetable crop?

- [A] Tomato
- [B] Okra
- [C] Brinjal
- [D] Cabbage

49. The chemical used to induce maleness in gynoeious lines of cucumber is

- [A] silver nitrate
- [B] NAA
- [C] IBA
- [D] B

50. 'Goma Aishwarya' is a variety of aonla recently released from which institute?

- [A] ICAR-Indian Agricultural Research Institute (IARI), New Delhi
- [B] ICAR-Central Institute for Arid Horticulture (CIAH), Bikaner
- [C] ICAR-Indian Institute of Horticultural Research (IIHR), Bengaluru
- [D] ICAR-Central Institute of Subtropical Horticulture (CISH), Lucknow

51. Who is known as the Father of Cole Crops in India?

- [A] Dr. G. Kalloo
- [B] Dr. Pritam Kalia
- [C] Dr. M. H. Marigowda
- [D] Dr. K. L. Chadha

52. *Cyamopsis tetragonoloba* is the botanical name of which vegetable crop?

- [A] French bean
- [B] Broad bean
- [C] Cowpea
- [D] Cluster bean

53. ICAR-Directorate of Onion and Garlic Research is located at

- [A] Kanpur, Uttar Pradesh
- [B] Rajgurunagar, Pune, Maharashtra
- [C] Jakhini, Varanasi, Uttar Pradesh
- [D] Shimla, Himachal Pradesh

54. Whiptail in cauliflower is caused by

- [A] nitrogen deficiency
- [B] boron deficiency
- [C] molybdenum deficiency
- [D] zinc deficiency

55. Male sterility is found in which vegetable crop?

- [A] Okra
- [B] Winged bean
- [C] Pumpkin
- [D] Onion

56. Saffron belongs to the family

- [A] Iridaceae
- [B] Fabaceae
- [C] Lauraceae
- [D] Myrtaceae

57. Cole crops are considered to have evolved from which of the following common ancestor wild cabbages?

- [A] *Brassica oleracea* var. *sylvestris*
- [B] *Brassica oleracea* var. *capitata*
- [C] *Brassica oleracea* var. *gemmifera*
- [D] *Brassica oleracea* var. *gongylodes*

58. The inflorescence of onion is called as

- [A] spadix
- [B] umbel
- [C] panicle
- [D] raceme

59. The botanical name of radish is

- [A] *Solanum lycopersicum*
- [B] *Allium cepa*
- [C] *Beta vulgaris*
- [D] *Raphanus sativus*

60. What is the scientific name of field pea?

- [A] *Pisum sativum* var. *arvense*
- [B] *Cicer arietinum*
- [C] *Pisum sativum* var. *hortense*
- [D] *Phaseolus vulgaris*

61. Sreekara, Subhakara, Panchami and Pournami are the varieties of which crop?

- [A] Ginger
- [B] Turmeric
- [C] Black pepper
- [D] Cardamom

62. Chirkey and Forkey diseases are associated with which crop?

- [A] Turmeric
- [B] Large cardamom
- [C] Black pepper
- [D] Ginger

63. Major tea-growing pockets are located in Assam, followed by

- [A] Kerala
- [B] Tamil Nadu
- [C] West Bengal
- [D] Karnataka

64. Crown choking or button shedding, a physiological disorder in coconut, is due to the deficiency of

- [A] zinc
- [B] boron
- [C] iron
- [D] calcium

65. The mechanism protogyny is found in which vegetable?

- [A] Okra
- [B] Tomato
- [C] Onion
- [D] Carrot

66. Which aromatic grass is known for good soil-binding properties?

- [A] *Matricaria chamomilla*
- [B] *Ocimum basilicum*
- [C] *Vetiveria zizanioides*
- [D] *Apium graveolens*

67. Which principal dry fruit (nut) belongs to the mango family?

- [A] Walnut
- [B] Almond
- [C] Pecan nut
- [D] Cashew nut

68. Which is the most commercially viable technique for propagation of cashew nut?

- [A] Shoot tip grafting
- [B] Softwood grafting
- [C] Offshoot
- [D] Cutting

69. Which is known as “21st century vegetable”?

- [A] Sweet potato
- [B] Winged bean
- [C] Tomato
- [D] Chekurmanis

70. ‘Deadly Nightshade’ is the common name of which medicinal plant?

- [A] *Withania somnifera*
- [B] *Datura stramonium*
- [C] *Atropa belladonna*
- [D] *Hyoscyamus niger*

71. Bharat Sundari is the variety of

- [A] hibiscus
- [B] rose
- [C] carnation
- [D] gerbera

72. Brindavan Garden is located in

- [A] New Delhi
- [B] Uttar Pradesh
- [C] Karnataka
- [D] Himachal Pradesh

73. The art of giving training plants into different shapes like animals, birds etc. is known as

- [A] porch
- [B] arbour
- [C] patio
- [D] topiary

74. Which is the climacteric vegetable?

- [A] Potato
- [B] Brinjal
- [C] Tomato
- [D] Chilli

75. Bonsai culture actually has its origin in which country?

- [A] China
- [B] Japan
- [C] India
- [D] Korea

76. The method used to replace a few unhealthy patches in a well-maintained lawn is known as

- [A] mowing
- [B] bricking
- [C] topiary
- [D] rolling

77. In which style of gardening is the plan forced to fit the land to secure natural beauty?

- [A] Informal style
- [B] Formal style
- [C] Mixed style
- [D] Mughal style

78. What is the new name of the 'Mughal Gardens' of Rashtrapati Bhavan, New Delhi, India?

- [A] Raj Udyan
- [B] Amrit Udyan
- [C] Bharat Udyan
- [D] None of the above

79. Plants which possess special structures such as thorns, rootlets, tendrils etc. to climb over a support are called

- [A] creepers
- [B] shrubs
- [C] climbers
- [D] herbs

80. 'Sauerkraut' is prepared from

- [A] sweet potato
- [B] cassava
- [C] potato
- [D] cabbage

81. Heterostyle is found in

- [A] brinjal
- [B] cabbage
- [C] cauliflower
- [D] onion

82. The example of cross-pollinated vegetable is

- [A] onion
- [B] carrot
- [C] tomato
- [D] cauliflower

83. Gladiolus is a

- [A] short-day plant
- [B] day neutral plant
- [C] long-day plant
- [D] long-short day plant

84. Which of the following vegetables is dioecious?

- [A] Pointed gourd
- [B] Carrot
- [C] Watermelon
- [D] Winged bean

85. Jwala, Himrose (Himroz), Noorjahan and Ranisahiba are rose varieties mostly used for

- [A] cut flower production
- [B] ornamental pot culture
- [C] bouquet
- [D] oil extraction

86. What is the optimum stage of harvesting of Standard Carnation for distant market?

- [A] Tight bud stage
- [B] Paint brush stage
- [C] Full bloom stage
- [D] Semi-open stage

87. China aster is _____ in nature.

- [A] biennial
- [B] perennial
- [C] shrub
- [D] annual

88. Quercetin is present in

- [A] onion
- [B] tomato
- [C] watermelon
- [D] beetroot

89. Chrysanthemum charm is a variety of

- [A] rose
- [B] marigold
- [C] chrysanthemum
- [D] dahlia

90. 'Freedom 2' is a transgenic variety of

- [A] summer squash
- [B] potato
- [C] tomato
- [D] sweet potato

91. Which fruit is most suitable for jelly preparation due to its high pectin content?

- [A] Mango
- [B] Guava
- [C] Sapota
- [D] Banana

92. Sticky or gummy jam is due to high

- [A] acidity
- [B] Total Soluble Solids (TSS)
- [C] moisture content
- [D] vitamin C

93. Edible part of globe artichoke is

- [A] spear
- [B] pod
- [C] flower bud
- [D] bulb

94. Controlled atmosphere storage generally refers to

- [A] increase in oxygen and decrease in carbon dioxide concentration
- [B] decrease in oxygen and increase in carbon dioxide concentration
- [C] increase in both oxygen and carbon dioxide concentrations
- [D] no change in atmospheric gases

95. Hypobaric storage is also known as

- [A] low-pressure storage
- [B] controlled humidity storage
- [C] modified atmosphere storage
- [D] cold storage

96. Which vegetable is known as 'King of Gourd'?

- [A] Ridge gourd
- [B] Bottle gourd
- [C] Pointed gourd
- [D] Sponge gourd

97. 'U' triangle is associated with

- [A] cole crops
- [B] tomato
- [C] onion
- [D] cucurbits

98. Single-seeded vegetable is

- [A] bottle gourd
- [B] chow-chow
- [C] knol khol
- [D] turnip

99. Pungency in garlic is due to

- [A] diallyl disulfide
- [B] amides
- [C] isothiocyanate
- [D] solanine

100. Which storage method helps small and marginal farmers to store fruits and vegetables for few days without use of electricity?

- [A] Cold storage
- [B] Controlled atmosphere storage
- [C] Zero Energy Cool Chamber (ZECC)
- [D] Freezing

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1. The sum $1^2 + 2^2 + 3^2 + \dots + n^2$ is equal to

[A] $\left(\frac{n(n+1)}{2}\right)^2$

[B] $\frac{n(n+1)(2n+1)}{6}$

[C] n^3

[D] $\frac{n(n+1)}{2}$

2. For the system $x + y \leq 6$ and $x - y \geq 3$, which point belongs to the solution region?

[A] (1,1)

[B] (2,1)

[C] (3,1)

[D] (4,1)

3. The middle term of $(x + y)^8$ is the

[A] 2nd term

[B] 4th term

[C] 5th term

[D] No middle term

4. If $y = f(at + b)$, where a, b are constants,

then $\frac{dy}{dt}$ equals to

[A] $af'(ax + b)$

[B] $bf'(ax + b)$

[C] $af(ax + b)$

[D] $bf(ax + b)$

5. If $i = \sqrt{-1}$, then i^{-1} equals to

[A] $e^{-\pi}$

[B] $e^{\frac{\pi}{2}}$

[C] $-e^{\pi}$

[D] $-e^{-\frac{\pi}{2}}$

6. In how many ways can the letters of the word MATHEMATICS be arranged such that all the M's are together?

[A] 10!

[B] 10!2!2!

[C] $\frac{10!}{2!}$

[D] $\frac{10!}{2!2!}$

7. If m_1 and m_2 ($m_1 \neq m_2$) satisfy the relation ${}^{(m+5)}P_{(m+1)} = \frac{11(m-1)}{2}(m+3)P_m$,

then the value of $m_1 + m_2$ is

[A] 13

[B] 14

[C] 15

[D] 16

8. If ${}^{(n+1)}C_{(r+1)} : {}^nC_r : {}^{(n-1)}C_{(r-1)} = 11 : 6 : 3$, then what are the values of n and r ?

[A] $n = 10, r = 10$

[B] $n = 5, r = 10$

[C] $n = 10, r = 5$

[D] $n = 5, r = 5$

9. Let $[x]$ be the greatest integer function.

What is the limit value of $\lim_{x \rightarrow 0} \frac{\sin([x])}{x}$?

[A] 1

[B] 0

[C] Does not exist

[D] None of the above

10. If the diagonal of a square is $10\sqrt{2}$ cm, then its area is

[A] 200 cm²

[B] 100 cm²

[C] 50 cm²

[D] 10 cm²

11. If the 8th term of an A.P. is 31 and the 15th term is 59, then the first term is

- [A] 6
- [B] 5
- [C] 4
- [D] 3

12. If $a = 3 + 5 + 7 + \dots + 25$, then a is

- [A] 166
- [B] 167
- [C] 168
- [D] 169

13. If $\log_2(\log_3(a)) = 2$, then the value of $\sqrt{a}$ is

- [A] 9
- [B] 81
- [C] 36
- [D] 6

14. If the arithmetic mean and harmonic mean of two numbers are in the ratio of 2 : 3, then the ratio of geometric mean to the sum of the numbers is

- [A] $\frac{3}{8}$
- [B] $\sqrt{\frac{3}{8}}$
- [C] $\sqrt{\frac{8}{3}}$
- [D] None of the above

15. If a, b, c are in arithmetic progression (A.P.), then which of the following is **true**?

- [A] $a + c = 2b$
- [B] $a + b = 2c$
- [C] $c + b = 2a$
- [D] None of the above

16. The pair of equations $2a + 3b = 5$ and $4a + 6b = 10$, has

- [A] two solutions
- [B] infinite solutions
- [C] one solution
- [D] None of the above

17. The graphical representation of inconsistent equations is

- [A] parallel lines
- [B] coincident lines
- [C] curved lines
- [D] intersecting lines

18. For what value of k do the equations $kx + 2y = 2$ and $12x + ky = 8$ have a unique solution?

- [A] $k = \pm\sqrt{6}$
- [B] $k = \pm 2$
- [C] $k = \pm 2\sqrt{6}$
- [D] $k \neq \pm 2\sqrt{6}$

19. The cross multiplication method is mainly useful when

- [A] equations are linear in two variables
- [B] only one equation is given
- [C] variables are more than two
- [D] equations are quadratic

20. Which method is mainly used to prove statements for all natural numbers?

- [A] Factorization
- [B] Mathematical induction
- [C] Cross multiplication
- [D] Elimination

21. If the zeros of $x^2 + ax + 12$ are 3 and 4, then $a = ?$

- [A] 14
- [B] -14
- [C] 7
- [D] -7

22. If $(x + 2)$ is a factor of $x^2 + ax - 6$, then $a = ?$

- [A] 1
- [B] -1
- [C] 2
- [D] -2

23. If $(x - 1)$ and $(x - 2)$ are the factors of polynomial $p(x)$, then

- [A] $p(1) = 1, p(2) = 1$
- [B] $p(1) = 0, p(2) = 1$
- [C] $p(1) = 1, p(2) = 0$
- [D] $p(1) = 0, p(2) = 0$

24. The length of an arc subtending 60° at the center of a circle of radius 21 cm is

- [A] 49π cm
- [B] $49\pi^2$ cm
- [C] 7π cm
- [D] $7\pi^2$ cm

25. The equation $x^2 + y^2 - 6x + 8y + 9 = 0$, represents a circle of radius

- [A] 2
- [B] 4
- [C] 8
- [D] 16

26. If two circles touch externally and their radii are 9 cm and 16 cm, then the length of direct common tangent between points of contact is

- [A] 6 cm
- [B] 12 cm
- [C] 18 cm
- [D] 24 cm

27. A circular smart road around a tourist zone in Ziro Valley has a diameter of 70 m. An IoT-based traffic monitoring system records that a vehicle completes 4 full rounds around the road. Find the total distance travelled by the vehicle.

- [A] 180π m
- [B] 280π m
- [C] 380π m
- [D] 880 m

28. A delivery boy from Pizza Hut delivers pizza to a student on the university campus. The distance between Pizza Hut, Nirjuli and the university campus is 600 m. Due to traffic diversion near the campus gate, the delivery boy must move around a circular traffic loop of radius 14 m exactly 3 times. Find the total distance travelled by the delivery boy.

- [A] $(600 + 56\pi)$ m
- [B] $(600 + 84\pi)$ m
- [C] $(300 + 84\pi)$ m
- [D] $(300 + 56\pi)$ m

29. A shopkeeper drives from Doimukh to the Sunday vegetable market at Harmuti, a distance of 21.8 km. Due to heavy traffic near the market, he has to drive around a circular parking area of radius 14 m exactly 4 complete times before finding a parking space. Find the extra distance travelled.

- [A] 84π m
- [B] $(21800 + 84\pi)$ m
- [C] $(21800 + 112\pi)$ m
- [D] 112π m

30. An IoT security camera at Donyi Polo Airport, Itanagar rotates through 90° and monitors a circular security zone of radius 28 m. Find the area monitored.

[A] $96\pi \text{ m}^2$

[B] $90\pi \text{ m}^2$

[C] $196\pi \text{ m}^2$

[D] None of the above

31. There are 2 roads from Itanagar to Naharlagun and 3 roads from Naharlagun to Ziro Valley. How many paths are there from Itanagar to Ziro Valley via Naharlagun?

[A] 3

[B] 6

[C] 3^2

[D] 2^3

32. Which measure of central tendency is least affected by extreme values?

[A] Median

[B] Standard deviation

[C] Variance

[D] Mean

33. Raw data without class intervals is called

[A] grouped data

[B] ungrouped data

[C] continuous data

[D] tabular data

34. The mean of a , $a + 2$, $a + 4$ is 10. Then $a = ?$

[A] 2

[B] 4

[C] 6

[D] 8

35. Data arranged in rows and columns is called

[A] tabular form

[B] linear form

[C] circular form

[D] graphical form

36. Two dice are thrown simultaneously. What is the probability that the sum of the numbers obtained is 8 or more?

[A] $\frac{5}{12}$

[B] $\frac{1}{3}$

[C] $\frac{1}{2}$

[D] None of the above

37. If $a + \frac{1}{a} = 12$, then $a^2 + \frac{1}{a^2} = ?$

[A] 140

[B] 142

[C] 144

[D] 146

38. If the sides of a triangle are 3 cm, 4 cm and 5 cm, then the triangle is

[A] right-angled

[B] obtuse-angled

[C] equilateral

[D] isosceles

39. A median divides a triangle into

[A] two equal angles

[B] two triangles of equal area

[C] two triangles of unequal area

[D] three equal parts

40. The centroid divides the median in the ratio of
 [A] 2 : 1
 [B] 1 : 3
 [C] 1 : 1
 [D] 2 : 3
41. If a, b, c are sides of a triangle such that $a^2 + b^2 + c^2 = ab + bc + ca$, then the triangle is
 [A] scalene
 [B] right-angled
 [C] equilateral
 [D] isosceles
42. The orthocenter of a right-angled triangle lies
 [A] inside triangle
 [B] outside triangle
 [C] at midpoint of hypotenuse
 [D] at the vertex of right angle
43. The volume of a cone is _____ the volume of a cylinder with the same base and height.
 [A] one-third
 [B] two-third
 [C] three times
 [D] half
44. A hemisphere of radius 6 cm has volume
 [A] $144\pi\text{cm}^3$
 [B] $81\pi\text{cm}^3$
 [C] $36\pi\text{cm}^3$
 [D] $576\pi\text{cm}^3$
45. A solid sphere of radius 6 cm is melted and recast into small spheres of radius 2 cm. The number of small spheres formed is
 [A] 9
 [B] 27
 [C] 12
 [D] 36
46. The radius of a sphere is increased by 100%. The volume increases by
 [A] 100%
 [B] 300%
 [C] 500%
 [D] 700%
47. If the volume of a cube is numerically equal to its total surface area, then its side is
 [A] 2
 [B] 3
 [C] 6
 [D] 12
48. The vector obtained by the cross product $\vec{a} \times \vec{b}$ is perpendicular to
 [A] only $\vec{a}$
 [B] only $\vec{b}$
 [C] Both $\vec{a}$ and $\vec{b}$
 [D] None of the above
49. Which of the following is **correct**?
 [A] $2^{120} < 5^{60} < 3^{90}$
 [B] $2^{120} > 5^{60} > 3^{90}$
 [C] $2^{120} > 5^{60} < 3^{90}$
 [D] $2^{120} < 3^{90} < 5^{60}$

50. Which law is used for vector addition?

- [A] Triangle law
- [B] Ohm's law
- [C] Boyle's law
- [D] Newton's law

51. A necessary condition for $f(t)$ to have a local maximum or minimum at $t = a$ is

- [A] $f(a) = 0$
- [B] $f(a) \neq 0$
- [C] $f'(a) = 0$
- [D] $f'(a) \neq 0$

52. For the curve

$$y = t^2 + at + 1$$

the tangent at $t = 1$ is parallel to the line $2t - y + 3 = 0$. The value of a is

- [A] 0
- [B] 1
- [C] 2
- [D] 3

53. If a function $f(t) = t^2 + at + 1$, is decreasing at $t = 1$, then

- [A] $a < 2$
- [B] $a > 2$
- [C] $a > -2$
- [D] $a < -2$

54. The function $f(t) = |t - a|$, is not differentiable at $t = ?$

- [A] 0
- [B] 1
- [C] a
- [D] $2a$

55. If a function $f(t) = t^2 + at$ for $t < 1$ and $f(t) = bt - 1$ for $t \geq 1$ is continuous and differentiable at $t = 1$ and $b = 4$, then $a = ?$

- [A] 0
- [B] 1
- [C] 2
- [D] 3

56. The domain of the function $f(t) = \frac{\sqrt{t}}{\log(t)}$ is

- [A] $[0, \infty)$
- [B] $(0, \infty)$
- [C] $[0, \infty) \setminus \{1\}$
- [D] $(0, \infty) \setminus \{1\}$

57. If $f'(a) = 0$ and $f''(a) < 0$, then $t = a$ is

- [A] maximum point
- [B] minimum point
- [C] inflection point
- [D] stationary inflection point

58. If $f(t) = \sqrt{t}$ and $g(t) = t - 4$, then the domain of $(f \circ g)(t)$ is

- [A] $(-\infty, \infty)$
- [B] $(0, \infty)$
- [C] $(4, \infty)$
- [D] $[4, \infty]$

59. Which of the following triplets **does not** represent direction ratios of a line?

- [A] (1,0,0)
- [B] (1,1,1)
- [C] (2,2,2)
- [D] (0,0,0)

60. If the position vector of the points $\vec{a}$, $\vec{b}$ and $\vec{c}$ are (3,2,3), (4,6,2) and (7,3,2) respectively, then the angle between the vectors $\vec{ab}$ and $\vec{ac}$ is

- [A] $\frac{\pi}{2}$
 [B] $\frac{\pi}{3}$
 [C] $\frac{\pi}{4}$
 [D] π

61. If a , b , c are the direction ratios and l , m , n are the corresponding direction cosines of the line, then which of the following is **incorrect**?

- [A] $a : l = b : m = c : n$
 [B] $l = \frac{a}{\sqrt{a^2 + b^2 + c^2}}$
 [C] $m^2 + n^2 = 1 - l^2$
 [D] $l + m + n = 1$

62. A jar contains y black balls and x yellow balls. Two balls are drawn without replacement. Find the probability that both balls are black.

- [A] $\frac{xy}{x^2 + y^2 + 2xy - x - y}$
 [B] $\frac{2xy}{x^2 + y^2 + 2xy - x - y}$
 [C] $\frac{x^2 - x}{x^2 + y^2 + 2xy - x - y}$
 [D] $\frac{y^2 - y}{x^2 + y^2 + 2xy - x - y}$

63. The Least Common Multiple (LCM) of two distinct prime numbers ($p < q$) is

65. Then $q^2 - p^2$ is divisible by
 [A] only 3
 [B] only 4
 [C] both 3 and 4
 [D] None of the above

64. If $\frac{x-1}{1+i} + \frac{y+2}{2-i} + \frac{3}{1-2i} = 4 + 3i$, then $\frac{y}{x} = ?$

- [A] $\frac{13}{10}$
 [B] $\frac{10}{13}$
 [C] $\frac{100}{13}$
 [D] $\frac{13}{100}$

65. What is the remainder when $x^{78} + x^{26} + 1$ is divided by $x^2 + 1$?

- [A] -1
 [B] -2
 [C] 0
 [D] 1

66. Let ω be the cube root of unity satisfying $\text{Im}(\omega) > 0$. If $z = \frac{1+\omega}{1+\omega^2}$, then the value of $|z| + \text{Arg}(z)$ is

- [A] $1 + \frac{\pi}{3}$
 [B] $1 + \frac{2\pi}{3}$
 [C] $\frac{2\pi}{3}$
 [D] $\frac{\pi}{3}$

67. A factory purchases product from three companies :

- Company A supplies 40% of the products and 5% of its products are defective.
- Company B supplies 35% of the products and 8% of its products are defective.
- Company C supplies 25% of the products and 12% of its products are defective.

If one product is selected at random from the factory's stock, what is the probability that the product is defective?

- [A] 0.076
- [B] 0.077
- [C] 0.078
- [D] 0.079

68. If $0^\circ < \theta < 90^\circ$ and $\sin(\theta) + \cos(\theta) = \frac{7}{5}$, then the value of $\sin^4(\theta) + \cos^4(\theta)$ is

- [A] $\frac{337}{625}$
- [B] $\frac{261}{625}$
- [C] $\frac{313}{625}$
- [D] $\frac{289}{625}$

69. If $\tan \theta + \cot \theta = 2$, then the value of $\tan^2 \theta + \cot^2 \theta$ is

- [A] 1
- [B] -1
- [C] 2
- [D] $\frac{1}{2}$

70. If $a = \int_{-1}^1 \log \left(\frac{1+t+t^2}{1-t+t^2} \right) dt$, then what is the value of $a-1$?

- [A] -1
- [B] 0
- [C] 1
- [D] 2

71. If $x = t^2$ and $y = t^3$, then $\frac{dy}{dx}$ equals to

- [A] $\frac{3t}{2}$
- [B] $-\frac{3t}{2}$
- [C] $\frac{2t}{3}$
- [D] $-\frac{2t}{3}$

72. The area enclosed by $y = t^2 + a^2$ and $y = 2a^2 - t^2$ ($a > 0$). Then which of the following is **true**?

- [A] Enclosed area is $2\sqrt{2}$ when $a = 1$
- [B] Enclosed area is $\frac{2\sqrt{2}}{3}$ when $a = 1$
- [C] Enclosed area is $2\sqrt{2}$ when $a = 2$
- [D] Enclosed area is $\frac{2\sqrt{2}}{3}$ when $a = 2$

73. If $y = ae^t + be^{-t}$, where a and b are arbitrary constants, represents a family of curves, then the order of the differential equation obtained after eliminating a and b is

- [A] 0
- [B] 1
- [C] 2
- [D] Does not exist

74. If $\frac{dy}{dx} = \frac{x+y}{x-y}$ with $y(1) = 0$ and $y(x) = x\phi(\log(x))$, then $\phi'(0)$ equals to

- [A] 0
- [B] 1
- [C] 2
- [D] 3

75. If $\frac{dy}{dx} = \frac{x(1+y^2)}{1+x^2}$ with $y(0) = 1$, then $\tan^{-1}(y(1))$ equals to

- [A] $\frac{\pi}{4} + \log(\sqrt{2})$
- [B] $\frac{\pi}{4} - \log(\sqrt{2})$
- [C] $\frac{\pi}{2} + \log(\sqrt{2})$
- [D] $\frac{\pi}{2} - \log(\sqrt{2})$

76. The planes $x + y + z - 1 = 0$ and $x - y + z - 3 = 0$ intersect in a line. The plane through this line and point $(1, 1, 1)$ is $ax + bz + c = 0$. Then $a + b + c$ equals to

- [A] 0
- [B] 1
- [C] 2
- [D] 3

77. The sphere $x^2 + y^2 + z^2 - 2ax - 2ay - 2az + 9 = 0$ touches the plane $x + y + z = 3$. Then a equals to

- [A] 1
- [B] 2
- [C] 3
- [D] 4

78. Two fair dice are thrown. The probability that the sum is 7, is

- [A] $\frac{1}{2}$
- [B] $\frac{5}{6}$
- [C] $\frac{1}{6}$
- [D] $\frac{2}{3}$

79. If $x^2 + (a+1)xy + ay^2 = 0$ represents two perpendicular lines, then a equals to

- [A] -1
- [B] 1
- [C] -2
- [D] 2

80. Point P divides the line segment AB internally in the ratio of $2 : 3$. Which of the following statements is **true**?

- [A] P is closer to A
- [B] P is closer to B
- [C] P is the midpoint
- [D] Cannot determine

81. Among all points on $x + y = 5$, the point nearest to the origin is

- [A] (0,5)
- [B] (2.5,2.5)
- [C] (1.5,3.5)
- [D] (2,3)

82. The asymptotes of $\frac{x^2}{16} - \frac{y^2}{9} = 1$ are

- [A] $y = \pm \frac{x}{4}$
- [B] $y = \pm \frac{x}{2}$
- [C] $y = \pm \frac{3x}{4}$
- [D] $y = \pm x$

83. Which conic has exactly one focus and one directrix?

- [A] Circle
- [B] Ellipse
- [C] Hyperbola
- [D] Parabola

84. Which statement is always **true** for an ellipse?

- [A] Increasing eccentricity makes it more circular
- [B] Increasing eccentricity decreases the distance between foci
- [C] Eccentricity can exceed 1
- [D] Increasing eccentricity makes the foci move farther from the center

85. Which conic section has the largest eccentricity?

- [A] Circle
- [B] Parabola
- [C] Hyperbola
- [D] None of the above

86. The sum of the coefficients of Gregory's series equals to

- [A] $\frac{\pi}{2}$
- [B] $\frac{\pi}{3}$
- [C] $\frac{\pi}{4}$
- [D] $\frac{\pi}{6}$

87. Let $y = y(t)$ satisfy $\frac{dy}{dt} - |A| = 0$,

where $A = \begin{bmatrix} y & 0 & 1 \\ 0 & -1 & 1 \\ 2 & 0 & \frac{1}{t} \end{bmatrix}$, $t > 0$.

If $y(\pi) = \pi + 2$, then $y\left(\frac{\pi}{2}\right)$ equals to

- [A] $\frac{\pi}{2} + 2$
- [B] $\frac{\pi}{2} + 4$
- [C] $\frac{\pi}{2} + 6$
- [D] $\frac{\pi}{2} + 8$

88. Let $z = (1+i)^{100}$. Then $\frac{z}{|z|} = ?$

- [A] 1
- [B] -1
- [C] i
- [D] $-i$

89. If $z^5 = 32$, find $\sum \frac{1}{z}$ over all roots.

- [A] 0
- [B] 1
- [C] $\frac{5}{2}$
- [D] 32

90. If $f(t) = \det \begin{bmatrix} t & t^2 & t^3 \\ 1 & 2t & 3t^2 \\ 0 & 2 & 6t \end{bmatrix}$ and $f'(t) = 2a$ at $t = \sqrt{2}$, then $a = ?$

- [A] 6
- [B] 12
- [C] 24
- [D] 48

91. In a tournament, let a_{ij} denotes the score difference of player i against player j . If player i defeats player j by 5 points, then player j 's score difference against player i is -5. What can be said about the matrix $A = (a_{ij})$ of score differences?

- [A] Symmetric
- [B] Diagonal
- [C] Identity
- [D] Skew-symmetric

92. Let $A = \begin{bmatrix} 1 & 0 \\ 2 & 4 \end{bmatrix}$ and $B = \text{adj}(A) + \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$.

If $\det(\text{adj}(A)) = 4$, then $\det(A)$ is

- [A] 1
- [B] 2
- [C] 4
- [D] 8

93. The area of the triangle formed by (0,0), (2,4) and $(a, 2a+3)$ is 3, if

- [A] $a = 0$ only
- [B] $a = \frac{1}{3}$ only
- [C] $a = 0$ and 3 only
- [D] All of the above

94. Which of the following operations **do not** change the value of a determinant?

- I. $R_2 \rightarrow R_2 + 3R_1$
- II. $C_3 \rightarrow C_3 - 2C_1$
- III. $R_1 \rightarrow R_1 - 5R_3$

- [A] I only
- [B] I and II only
- [C] II and III only
- [D] I, II and III

95. If $\sin(\theta) + \cos(\theta) = \sqrt{2}$, then θ equals to

[A] 90°

[B] 60°

[C] 45°

[D] 30°

96. If $\sin(\theta) = \frac{5}{13}$, $0 < \theta < \frac{\pi}{2}$, then $\sin(2\theta)$ equals to

[A] $\frac{120}{169}$

[B] $\frac{169}{120}$

[C] $\frac{60}{169}$

[D] $\frac{169}{60}$

97. The derivative of $\tan^{-1}(t)$ with respect to t at $t = 1$ is

[A] ∞

[B] 1

[C] $\frac{1}{2}$

[D] 0

98. If $a = \int_0^2 \frac{1}{3^x + 3} dx$, then $3a - 1$ is

[A] 0

[B] 1

[C] 2

[D] -1

99. If $\sin(nx) = ax + bx^3 + \dots$, then $\frac{b}{a^3}$ equals to

[A] $\frac{1}{6}$

[B] $-\frac{1}{6}$

[C] $\frac{1}{3}$

[D] $-\frac{1}{3}$

100. If $\lim_{t \rightarrow 0} \left(\frac{\sin(nt) - nt}{t^3} \right) = -\frac{32}{3}$, then the value of n is

[A] 2

[B] -2

[C] 4

[D] -4

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1. Which of the following pairs has the same dimensional formula?

- [A] Pressure and energy
- [B] Momentum (linear) and power
- [C] Stress and force
- [D] Torque and work done

2. A car is driving at a speed of 72 km/h in a straight highway. Its speed in m/s is

- [A] 10 m/s
- [B] 20 m/s
- [C] 40 m/s
- [D] 36 m/s

3. A physical quantity X is given by

relation $X = \frac{A^2 B^{1/2}}{C^3}$. The measured values of A , B and C are found to be (2.00 ± 0.02) , (8.00 ± 0.16) and (4.00 ± 0.04) respectively. The percentage of error in X is

- [A] 2.00%
- [B] 2.20%
- [C] 5.00%
- [D] 6.00%

4. A car initially at rest is accelerated along a straight line with an acceleration of 3 ms^{-2} for 10 s and then drive with the attained constant velocity for another 20 s. The total distance travelled by the car in this 30 s is

- [A] 1350 m
- [B] 450 m
- [C] 750 m
- [D] 600 m

5. Two objects are thrown vertically upward with initial velocities u_1 and u_2 respectively. If the ratio of the maximum height attained is $\frac{4}{25}$, then the value of $\frac{u_1}{u_2}$ is

- [A] $\frac{4}{25}$
- [B] $\frac{2}{5}$
- [C] $\frac{25}{4}$
- [D] $\frac{5}{2}$

6. A javelin thrower can achieve maximum horizontal distance when the angle of projection is

- [A] 0°
- [B] 30°
- [C] 45°
- [D] 60°

7. A monkey of mass 20 kg is climbing upward along a rope that can withstand a maximum tension of 240 N. The maximum acceleration with which the monkey can climb without breaking the rope is [use $g = 10 \text{ ms}^{-2}$]

- [A] 2 ms^{-2}
- [B] 12 ms^{-2}
- [C] 4 ms^{-2}
- [D] 8 ms^{-2}

8. A block of mass M is sliding on a fixed inclined plane which is inclined at an angle θ to the horizontal. If μ is the coefficient of friction between the block and the plane, then the acceleration of the block is

- [A] $g(\sin \theta - \mu \cos \theta)$
- [B] $g(\sin \theta + \mu \cos \theta)$
- [C] $g(\cos \theta - \mu \sin \theta)$
- [D] $g(\cos \theta + \mu \sin \theta)$

9. Work-Energy theorem states that
- [A] net work done on an object is equal to the change in total mechanical energy
 - [B] net work done on an object is equal to the change in potential energy
 - [C] net work done on an object is equal to the change in kinetic energy
 - [D] net work done on an object is always equal to zero
10. Which of the following statements is **true** for a particle moving with a uniform speed around a circular path?
- [A] Both velocity and acceleration are constant of motion
 - [B] Velocity is constant while the acceleration is zero
 - [C] Acceleration is constant but velocity changes with time
 - [D] Both acceleration and velocity are not constant of motion
11. A point object of mass m is dropped from a height H above the ground. At what height (h) above the ground will the kinetic energy of the object be equal to its potential energy?
- [A] $h = \frac{H}{4}$
 - [B] $h = \frac{H}{2}$
 - [C] $h = \frac{H}{6}$
 - [D] $h = \frac{H}{8}$
12. A ball of mass m is dropped from a height h onto a horizontal ground floor and it rebounds repeatedly. If the co-efficient of restitution between the ball and floor is e , then the total distance travelled by the ball before it comes to rest is
- [A] $S = \left(\frac{1}{1-e^2} \right) h$
 - [B] $S = \left(\frac{e^2}{1-e^2} \right) h$
 - [C] $S = \left(\frac{1+e^2}{1-e^2} \right) h$
 - [D] $S = \left(\frac{1-e^2}{1+e^2} \right) h$
13. For a particle that is initially at rest and moves under the action of a constant power source, the displacement of the particle is given by $s \propto t^n$. The value of n is
- [A] 1
 - [B] $\frac{1}{2}$
 - [C] 2
 - [D] $\frac{3}{2}$
14. Which of the following statements is **true** for elastic collision?
- [A] Only momentum is conserved
 - [B] Only kinetic energy is conserved
 - [C] Both momentum and kinetic energy are conserved
 - [D] Neither momentum nor kinetic energy is conserved
15. A constant force of $(2\hat{i} + \hat{j} - 2\hat{k})\text{N}$ acts on a particle whose position vector is $(\hat{i} - \hat{j} + \hat{k})\text{m}$. The torque on the particle about the origin is
- [A] $(\hat{i} + 4\hat{j} + 3\hat{k})\text{N.m}$
 - [B] $(\hat{i} - 4\hat{j} + 3\hat{k})\text{N.m}$
 - [C] $-(\hat{i} + 4\hat{j} + 3\hat{k})\text{N.m}$
 - [D] $-(\hat{i} - 4\hat{j} + 3\hat{k})\text{N.m}$

16. A shell fired from the ground explodes in mid-air into two fragments. Neglecting air resistance, the centre of mass of the fragments after the explosion moves along

- [A] a straight line
- [B] a circular path
- [C] an elliptical path
- [D] a parabolic path

17. A solid cylindrical body of radius R and length L is rolling on a plane without slipping. If m is the mass of the body, then the total kinetic energy of the rolling cylinder is

- [A] $\frac{1}{2}mv^2$
- [B] $\frac{1}{4}mv^2$
- [C] $\frac{3}{4}mv^2$
- [D] $\frac{7}{10}mv^2$

18. A rectangular lamina of length l and breadth b has a mass M . The moment of inertia of the lamina along an axis perpendicular to its plane and passing through its centre is

- [A] $\frac{M}{12}(l^2 + b^2)$
- [B] $\frac{M}{6}(l^2 + b^2)$
- [C] $\frac{M}{3}(l^2 + b^2)$
- [D] $\frac{M}{4}(l^2 + b^2)$

19. At what altitude above the Earth's surface does the acceleration due to gravity decrease by 2% from its value at the surface? (Take the radius of the Earth as 6400 km.)

- [A] 32 km
- [B] 64 km
- [C] 128 km
- [D] 256 km

20. The ratio of the escape velocity from the Earth's surface to the orbital velocity of a satellite in a circular orbit close to the Earth's surface is

- [A] 1 : 2
- [B] 1 : $\sqrt{2}$
- [C] $\sqrt{2}$: 1
- [D] 2 : 1

21. An object of mass m moves around another heavier object of mass M such that $M \gg m$ in a circular orbit. If r is the radius of the circular orbit, then the energy of the system is

- [A] $E = -G \frac{Mm}{2r}$
- [B] $E = -G \frac{Mm}{r}$
- [C] $E = -G \frac{2Mm}{r}$
- [D] $E = G \frac{Mm}{2r}$

22. The angular frequency of the Earth's rotation about its axis in angular units is

- [A] $\frac{\pi}{12}$
- [B] $\frac{\pi}{43200}$
- [C] $\frac{\pi}{86400}$
- [D] $\frac{\pi}{24}$

23. Geostationary satellites, mainly used for telecommunication, orbit around the Earth at an altitude approximately equal to

- [A] 360 km
- [B] 3600 km
- [C] 36000 km
- [D] 360000 km

- 24.** Which of the following statements about Kepler's laws of planetary motion is **false** ?
- [A] All planets move in elliptical orbits with the Sun situated at one of the foci
 - [B] The line joining a planet and the Sun sweeps out equal areas in equal intervals of time
 - [C] The square of the time period of revolution of a planet is proportional to the cube of the semi-major axis of the ellipse traced out by the planet
 - [D] The speed of a planet is minimum at perihelion and maximum at aphelion
- 25.** The dimensional formula of co-efficient of viscosity is
- [A] $[ML^{-1}T^{-1}]$
 - [B] $[ML^{-1}T^{-2}]$
 - [C] $[MLT^{-2}]$
 - [D] $[ML^{-2}T^{-1}]$
- 26.** Bernoulli's principle is applicable to
- [A] turbulent flow of a viscous fluid
 - [B] steady flow of an incompressible and non-viscous fluid
 - [C] steady flow of a compressible fluid
 - [D] any type of fluid flow irrespective of viscosity
- 27.** The terminal velocity of a spherical body falling through a viscous liquid is v_t . If the radius of the spherical body is doubled, the new terminal velocity in the same viscous liquid will be
- [A] v_t
 - [B] $2v_t$
 - [C] $\frac{v_t}{4}$
 - [D] $4v_t$
- 28.** Generally, the surface tension of a liquid
- [A] increases with increase in temperature
 - [B] decreases with increase in temperature
 - [C] remains constant with temperature
 - [D] first increases and then decreases with temperature
- 29.** n numbers of small liquid drops of radius r coalesce to form a bigger liquid drop. If T be the surface tension of the liquid, then the change in the surface energy is
- [A] $4\pi r^2(1 - n^{\frac{1}{3}})nT$
 - [B] $4\pi r^2(1 - n^{\frac{2}{3}})nT$
 - [C] $4\pi r^2(n^{\frac{1}{3}} - 1)nT$
 - [D] $4\pi r^2(n^{-\frac{1}{3}} - 1)nT$
- 30.** Two capillary tubes made of the same material having radii in the ratio of 1 : 3 are dipped in a liquid of surface tension T . If h_1 and h_2 are the corresponding heights of capillary rise in the two tubes, then the ratio $h_1 : h_2$ is
- [A] 1 : 3
 - [B] 1 : 9
 - [C] 3 : 1
 - [D] 9 : 1
- 31.** The temperature of a body increases from 27°C to 127°C . The corresponding increase in temperature on the Fahrenheit scale is
- [A] 100°F
 - [B] 45.6°F
 - [C] 180°F
 - [D] 212°F

32. The coefficients of linear, area and volume expansion of an isotropic solid are denoted by α , β and γ respectively. Which of the following relations is **correct**?

- [A] $\alpha : \beta : \gamma = 1 : 2 : 3$
 [B] $\alpha : \beta : \gamma = 3 : 2 : 1$
 [C] $\alpha : \beta : \gamma = 2 : 1 : 3$
 [D] $\alpha : \beta : \gamma = 3 : 1 : 2$

33. If $\gamma = \frac{C_P}{C_V}$ is the ratio of specific heat at constant pressure and constant volume of an ideal gas, then C_P is given by (Here R is the Universal gas constant)

- [A] $C_P = \left(\frac{\gamma - 1}{\gamma} \right) R$
 [B] $C_P = \left(\frac{\gamma}{\gamma - 1} \right) R$
 [C] $C_P = \left(\frac{\gamma}{\gamma + 1} \right) R$
 [D] $C_P = \left(\frac{\gamma + 1}{\gamma} \right) R$

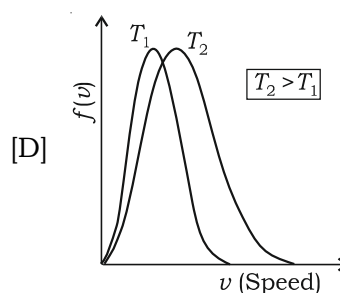
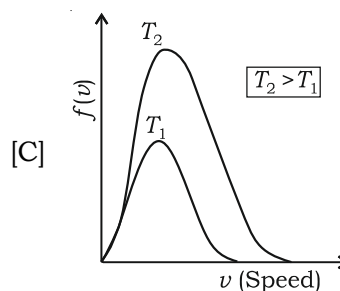
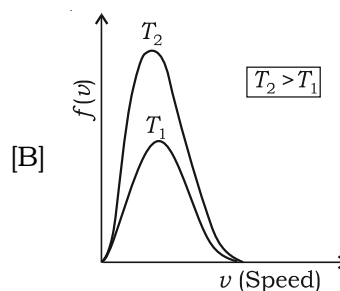
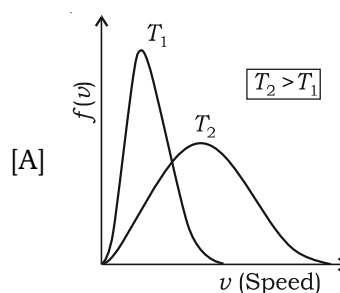
34. Two metal rods A and B having equal length and cross-sectional area are soldered end to end. The free ends of rod A and B are maintained at temperatures T_1 and T_2 ($T_1 > T_2$) respectively. If K_A and K_B are the thermal conductivities of the rod A and rod B respectively, the temperature T_j at the junction at steady state is

- [A] $T_j = \frac{T_1 + T_2}{2}$
 [B] $T_j = \frac{K_A T_1 + K_B T_2}{K_A + K_B}$
 [C] $T_j = \frac{K_A T_1 - K_B T_2}{K_A + K_B}$
 [D] $T_j = \frac{K_B T_1 + K_A T_2}{K_A + K_B}$

35. A graph is plotted between $\log_e(T - T_0)$ and time (t), where T and T_0 are the temperatures of the body and surrounding respectively. The nature of the graph is

- [A] a straight line with positive slope
 [B] a straight line with negative slope
 [C] an exponential decay curve
 [D] an exponential growth curve

36. Which of the following graphs **correctly** represents the Maxwellian distribution of speeds of an ideal gas?



37. The adiabatic index given by $\gamma = \frac{C_p}{C_v}$ for O_2 molecules at ambient temperature is

- [A] $\frac{5}{3}$
- [B] $\frac{4}{3}$
- [C] $\frac{9}{7}$
- [D] $\frac{7}{5}$

38. A real gas approaches the ideal gas behaviour at

- [A] high pressure and low temperature
- [B] high pressure and high temperature
- [C] low pressure and low temperature
- [D] low pressure and high temperature

39. The total change in entropy of a Carnot's cycle

- [A] is zero
- [B] remains constant
- [C] increases
- [D] decreases

40. A black body radiating a total power of 20 W is found to have its maximum intensity at the wavelength of $\lambda_m = 400$ nm. If the surface temperature of the blackbody is doubled, then the new value of λ_m and radiated power are respectively

- [A] 200 nm and 320 W
- [B] 200 nm and 80 W
- [C] 800 nm and 320 W
- [D] 800 nm and 80 W

41. Which of the following represents Planck's black body radiation law?

- [A] $u(\lambda, T) = \frac{8\pi hc}{\lambda^5} \frac{1}{e^{\frac{hc}{\lambda KT}} + 1}$
- [B] $u(\lambda, T) = \frac{8\pi hc}{\lambda^3} \frac{1}{e^{\frac{hc}{\lambda KT}} + 1}$
- [C] $u(\lambda, T) = \frac{8\pi hc}{\lambda^5} \frac{1}{e^{\frac{hc}{\lambda KT}} - 1}$
- [D] $u(\lambda, T) = \frac{8\pi hc}{\lambda^3} \frac{1}{e^{\frac{hc}{\lambda KT}} - 1}$

42. Two sound waves of frequencies 256 Hz and 260 Hz travel simultaneously in air. The number of beats heard per second is

- [A] 1
- [B] 2
- [C] 3
- [D] 4

43. The displacement of a particle executing simple harmonic motion is described by $y = a \sin \omega t$. The instantaneous velocity of the particle is given by

- [A] $v = \omega \sqrt{a^2 - y^2}$
- [B] $v = -\omega \sqrt{a^2 - y^2}$
- [C] $v = \omega \sqrt{y^2 - a^2}$
- [D] $v = -\omega \sqrt{y^2 - a^2}$

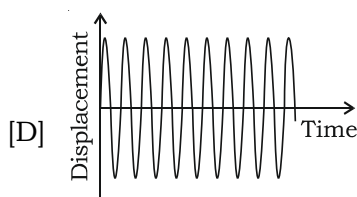
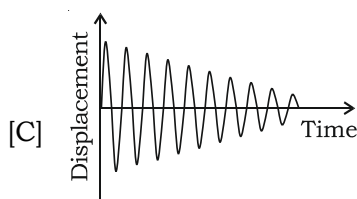
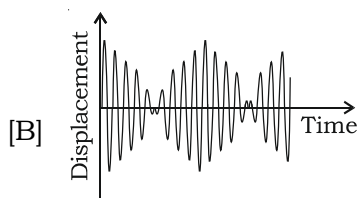
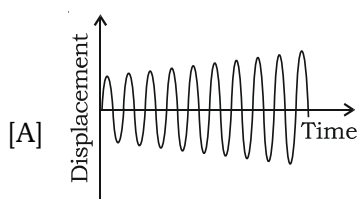
44. In a resonance tube experiment, the first resonance length was obtained at 18 cm with a tuning fork of frequency f_1 . If the experiment was performed using another tuning fork of frequency f_2 in the same resonance tube, the first resonance was obtained at a length of 12 cm. The ratio $f_2 : f_1$ is

- [A] 2 : 3
- [B] 3 : 2
- [C] 4 : 9
- [D] 9 : 4

45. The mass M is suspended from a spring of negligible mass. The spring is pulled a little and then released so that the mass executes SHM with time period T . If the mass is increased by m , the time period becomes $\frac{5T}{3}$. What is the ratio of $\frac{m}{M}$?

- [A] $\frac{25}{9}$
 [B] $\frac{16}{9}$
 [C] $\frac{9}{16}$
 [D] $\frac{9}{25}$

46. Which of the following graphs represents the damped oscillation?



47. A transverse harmonic wave on a string travelling along negative X -axis with a speed of 2 km s^{-1} has an amplitude of 5 m and frequency of 20 Hz . Assuming the initial phase to be zero, the displacement of the wave is

- [A] $y(x, t) = 5 \sin(0.02\pi x + 40\pi t) \text{ m}$
 [B] $y(x, t) = 5 \sin(0.02\pi x - 40\pi t) \text{ m}$
 [C] $y(x, t) = 5 \sin(40\pi x + 0.02\pi t) \text{ m}$
 [D] $y(x, t) = 5 \sin(40\pi x - 0.02\pi t) \text{ m}$

48. Laplace pointed out that the pressure variations during the propagation of sound waves are so fast and therefore the process is adiabatic. Accordingly, the speed of sound waves in gas is given by (All the symbols used here have their usual meanings)

- [A] $v = \sqrt{\frac{P}{\rho}}$
 [B] $v = \sqrt{\frac{\gamma P}{\rho}}$
 [C] $v = \sqrt{\frac{\rho}{P}}$
 [D] $v = \sqrt{\frac{\rho}{\gamma P}}$

49. A stretched string fixed at both ends vibrates in its 5th harmonics. The number of nodes and antinodes in this normal mode of vibration are respectively

- [A] 5 and 5
 [B] 4 and 5
 [C] 5 and 4
 [D] 6 and 5

50. Two identical sources S_1 and S_2 emit sound waves of frequency f whose speed is v . An observer moves towards S_1 and away from S_2 with speed u . The beat frequency as heard by the observer is

- [A] $\frac{uf}{v}$
- [B] $\frac{2uf}{v}$
- [C] $\frac{uf}{2v}$
- [D] 0

51. An object is placed at a distance of 30 cm in front of a convex mirror of focal length 20 cm. The nature of the image is

- [A] virtual and diminished
- [B] virtual and magnified
- [C] real and diminished
- [D] real and magnified

52. Consider the following statements :

- I. The critical angle depends on the refractive indices of the two media.
- II. Total internal reflection is possible only if the angle of incidence exceeds the critical angle.
- III. The critical angle is independent of the wavelength (colour) of light.

Which of the statements given above are **true** ?

- [A] I, II and III
- [B] I and III only
- [C] II and III only
- [D] I and II only

53. A small bulb is placed at the bottom of a tank containing a liquid of refractive index μ . If the depth of the tank is d , then the surface area of liquid surface through which the light from bulb can emerge out is

- [A] $\frac{\pi d^2(\mu^2 - 1)}{\mu}$
- [B] $\frac{\pi d^2}{\mu}$
- [C] $\frac{\pi d^2}{\mu^2 - 1}$
- [D] $\frac{\pi d^2}{\mu^2 + 1}$

54. A biconvex lens has same radii of curvature of 20 cm. If the refractive index of the material of the lens is 1.5, then the focal length of the biconvex lens is

- [A] 10 cm
- [B] 20 cm
- [C] 15 cm
- [D] 30 cm

55. At minimum angle of deviation produced by a prism,

- [A] the angle of incidence is greater than the angle of emergence
- [B] the angle of incidence is less than the angle of emergence
- [C] the angle of incidence is equal to the angle of emergence
- [D] there is no specific relation between angle of incidence and angle of emergence

56. The blue colour of the sky is due to

- [A] scattering of light
- [B] dispersion of light
- [C] diffraction of light
- [D] reflection of light

57. If half part of the objective lens for both a compound microscope and an astronomical telescope is painted by a black colour. What will happen to the image formed by both the instruments?

- [A] Half part of the image disappears for both the instruments
- [B] Image remains same but the brightness of image is reduced
- [C] Only image is seen in telescope
- [D] Only image is seen in microscope

58. If the angle of minimum deviation of a prism is equal to the angle of the prism, then the relation between the refractive index of the material of the prism and the angle of the prism is

- [A] $\mu = \sin A$
- [B] $\mu = 2 \sin\left(\frac{A}{2}\right)$
- [C] $\mu = 2 \cos\left(\frac{A}{2}\right)$
- [D] $\mu = 2 \tan\left(\frac{A}{2}\right)$

59. Which of the following pairs of sources of light can produce a stable interference pattern?

- [A] Two individual sodium lamps of same intensity
- [B] Two individual red light LASER pointers
- [C] Two individual monochromatic light sources having same wavelength
- [D] Two virtual sources produced by a Fresnel biprism from a monochromatic source

60. In Young's double slit experiment, the fringe width using a light source of wavelength λ is β . If the source of light is replaced by another light of wavelength λ_1 such that the fringe width becomes doubled. The relation between λ and λ_1 is

- [A] $\lambda_1 = 2\lambda$
- [B] $\lambda_1 = 4\lambda$
- [C] $\lambda_1 = \frac{\lambda}{2}$
- [D] $\lambda_1 = \frac{\lambda}{4}$

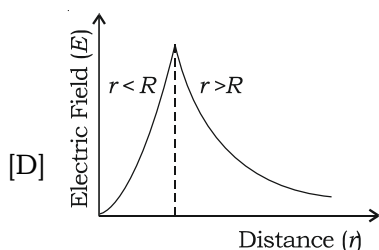
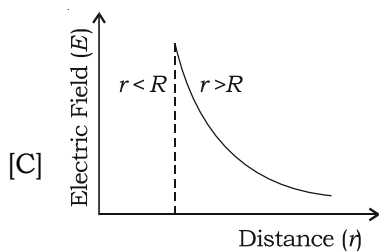
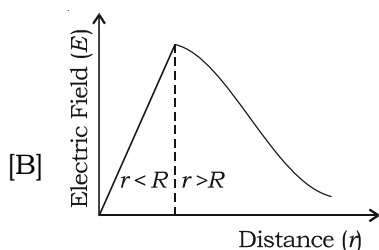
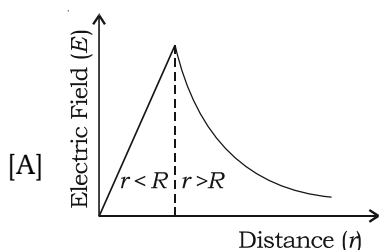
61. The inability of an optical instrument to resolve two very closely objects is mainly due to

- [A] interference of light
- [B] diffraction of light
- [C] polarization of light
- [D] scattering of light

62. A ray of light strikes on a glass plate of refractive index $\sqrt{3}$. If the reflected and refracted light are perpendicular to each other, the angle of refraction is

- [A] 0°
- [B] 30°
- [C] 45°
- [D] 90°

63. Which of the following graphs **correctly** represents the variation of electric field with distance due to a charged non-conducting solid sphere of radius R ?



64. At very large distance, the electric potential due to a dipole having a dipole moment $\vec{p}$ varies with distance as $V \propto r^{-n}$. The value of n is

[A] 1
[B] 2
[C] 3
[D] 4

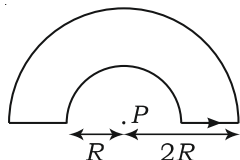
65. A point charge q is moving around a fixed point charge Q in a circular path of radius r such that the charge Q is located at the centre of the circular path. If r is the radius of the circular path, then the work done by electrostatic force in moving the charge for one complete rotation is

[A] $\frac{1}{4\pi\epsilon_0} \frac{Qq}{r}$
[B] $\frac{1}{4\pi\epsilon_0} \frac{2Qq}{r}$
[C] $\left(\frac{1}{4\pi\epsilon_0} \frac{Qq}{r^2} \right) 2\pi r$
[D] 0

66. Three point charges $4Q$, $-Q$ and $2Q$ are located at the point $(a, 0)$, $(-a, 0)$ and $(3a, 0)$ respectively. The electric flux due to these charges through a sphere of radius $2a$ centred at origin is

[A] $\frac{3Q}{\epsilon_0}$
[B] $\frac{5Q}{\epsilon_0}$
[C] $\frac{6Q}{\epsilon_0}$
[D] $\frac{Q}{\epsilon_0}$

67. Two semicircular loops of radii R and $2R$ carry a current I as shown in figure below. The magnitude of magnetic field induction at centre, P is

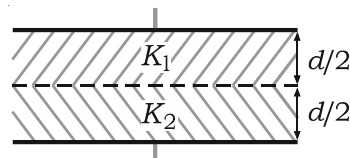


- [A] $\frac{3\mu_0 I}{8R}$
- [B] $\frac{\mu_0 I}{8R}$
- [C] $\frac{3\mu_0 I}{8\pi R}$
- [D] $\frac{\mu_0 I}{8\pi R}$

68. A capacitor of capacitance C is charged by using a battery and a charge of Q is stored in it. After that the battery is disconnected and the capacitor is connected to another uncharged capacitor having same capacitance. The amount of electrostatic energy lost in this process is

- [A] $\frac{1}{2} \frac{Q^2}{C}$
- [B] $\frac{3}{4} \frac{Q^2}{C}$
- [C] $\frac{1}{4} \frac{Q^2}{C}$
- [D] $\frac{3}{8} \frac{Q^2}{C}$

69. Two dielectric materials having different dielectric constants k_1 and k_2 are inserted in between the plates of a parallel plate capacitor as shown in the figure below. If A and d are the plate area and distance of separation of the plate, the effective capacitance of this arrangement is



- [A] $\frac{A\epsilon_0}{d} \left(\frac{k_1 k_2}{k_1 + k_2} \right)$
- [B] $\frac{2A\epsilon_0}{d} \left(\frac{k_1 k_2}{k_1 + k_2} \right)$
- [C] $\frac{2A\epsilon_0}{d} (k_1 + k_2)$
- [D] $\frac{A\epsilon_0}{d} (k_1 + k_2)$

70. A dielectric slab of dielectric constant k is fully inserted in between the plates of a parallel plate capacitor. The area and plate separation of the capacitor are A and d respectively. If the dielectric strength is E_b , the maximum amount of charge that can be stored without causing the dielectric breakdown is

- [A] $Q_{\max} = \frac{kA\epsilon_0 E_b}{2}$
- [B] $Q_{\max} = \frac{kA\epsilon_0 E_b d}{2}$
- [C] $Q_{\max} = kA\epsilon_0 E_b d$
- [D] $Q_{\max} = kA\epsilon_0 E_b$

71. Which of the following relations is **false**? (All symbols have their usual meanings in relation to current electricity)

[A] $\vec{v}_d = -\frac{e\vec{E}\tau}{m}$

[B] $\vec{j} = \frac{ne^2}{m}\tau\vec{E}$

[C] $\rho = \frac{ne^2\tau}{m}$

[D] $\mu = \frac{e\tau}{m}$

72. The resistance of a metallic wire at temperature T_2 is twice the value of the resistance of the same wire at temperature T_1 . If α is the temperature co-efficient of resistance of the wire, then the value of $(T_2 - T_1)$ is

[A] $\frac{2}{\alpha}$

[B] $\frac{1}{\alpha}$

[C] $\frac{1}{2\alpha}$

[D] $\frac{2}{3\alpha}$

73. A carbon resistor has its colour bands in sequence as Green, Black, Gold and Silver respectively. The value of the resistance is

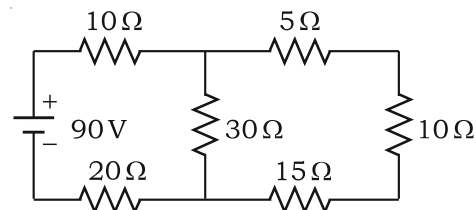
[A] $R = (50 \pm 15\%) \Omega$

[B] $R = (50 \pm 10\%) \Omega$

[C] $R = (5 \pm 15\%) \Omega$

[D] $R = (5 \pm 10\%) \Omega$

74. In the given circuit diagram, the electric current flowing through 30Ω resistor is



[A] 0.1 A

[B] 0.5 A

[C] 1 A

[D] 2 A

75. A proton and alpha particle moving with same velocity enters a region of uniform magnetic field describing a circular trajectory. The ratio of the radius of the proton's trajectory to the radius of the alpha particle's trajectory is

[A] 2 : 1

[B] 1 : 2

[C] 1 : 4

[D] 4 : 1

76. A galvanometer can be converted into ammeter by connecting

[A] a shunt in parallel

[B] a shunt in series

[C] a high resistor in parallel

[D] a high resistor in series

77. Which of the following Maxwell's equations represents the Faraday's law of electromagnetic induction?

[A] $\oint \vec{E} \cdot d\vec{A} = \frac{q}{\epsilon_0}$

[B] $\oint \vec{B} \cdot d\vec{A} = 0$

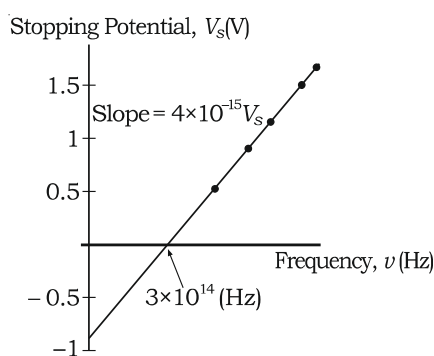
[C] $\oint \vec{E} \cdot d\vec{l} = -\frac{\partial \Phi_B}{\partial t}$

[D] $\oint \vec{B} \cdot d\vec{l} = \mu_0 i_c + \mu_0 \epsilon_0 \frac{\partial \Phi_E}{\partial t}$

78. A paramagnetic material is _____ by a magnet.

- [A] strongly attracted
- [B] strongly repelled
- [C] weakly repelled
- [D] weakly attracted

79. A student performed the experiment on the photoelectric effect using a photocell having a certain work function to determine the Planck's constant. He measured the stopping potential (V_s) at different frequencies (ν) of the incident radiation. A graph is plotted between stopping potential (V_s) along Y-axis and frequency (ν) of the incident radiation along X-axis and the graph is shown in the figure below.



The estimated values of Planck's constant and work function are (nearest value)

- [A] $h = 6.4 \times 10^{-34} \text{ Js}$
 $\phi_0 = 0.6 \text{ eV}$
- [B] $h = 6.4 \times 10^{-34} \text{ Js}$
 $\phi_0 = 1.2 \text{ eV}$
- [C] $h = 6.626 \times 10^{-34} \text{ Js}$
 $\phi_0 = 1.2 \text{ eV}$
- [D] $h = 6.626 \times 10^{-34} \text{ Js}$
 $\phi_0 = 0.6 \text{ eV}$

80. The energy of an electron in a hydrogen atom is -3.4 eV . The angular momentum of the electron in this state is

- [A] $2\hbar$
- [B] $\frac{\hbar}{2}$
- [C] $\hbar$
- [D] $2\pi\hbar$

81. If the frequency of k_α line of Cu ($Z = 29$) is known to be $2 \times 10^{18} \text{ Hz}$, the frequency of k_α line of La ($Z = 57$) is

- [A] $5 \times 10^{17} \text{ Hz}$
- [B] $5 \times 10^{18} \text{ Hz}$
- [C] $16 \times 10^{18} \text{ Hz}$
- [D] $8 \times 10^{18} \text{ Hz}$

82. A proton and α particle have the same kinetic energy. The ratio of the de-Broglie wavelength of the proton to that of the α particle is

- [A] 4 : 1
- [B] 1 : 4
- [C] 2 : 1
- [D] 1 : 2

83. Which of the following experiments confirms the wave nature of the electron?

- [A] Photoelectric effect
- [B] Davisson-Germer experiment
- [C] Compton effect
- [D] Millikan's oil drop experiment

84. The radius of ${}_{12}\text{Mg}^{27}$ nucleus is measured to be 3.6×10^{-13} cm. The radius of ${}_{29}\text{Cu}^{64}$ nucleus is estimated to be

- [A] 2.7×10^{-13} cm
- [B] 10.8×10^{-13} cm
- [C] 7.2×10^{-13} cm
- [D] 4.8×10^{-13} cm

85. The binding energy of a nucleus A_ZX is given by $E_b = \Delta Mc^2$. If M is the mass of the nucleus, then ΔM can be expressed as (All the symbols used here have their usual meanings)

- [A] $\Delta M = [Zm_p + (A - Z)m_n] - M$
- [B] $\Delta M = M - [Zm_p + (A - Z)m_n]$
- [C] $\Delta M = [Zm_n + (A - Z)m_p] - M$
- [D] $\Delta M = M - [Zm_n + (A - Z)m_p]$

86. The half-life of Bi^{214} is 20 minutes. The fraction of the Bi^{214} sample that remains after 2 hours is

- [A] $\frac{1}{32}$
- [B] $\frac{1}{64}$
- [C] $\frac{1}{12}$
- [D] $\frac{1}{16}$

87. The relation between the half-life ($T_{1/2}$) and the mean life (τ) of a radioactive substance is

- [A] $T_{1/2} = \frac{\tau}{\ln 2}$
- [B] $T_{1/2} = \tau \ln 2$
- [C] $T_{1/2} = \frac{\ln 2}{\tau}$
- [D] $T_{1/2} = \frac{\tau}{2}$

88. A radioactive sample of ${}_{90}\text{Th}^{232}$ decays into ${}_{82}\text{Pb}^{208}$. The numbers of alpha and beta particles emitted are respectively

- [A] 6 and 8
- [B] 8 and 6
- [C] 6 and 4
- [D] 4 and 6

89. In hydrogen bomb, the initial high temperature required for the nuclear reaction is provided by

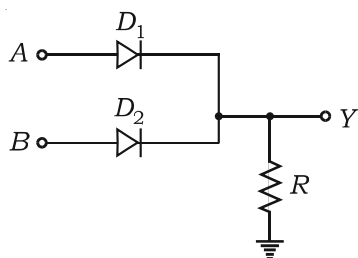
- [A] fusion reaction
- [B] chemical explosives
- [C] fission reaction
- [D] passing gamma rays

90. A crystal AX has a Face Centred Cubic (FCC) structure. If the radii of A and X ions are r_1 and r_2 respectively, then the lattice parameter of AX crystal is

- [A] $a = \frac{\sqrt{3}}{2}(r_1 + r_2)$
- [B] $a = \frac{1}{2}(r_1 + r_2)$
- [C] $a = 2(r_1 + r_2)$
- [D] $a = \sqrt{2}(r_1 + r_2)$

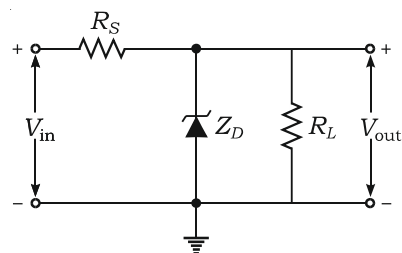
91. When a Si crystal is doped with phosphorous atoms, the Fermi level of the doped Si
- [A] moves towards the conduction band
 - [B] moves towards the valence band
 - [C] remains same
 - [D] moves below the valence band

92. In the given circuit D_1 and D_2 are two p - n junction diodes. A and B are the input terminals and Y is the output terminal. This circuit behaves as a/an



- [A] NOR gate
 - [B] NAND gate
 - [C] AND gate
 - [D] OR gate
93. The ripple factor of a full wave rectifier is
- [A] 0.812
 - [B] 0.41
 - [C] 1.21
 - [D] 0.48

94. In the Zener diode voltage regulator circuit shown in the figure, the input voltage $V_{in} = 20\text{ V}$, series resistance $R_S = 200\ \Omega$, load resistance $R_L = 400\ \Omega$ and Zener breakdown voltage $V_Z = 12\text{ V}$. Assuming the Zener diode operates in breakdown region, the current through the Zener diode is



- [A] 40 mA
 - [B] 30 mA
 - [C] 10 mA
 - [D] 5 mA
95. With increase in temperature, the band gap of a semiconductor generally
- [A] decreases
 - [B] increases
 - [C] remains constant
 - [D] becomes zero at all temperatures

96. α and β are the dc current gains in common-base and common-emitter configuration of a transistor respectively. If the value of α changes from 0.98 to 0.99, then the value of β changes from

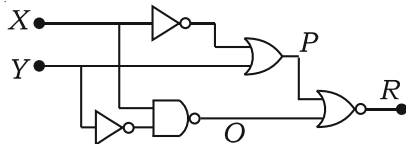
[A] 99 to 49

[B] 49 to 89

[C] 59 to 99

[D] 49 to 99

97. In the logic circuit shown in the figure, the output R is high when



[A] $X = 0, Y = 0$

[B] $X = 0, Y = 1$

[C] $X = 1, Y = 0$

[D] $X = 1, Y = 1$

98. The colour of the light emitted by LED depends mainly on the

[A] forward current in LED

[B] band gap

[C] reverse current in LED

[D] size of the LED

99. In amplitude modulation of a signal of frequency f_m with a carrier wave of frequency f_c , the bandwidth of the amplitude modulated wave is

[A] $2f_m$

[B] $2f_c$

[C] $f_c - f_m$

[D] $f_c + f_m$

100. The FM broadcast signals lie in the frequency range between

[A] 540 kHz and 1600 kHz

[B] 640 kHz and 2100 kHz

[C] 78 MHz and 118 MHz

[D] 88 MHz and 108 MHz

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1. Consider the following statements regarding the behavioural approach in Politics :

- I. It emphasises on the study of actual human behaviour in political situations rather than formal structures.
- II. It aims to make Political Science a purely value-free, quantitative science.
- III. David Easton formulated the “Credo of Relevance” as a core pillar of behaviouralism.

Which of the statements given above are **correct**?

- [A] I and II only
[B] II and III only
[C] I and III only
[D] I, II and III

2. Who among the following political thinkers stated that “Right is one man’s capacity of influencing the acts of others, not by his own strength but by the strength of the society”?

- [A] John Locke
[B] Thomas Holland
[C] Bernard Bosanquet
[D] Harold J. Laski

3. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : According to Karl Marx, the State is an instrument of class rule and exists to promote the exploitation of the Proletariat by the Bourgeoisie.

Reason (R) : In the Marxist view, political power is the organised power of one class for oppressing another, inherently tied to the economically dominant class.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
[B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
[C] **(A)** is true but **(R)** is false
[D] **(A)** is false but **(R)** is true

4. Arrange the following theories of democracy in the **correct** chronological order of their historical emergence :

- I. Elitist Theory of Democracy
- II. Classical/Protective Theory of Democracy
- III. Pluralist Theory of Democracy
- IV. Deliberative/Participatory Theory of Democracy

- [A] II → I → III → IV
[B] II → III → I → IV
[C] I → II → III → IV
[D] III → II → I → IV

5. Which of the following statements is **not** aligned with the Pluralist Theory of Democracy?

- [A] It emphasises the need for territorial and functional decentralisation of authority.
[B] It insists on a strict, single, indivisible locus of State sovereignty.
[C] It favours the introduction of Self-Government through autonomous groups.
[D] It views society as a collection of diverse interest groups competing for policy influence.

6. Consider the following statements regarding the concepts of liberty :

- I. Negative liberty primarily emphasises the absolute absence of external interference in an individual’s personal sphere.
- II. Positive liberty is conceptualised as the power or capability of doing or enjoying something worth doing or enjoying.
- III. T. H. Green and John Stuart Mill are both classified as pure and uncompromising negative libertarians.

Which of the statements given above is/are **correct**?

- [A] I only
[B] I and II only
[C] II and III only
[D] I, II and III

7. Match **List—I** (Books) with **List—II** (Authors) and select the **correct** answer :

List—I (Books)	List—II (Authors)
(a) <i>A Grammar of Politics</i>	(i) Vernon Van Dyke
(b) <i>Political Science : A Philosophical Analysis</i>	(ii) Harold J. Laski
(c) <i>State Against Democracy</i>	(iii) Robert Michels
(d) <i>Political Parties</i>	(iv) Rajni Kothari

(a) (b) (c) (d)

[A] (ii) (i) (iv) (iii)

[B] (ii) (i) (iii) (iv)

[C] (i) (ii) (iv) (iii)

[D] (iv) (iii) (i) (ii)

8. Which of the following is the most accurate description of the relationship between Civil Law and Public Law?

[A] Civil law is an aspect of public law that controls criminal behaviour

[B] Civil law is a form of private law that governs relationships, obligations and disputes between individuals or private entities

[C] Civil law is strictly defined as international law enforced by the United Nations

[D] Civil law relates strictly to institutional dynamics between the legislature and executive

9. Consider the following statements regarding feminist political theory :

I. Liberal feminism focuses on securing equal legal and political rights within the existing framework of liberal democracy.

II. Radical feminism argues that patriarchal gender relations are the primary form of oppression and that “the personal is political”.

III. Socialist feminism attributes women’s subjugation exclusively to psychological factors, completely rejecting economic structures.

Which of the statements given above are **correct**?

[A] I and II only

[B] II and III only

[C] I and III only

[D] I, II and III

10. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : Post-behaviouralism was a protest movement against the excessive quantification and methodological rigidity of Behavioural Political Science.

Reason (R) : Post-behaviouralism demanded that Political Research must emphasise ‘action’ and ‘relevance’ over technical purity.

Select the **correct** option :

[A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**

[B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**

[C] **(A)** is true but **(R)** is false

[D] **(A)** is false but **(R)** is true

11. Which among the following is the **correct** composition of the four essential elements of the 'State' in political theory?

- [A] Population, Territory, Constitution, Judiciary
- [B] Citizens, Government, Liberty, Sovereignty
- [C] Population, Territory, Government, Sovereignty
- [D] Sovereignty, Law, Political Parties, Boundaries

12. Match **List—I** (Political Concepts) with **List—II** (Core Thinkers) and select the **correct** answer :

List—I (Political Concepts)	List—II (Core Thinkers)
(a) Veil of Ignorance / Justice as Fairness	(i) Karl Marx
(b) Libertarian / Entitlement Theory of Justice	(ii) John Rawls
(c) Historical Materialism	(iii) Robert Nozick
(d) Capability Approach to Justice	(iv) Amartya Sen
(a) (b) (c) (d)	
[A] (ii) (iii) (i) (iv)	
[B] (ii) (i) (iii) (iv)	
[C] (iii) (ii) (i) (iv)	
[D] (iv) (iii) (i) (ii)	

13. Consider the following statements regarding the traditional approach to the study of politics :

- I. It is predominantly normative, descriptive and institutional in its methodology.
- II. It completely rejects philosophical and historical analysis in favour of laboratory experimentation.
- III. It focuses heavily on the formal-legal framework of political systems.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

14. Who among the following asserted that "The God, who gave us life, gave us liberty at the same time"?

- [A] Thomas Jefferson
- [B] Adam Smith
- [C] T. H. Green
- [D] Mahatma Gandhi

15. The right to form political associations or interest groups falls under which category of rights?

- [A] Natural Rights
- [B] Civil Rights
- [C] Economic Rights
- [D] Political/Legal Rights

16. Which system of taxation is considered most conducive to achieving economic justice through structural redistribution?

- [A] Flat Proportional Taxation
- [B] Graded/Progressive Taxation
- [C] Regressive Indirect Taxation
- [D] Zero Corporate Taxation

17. The concept of Social Equality in political theory primarily implies

- [A] the equal distribution of material wealth across all classes
- [B] the absence of special social privileges based on caste, race, religion, or gender, ensuring equal status for all
- [C] the nationalisation of all modes of production by State decree
- [D] absolute uniformity in the intellectual and physical capacities of citizens

18. Who defined rights as 'a reasonable claim recognised by society and enforced by the State'?

- [A] Bernard Bosanquet
- [B] Harold J. Laski
- [C] T. H. Green
- [D] Karl Marx

19. Who opined that liberty and equality are antithetical and entirely incompatible with each other?

- [A] Lord Acton
- [B] H. J. Laski
- [C] Ernest Barker
- [D] T. H. Green

20. In a Parliamentary form of Government, which of the following principles is structurally foundational?

- [A] Strict and watertight separation of powers between the Executive and the Legislature
- [B] The Executive is drawn from and held directly responsible to the Legislature
- [C] The President acts as the real, supreme Executive head, independent of the Parliament
- [D] Tenure of the Head of Government is fixed and immune to legislative votes of confidence

21. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : In a Presidential form of Government, the Executive head is independent of the Legislature for their tenure.

Reason (R) : The Presidential system is structurally built upon the doctrine of the separation of powers.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

22. Consider the following statements regarding the 'Elitist Theory of Democracy' :

- I. It maintains that all societies are divided into a minority who rule and a majority who are ruled.
- II. Vilfredo Pareto and Gaetano Mosca are primary proponents of this model.
- III. It argues that democracy is merely an institutional arrangement for arriving at political decisions through competitive elite elections.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

23. Which approach to study politics has been severely criticised by Leo Strauss and Herbert Storing for ignoring the normative-moral foundations of politics?

- [A] Philosophical approach
- [B] Historical approach
- [C] Behavioural approach
- [D] Marxist approach

24. John Austin's concept of monistic sovereignty defines law as

- [A] the custom of the community accumulated over generations
- [B] the dictate of right reason embedded in cosmic order
- [C] the command of a determinate political superior who receives habitual obedience
- [D] the direct, unmediated expression of the general will

25. The 'social contract theory' of the origin of the State postulates that

- [A] the State is an organic extension of the human family structure
- [B] the State is a divine creation designed to execute cosmic law
- [C] the State is a product of deliberate, rational conventions made by individuals to escape an anarchic state of nature
- [D] the State is purely an instrument of violent conquest by dominant nomadic tribes

26. Match **List—I** (Schedules) with **List—II** (Core Subjects) of the Constitution of India :

List—I		List—II	
(Schedules)		(Core Subjects)	
(a) Seventh Schedule	(i) Provisions relating to disqualification on grounds of defection		
(b) Eighth Schedule	(ii) Allocation of subjects into Union, State and Concurrent Lists		
(c) Tenth Schedule	(iii) Powers, authority and responsibilities of Panchayats		
(d) Eleventh Schedule	(iv) Languages recognised by the Constitution		
(a)	(b)	(c)	(d)
[A] (ii)	(iv)	(i)	(iii)
[B] (ii)	(i)	(iv)	(iii)
[C] (iii)	(iv)	(i)	(ii)
[D] (i)	(ii)	(iii)	(iv)

27. Consider the following statements regarding the Fundamental Rights guaranteed by the Constitution of India :

- I. 'Equality Before the Law' under Article 14 is available to citizens and foreigners alike.
- II. Right to Form Cooperative Societies is protected as a Fundamental Right under Article 19(1)(c).
- III. Right of Children, aged 6 to 14 years, to Free and Compulsory Education is guaranteed under Article 21A.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

28. Which landmark judgment of the Supreme Court explicitly held that the Indian Constitution is founded on the bedrock of the balance between Fundamental Rights and Directive Principles of State Policy?

- [A] *Kesavananda Bharati v. State of Kerala* (1973)
- [B] *Minerva Mills v. Union of India* (1980)
- [C] *Golaknath v. State of Punjab* (1967)
- [D] *Maneka Gandhi v. Union of India* (1978)

29. Match **List—I** (Articles of the Indian Constitution affecting women) with **List—II** (Core Contents) and select the **correct** answer using the code given below :

List—I (Articles)	List—II (Core Contents)
(a) Article 15	(i) State to secure just and humane conditions of work and maternity relief
(b) Article 39	(ii) Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth
(c) Article 42	(iii) Equal pay for equal work for both men and women
(d) Article 243D	(iv) Reservation of seats for women in Panchayats

Code :

- | | | | |
|-----------|-------|-------|------|
| (a) | (b) | (c) | (d) |
| [A] (ii) | (iii) | (i) | (iv) |
| [B] (ii) | (i) | (iii) | (iv) |
| [C] (iii) | (ii) | (i) | (iv) |
| [D] (i) | (iii) | (ii) | (iv) |

30. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : The federal framework of the Indian Constitution is deeply influenced by the structural pattern of the Canadian federal model.

Reason (R) : The Indian federation is characterised by an indestructible union of destructible States, vesting residuary powers squarely with the Centre.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

31. Consider the following statements regarding the Writ jurisdictions in the Indian Constitution :

- The Supreme Court can issue writs under Article 32 only for the enforcement of Fundamental Rights.
- The High Courts can issue writs under Article 226 for the enforcement of Fundamental Rights as well as for ordinary legal rights.
- The writ of *Habeas Corpus* cannot be issued against private individuals but only against public authorities.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

32. Arrange the following landmark structural steps in the making of the Indian Constitution in chronological order :

- Presentation of the Objective Resolution by Jawaharlal Nehru
- Formal constitution of the Drafting Committee under Dr. B. R. Ambedkar
- First formal meeting of the Constituent Assembly
- Adoption and signing of the Constitution by the Constituent Assembly

- [A] III → I → II → IV
- [B] I → III → II → IV
- [C] III → II → I → IV
- [D] II → I → III → IV

33. Consider the following statements regarding the dynamics of 'Regionalism' in India :

- I. Regionalism acts as a force of political mobilisation to assert local developmental and cultural interests.
- II. It is always entirely incompatible with the principles of federalism and constitutional unity.
- III. Economic disparities across States act as a primary driver of regionalist tendencies.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

34. Article 249 of the Indian Constitution authorises the Parliament to legislate on a subject listed in the State List, if

- [A] the Supreme Court grants special written authorisation to the Parliament
- [B] the President issues an executive order declaring it a national emergency
- [C] the Rajya Sabha passes a resolution supported by not less than two-thirds of its members present and voting, declaring it expedient in the national interest
- [D] the Inter-State Council submits a formal recommendation to that effect

35. Who among the following described the Directive Principles of State Policy as "pious aspirations" or "a cheque on a bank, payable only when the resources of the bank allow"?

- [A] Dr. B. R. Ambedkar
- [B] Professor K. T. Shah
- [C] Granville Austin
- [D] Sir Ivor Jennings

36. Which Article of the Indian Constitution protects the right of an individual to travel abroad as interpreted by the Supreme Court in the Maneka Gandhi case?

- [A] Article 14
- [B] Article 19
- [C] Article 21
- [D] Article 22

37. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : The multi-party system in India often leads to the formation of unstable coalition governments at the centre.

Reason (R) : Indian political parties are primarily fragmented along deep regional, caste and linguistic cleavages.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

38. The 52nd Constitutional Amendment Act (1985) of India, defines changing party allegiance by an elected legislator after elections legally as

- [A] ideological mobility
- [B] political defection
- [C] coalition restructuring
- [D] floor management

39. Articles 245 to 255 in Part XI of the Constitution of India explicitly deals with Centre-State relations in matters involving

- [A] financial allocation and taxation powers
- [B] administrative and executive oversight coordination
- [C] legislative relations and distribution of legislative powers
- [D] judicial jurisdiction of inter-State tribunals

40. Which body was structurally reconstituted in 2010 under the chairmanship of the then Prime Minister, Dr. Manmohan Singh, for advising the Government of India on measures to be taken to counter internal divisiveness, communalism and casteism?
- [A] NITI Aayog
[B] National Integration Council (NIC)
[C] Law Commission of India
[D] National Security Advisory Board
41. Which of the following statements is **not true** regarding the Preamble to the Indian Constitution?
- [A] It is based on the Objective Resolution drafted and moved by Pandit Nehru.
[B] It can be amended under Article 368 of the Constitution.
[C] It was amended only once via the 42nd Constitutional Amendment Act (1976).
[D] It is directly enforceable in a court of law to override specific statutory provisions.
42. Which of the following is **not** an accurate feature or rule governing the exercise of judicial review by the Supreme Court of India?
- [A] The power of judicial review is implicit in Article 13 of the Constitution
[B] The Court can strike down legislative enactments and executive orders if they violate the Constitution
[C] A specific case or petition must be formally brought before the Court to invoke review
[D] A unanimous opinion of all sitting judges is mandatory for declaring any Central law unconstitutional and void
43. Who among the following called the Right to Constitutional Remedies (Article 32) the “very heart and soul of the Constitution”?
- [A] Dr. Rajendra Prasad
[B] Pandit Jawaharlal Nehru
[C] Dr. B. R. Ambedkar
[D] Justice P. N. Bhagwati
44. Which of the following indicates the **correct** textual sequence of terms as enshrined in the Preamble to the Indian Constitution?
- [A] Sovereign, Democratic, Socialist, Secular, Republic
[B] Sovereign, Socialist, Secular, Democratic, Republic
[C] Sovereign, Secular, Socialist, Democratic, Republic
[D] Federal, Socialist, Secular, Democratic, Republic
45. Which of the following constitutional provisions incorporates elements reflecting Gandhian ideology and principles?
- [A] Fundamental Rights (Part III)
[B] Directive Principles of State Policy (Part IV)
[C] Fundamental Duties (Part IVA)
[D] Special Provisions for Anglo-Indians
46. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :
- Assertion (A)** : The Directive Principles of State Policy are fundamental in the governance of the country.
Reason (R) : The Directive Principles are explicitly justiciable and carry penal sanctions if unfulfilled by the State.
- Select the **correct** option :
- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
[B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
[C] **(A)** is true but **(R)** is false
[D] **(A)** is false but **(R)** is true

47. Consider the following statements regarding the President's Rule under Article 356 :

- I. It can be proclaimed by the President if a situation has arisen in which the Government of a State cannot be carried on in accordance with the Provisions of the Constitution.
- II. Even proclamation issued under Article 356 must be approved by both Houses of Parliament within two months from the date of its issue.
- III. The validity of a proclamation under Article 356 is entirely immune from judicial review.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

48. National Integration Day in India is celebrated each year, to promote national unity, on

- [A] 1st November
- [B] 14th November
- [C] 19th November
- [D] 26th November

49. Which constitutional body handles the institutional settlement of inter-State water disputes under Article 262?

- [A] Inter-State Council
- [B] Central Water Commission
- [C] Statutory Ad-hoc Tribunals created by the Parliament
- [D] The Supreme Court of India under original jurisdiction

50. The original jurisdiction of the Supreme Court of India covers which of the following disputes?

- I. Disputes between the Government of India and one or more States
- II. Inter-State border or resource sharing disputes between two or more States
- III. Ordinary civil suits filed by an individual citizen against the Central Government

Select the **correct** option :

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

51. Arrange the following events in the **correct** chronological order of their genesis during the different phases of the Cold War :

- I. Proclamation of the Truman Doctrine
- II. Soviet intervention in Afghanistan
- III. The Cuban Missile Crisis
- IV. Signing of the Warsaw Pact

- [A] I → IV → III → II
- [B] I → III → IV → II
- [C] IV → I → III → II
- [D] III → I → IV → II

52. Which three leaders are universally acknowledged as the principal founding fathers who initiated the Non-Aligned Movement (NAM)?

- [A] Jawaharlal Nehru, Sukarno, Kwame Nkrumah
- [B] Jawaharlal Nehru, Josip Broz Tito, Gamal Abdel Nasser
- [C] Winston Churchill, Franklin Roosevelt, Joseph Stalin
- [D] Zhou Enlai, Jawaharlal Nehru, Anwar Sadat

53. Consider the following statements regarding the United Nations Organisation :

- I. The United Nations formally came into existence on 24th October, 1945.
- II. The primary organ responsible for maintaining international peace and security is the UN Security Council.
- III. Decisions of the Security Council on procedural matters require a unanimous vote, including the veto of all permanent members.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

54. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : India's 'Look East Policy', initiated in 1991, marked a strategic shift to engage with the ASEAN region.

Reason (R) : The policy was driven by the collapse of the Soviet Union and India's need to find dynamic alternative economic and strategic partners.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

55. Consider the following statements regarding India's Nuclear Policy :

- I. India has signed and ratified both the Non-Proliferation Treaty (NPT) and the Comprehensive Nuclear-Test-Ban Treaty (CTBT).
- II. A core pillar of India's nuclear doctrine is the commitment to a 'No First Use' policy against nuclear-weapon States.
- III. India maintains a strategy of 'Credible Minimum Deterrence'.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

56. Match **List—I** (Strategic Concepts) with **List—II** (Target Countries/Regions) relating to Indian Foreign Policy :

List—I (Strategic Concepts)	List—II (Target Countries/Regions)
(a) String of Pearls (Counter-strategy)	(i) Pakistan
(b) Indus Waters Treaty	(ii) China
(c) Mahakali Treaty	(iii) Bangladesh
(d) Ganga Water Sharing (Farakka)	(iv) Nepal
(a) (b) (c) (d)	
[A] (ii) (i) (iv) (iii)	
[B] (ii) (i) (iii) (iv)	
[C] (i) (ii) (iv) (iii)	
[D] (iii) (iv) (i) (ii)	

57. Which of the following is **not** one of the five core principles of 'Panchsheel' governing India's Foreign Policy?

- [A] Mutual respect for each other's territorial integrity and sovereignty
- [B] Mutual non-aggression
- [C] Formulating regular collective military defence alliances against third-party States
- [D] Peaceful co-existence

58. In which city was the Charter of the South Asian Association for Regional Cooperation (SAARC) signed in December 1985?

- [A] New Delhi
- [B] Islamabad
- [C] Dhaka
- [D] Kathmandu

59. Which of the following elements is classified as a 'tangible or material' element of National Power in international relations?

- [A] National Character and Morale
- [B] Leadership Quality
- [C] Technological capacity and industrial infrastructure
- [D] Efficiency of bureaucratic organisation

60. Consider the following statements regarding the structure of the United Nations Security Council (UNSC) :

- I. It consists of 15 members, of which 5 are permanent and 10 are non-permanent, elected for two-year terms.
- II. The G4 nations (India, Brazil, Germany, Japan) collectively support each other's bids for permanent seats.

Which of the statements given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

61. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : The Comprehensive Nuclear-Test-Ban Treaty (CTBT) was rejected by India in 1996.

Reason (R) : India viewed the CTBT as deeply discriminatory, failing to link horizontal non-proliferation with a time-bound commitment to total vertical disarmament by existing nuclear powers.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

62. The boundary line that delineates the frontier between India (Northeast region) and China is historically known as

- [A] Radcliffe Line
- [B] Durand Line
- [C] McMahon Line
- [D] Line of Control (LoC)

63. In which year did India perform its first peaceful nuclear explosion experiment with code name "Smiling Buddha"?

- [A] 1962
- [B] 1974
- [C] 1998
- [D] 2005

64. The concept of 'Détente' in the history of International Relations refers specifically to
- [A] the immediate escalation of nuclear threat during a crisis
 - [B] the easing of strained relations and systemic tensions between the USA and the USSR during the Cold War
 - [C] the formal dissolution of the League of Nations
 - [D] the creation of regional economic trade blocs in Latin America
65. The Shimla Agreement (1972) signed between India and Pakistan established which core principle for handling bilateral disputes?
- [A] Mandatory mediation by the United Nations Security Council
 - [B] Resolution of all disputes strictly through peaceful bilateral negotiations without external intervention
 - [C] Structural resolution via third-party arbitration by the United States
 - [D] Postponement of dialogue until complete disarmament is achieved
66. Which international organisation is considered as the historical precursor to the United Nations?
- [A] Concert of Europe
 - [B] League of Nations
 - [C] North Atlantic Treaty Organization
 - [D] International Court of Arbitration
67. The geopolitical doctrine 'Mekong-Ganga Cooperation' is an initiative involving India and how many ASEAN countries?
- [A] Five
 - [B] Six
 - [C] Four
 - [D] Seven

68. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : The institutional progress of SAARC has been slow and frequently gridlocked.

Reason (R) : Structural bilateral animosities, particularly between India and Pakistan, heavily shadow institutional integration within SAARC.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
 - [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
 - [C] **(A)** is true but **(R)** is false
 - [D] **(A)** is false but **(R)** is true
69. Consider the following statements regarding the 'Indian Ocean Region' (IOR) in India's current maritime strategy :
- I. The SAGAR initiative (Security and Growth for All in the Region) outlines India's vision for the IOR.
 - II. The Indian Ocean handles massive global sea lines of communication, making its maritime security vital for India's trade.
- Which of the statements given above is/are **correct**?
- [A] I only
 - [B] II only
 - [C] Both I and II
 - [D] Neither I nor II

70. Arrange the following foreign policy shifts of India in chronological sequence from their historical inception :

- I. Act East Policy
- II. Non-Aligned Movement (NAM)
- III. Look East Policy
- IV. Panchsheel Pact Policy

- [A] IV → II → III → I
- [B] II → IV → III → I
- [C] IV → III → II → I
- [D] II → III → IV → I

71. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : Realist theories view International Politics as fundamentally anarchic.

Reason (R) : There is no overarching global sovereign authority capable of enforcing laws and binding state behaviour.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

72. India's 'Gujral Doctrine' (1996) formulated a principle for foreign policy regarding its smaller neighbours based on

- [A] strict, transactional, mathematical reciprocity in all concessions
- [B] non-reciprocal asymmetry, where India gives unilaterally what it can in good faith without expecting matching returns
- [C] continuous military deployment along border zones
- [D] forging a common currency framework across South Asia

73. Given below are two statements, one labelled as **Assertion (A)** and the other labelled as **Reason (R)** :

Assertion (A) : Neoliberal institutionalism argues that international cooperation is achievable despite global anarchy.

Reason (R) : International regimes and institutions can lower transaction costs and mitigate the problem of cheating through transparency.

Select the **correct** option :

- [A] Both **(A)** and **(R)** are true and **(R)** is the correct explanation of **(A)**
- [B] Both **(A)** and **(R)** are true but **(R)** is not the correct explanation of **(A)**
- [C] **(A)** is true but **(R)** is false
- [D] **(A)** is false but **(R)** is true

74. Who among the following classical thinkers defined International Relations primarily through the prism of political realism, emphasising national interest defined in terms of power?

- [A] Woodrow Wilson
- [B] Hans J. Morgenthau
- [C] Immanuel Kant
- [D] John Mearsheimer

75. Consider the following statements regarding the 'Enclave Exchange' under the 100th Constitutional Amendment Act :

- I. It resolved long-standing cross-border land boundary disputes between India and Bangladesh.
- II. It was based on the modification of the Land Boundary Agreement of 1974.

Which of the statements given above is/are **correct**?

- [A] I only
- [B] II only
- [C] Both I and II
- [D] Neither I nor II

76. Consider the following statements regarding the reservation of seats in Panchayati Raj Institutions (PRIs) in Arunachal Pradesh :

- I. The 73rd Constitutional Amendment Act mandates that all States must reserve a percentage of seats for Scheduled Castes (SCs) in Panchayats.
- II. The State of Arunachal Pradesh is fully exempted from the provision of reserving Panchayat seats for SCs.
- III. Not less than one-third of the total seats in Panchayats at all levels in Arunachal Pradesh are reserved for women.

Which of the statements given above are **correct**?

- [A] I and II only
[B] II and III only
[C] I, II and III
[D] I and III only

77. Which one of the following is **not** a constitutional feature of Panchayati Raj System in India?

- [A] State Election Commission
[B] Five-year tenure
[C] District Planning Committee
[D] Reservation for SCs/STs and women

78. Consider the following statements regarding the governing laws and tribal administration in Arunachal Pradesh :

- I. Autonomous District Councils (ADCs) under the Sixth Schedule of the Indian Constitution is the primary form of Local Government in Arunachal Pradesh.
- II. The State is governed by special provisions under Article 371-H of the Constitution.

Which of the statements given above is/are **correct**?

- [A] I only
[B] II only
[C] Both I and II
[D] None of the above

79. Consider the following statements :

- I. Article 40 under the Directive Principles of State Policy directs the State to organize Village Panchayats.
- II. Panchayats were given constitutional status through the 73rd Constitutional Amendment Act, 1992.
- III. Arunachal Pradesh follows a completely two-tier Panchayati Raj system.

Which of the above statements is/are **correct**?

- [A] I and II only
[B] II only
[C] I and III only
[D] I, II and III

80. Consider the following statements :

- I. Gram Sabha is recognised as the People's Parliament at the village level.
- II. Gram Sabha consists of all adult members of the village.
- III. Elected Panchayati Raj Institutions are accountable to the Gram Sabha.

Which of the above statements are **correct**?

- [A] I and II only
[B] II and III only
[C] I and III only
[D] I, II and III

81. Consider the following statements :

- I. One-third of the seats in Panchayats are reserved for women.
- II. Reservation applies to chairperson posts also.
- III. Reservation for women is optional under the Constitution.

Which of the above statements is/are **correct**?

- [A] I and II only
[B] II only
[C] I only
[D] I, II and III

82. Consider the following statements about Municipal Administration in Arunachal Pradesh :

- I. The Arunachal Pradesh Municipal Act, 2007, provides the legal framework for the constitution of Municipalities and Nagar Panchayats.
- II. The State introduced its first-ever municipal elections in the capital city, Itanagar, under the provisions of the Municipal Elections Act.
- III. Similar to the Panchayats, urban local bodies in the State are completely exempt from reserving seats for the Scheduled Castes.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I, II and III
- [D] I and III only

83. Consider the following statements about local governance in Arunachal Pradesh :

- I. The P. K. Thungan Committee, which recommended the constitutional recognition of Panchayati Raj Institutions, was headed by an Arunachali leader.
- II. The primary administrative capital, Itanagar, falls under the purview of the Itanagar Municipal Corporation.
- III. Municipal governance in the State is governed by the provisions laid out in the 73rd Constitutional Amendment Act.

Which of the statements given above are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

84. Consider the following statements regarding women's representation :

Statement—I : Not less than one-third (33%) of the total seats at every level of the Panchayati Raj in Arunachal Pradesh are reserved for women.

Statement—II : The reservation for women is strictly fixed and does not allow for rotation across consecutive terms.

- [A] Both statements are true
- [B] Both statements are false
- [C] Statement—I is true but Statement—II is false
- [D] Statement—I is false but Statement—II is true

85. Consider the following statements regarding State Municipal Administration :

Statement—I : The Arunachal Pradesh Municipal Act extends to all areas of the State, including defence areas.

Statement—II : The provisions of the 74th Constitutional Amendment govern the urban local bodies of the State.

- [A] Both statements are true
- [B] Both statements are false
- [C] Statement—I is true but Statement—II is false
- [D] Statement—I is false but Statement—II is true

86. Consider the following statements about the evolution of Panchayati Raj in Arunachal Pradesh :

- I. The North-East Frontier Agency (NEFA) Panchayat Raj Regulation passed in 1967 was officially replaced by the Panchayat Raj Act, 1993, in Arunachal Pradesh.
- II. The present Panchayati Raj system operates according to the Arunachal Pradesh Panchayat Raj Act, 1997.
- III. Arunachal Pradesh follows a traditional two-tier Panchayati Raj system.

Which of the statements given above is/are **correct**?

- [A] I and II only
- [B] I and III only
- [C] II only
- [D] I only

87. Consider the following statements regarding the State Election Commission :

- I. It conducts Panchayat elections.
- II. It is appointed by the Governor.
- III. It conducts State legislative elections.

Which of the statements given above is/are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I only
- [D] I, II and III

88. The minimum age for contesting Panchayat elections in Arunachal Pradesh is

- [A] 18 years
- [B] 21 years
- [C] 25 years
- [D] 30 years

89. Consider the following statements regarding the Ashok Mehta Committee :

- I. It recommended a two-tier Panchayati Raj system.
- II. It viewed the district as the basic unit of decentralisation.
- III. It opposed political party participation in Panchayat elections.

Which of the statements given above is/are **correct**?

- [A] I and II only
- [B] II only
- [C] I and III only
- [D] I, II and III

90. Which Committee's recommendation in 1965 paved the way for the historical introduction of the Panchayati Raj system in NEFA?

- [A] Balwant Rai Mehta Committee
- [B] Ashok Mehta Committee
- [C] Daying Ering Committee
- [D] L. M. Singhvi Committee

91. What is the standard minimum population required for a village to be declared a standard Panchayat area?

- [A] 100
- [B] 300
- [C] 500
- [D] 1000

92. Which of the following is associated with Panchayati Raj resource mobilisation?

- [A] Fiscal deficit financing
- [B] Monetary policy
- [C] Foreign exchange reserve
- [D] Resource envelope

93. Which among the following subjects is included in Panchayat functions?

- [A] Atomic energy
- [B] International trade
- [C] Drinking water
- [D] Currency regulation

94. Consider the following statements regarding Gram Sabha :

- I. Gram Sabha discusses village development issues.
- II. Gram Sabha conducts social audit of schemes.
- III. Gram Sabha functions as a judicial court.

How many statements given above is/are **correct**?

- [A] One
- [B] Two
- [C] Three
- [D] None of the above

95. Sustainable Development Goals (SDGs) in Panchayati Raj are related to

- I. decent work and economic growth
- II. industry, innovation and infrastructure
- III. responsible consumption and production

Select the **correct** answer :

- [A] I and II only
- [B] II and III only
- [C] I and III only
- [D] I, II and III

96. Consider the following statements :

- I. Panchayats can levy certain local taxes and fees.
- II. Panchayats depend entirely on Union Government Grants.
- III. Panchayats receive financial assistance through State Finance Commission Recommendations.

Which of the statements given above is/are **correct**?

- [A] I and III only
- [B] II only
- [C] I only
- [D] I, II and III

97. Consider the following statements regarding the Gram Panchayat Development Plan (GPDP) :

- I. GPDP is also known as 'My Village My Development Plan' in Arunachal Pradesh.
- II. GPDP encourages participatory planning.
- III. GPDP excludes Gram Sabha participation.

Which of the statements given above is/are **correct**?

- [A] I and II only
- [B] II and III only
- [C] I only
- [D] I, II and III

98. Who conducts the Panchayat elections in Arunachal Pradesh?

- [A] The Election Commission of India
- [B] The District Administration
- [C] The State Election Commission
- [D] The Ministry of Panchayati Raj

99. Which one of the following is **correctly** matched?

(Institution)	(Function)
(a) Gram Sabha	— Social audit
(b) Gram Panchayat	— Local administration
(c) State Finance Commission	— Review Panchayat finances

- [A] (a) and (b) only
- [B] (b) and (c) only
- [C] (a) and (c) only
- [D] (a), (b) and (c)

100. Which Article of the Constitution of India grants special provisions with respect to the State of Arunachal Pradesh?

- [A] Article 371-G
- [B] Article 371-H
- [C] Article 371-I
- [D] Article 371-J

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