

Time : 1½ hours

Full Marks : 100

Instructions : The figures in the right-hand margin indicate full marks for the questions.

1. A group of friends are sitting in an arrangement one each at the corner of an octagonal table and all facing the center. Mayuri is sitting diagonally opposite to Joseph, who is sitting on Swatee's right. Rakesh is next to Swatee, and opposite Ibrahim, who is on Kumar's left. Tapasya is not on Mayuri's right, but opposite Venessa. Who is sitting on Venessa's right?
(A) Joseph
(B) Rakesh
(C) Mayuri
(D) Kumar
2. Kaplan is three years older than his wife, Miriam, and four times as old as his son Sigmund. If Sigmund becomes 15 years old after 3 years, what is the present age of Miriam?
(A) 55 years
(B) 50 years
(C) 48 years
(D) 45 years
3. Identify the correctly spelt word
(A) CIRCUMSTANSE
(B) CIRCUMNAVIGETE
(C) CIRCUMFERENCE
(D) CIRCUMSATNTIAL
4. For the detectives, clues available at a crime scene are
(A) suggestive
(B) circumstantial
(C) inferential
(D) derivative

5. Which of the given responses would be a meaningful order of the following words in context of our society?
- I. Country
 - II. Family
 - III. Member
 - IV. Locality
 - V. State
- (A) III, II, IV, V, I
 - (B) III, IV, I, V, II
 - (C) I, II, III, IV, V
 - (D) III, II, V, IV, I
6. In a parliamentary form of government, real powers of the State are vested in the
- (A) President
 - (B) Chief Justice of Supreme Court
 - (C) Council of Ministers headed by the Prime Minister
 - (D) Parliament
7. At which site of excavation was a status of a bearded man found?
- (A) Pamir
 - (B) Harappa
 - (C) Mohenjodaro
 - (D) Lothal
8. The main characteristic of the Indus Valley Civilization was
- (A) town planning
 - (B) drainage system
 - (C) pucca houses
 - (D) well laid out roads

9. Which of the following organs is used in the purification of blood in human body?
- (A) Liver
 - (B) Kidney
 - (C) Spleen
 - (D) Lungs
10. The largest continent in the world is
- (A) Europe
 - (B) North America
 - (C) Asia
 - (D) Africa
11. Pacemaker is implanted in heart when one of the following is defective :
- (A) SA node
 - (B) AV node
 - (C) Purkinje fibers
 - (D) Bundle of His
12. Liquefied Petroleum Gas (LPG) is mainly a mixture of
- (A) propane and butane
 - (B) butane and methane
 - (C) propane and isobutene
 - (D) propane and methane

13. Who initiated the Home Rule Movement in India?
- (A) Chittaranjan Das
 - (B) Lala Lajpat Rai
 - (C) Annie Besant
 - (D) Maulana Abdul Kalam Azad
14. In which of the following countries is the temple of Preah Vihear, a UNESCO World Heritage sites?
- (A) Thailand
 - (B) Myanmar
 - (C) Cambodia
 - (D) Vietnam
15. Gautam Buddha had attained Enlightenment (or Buddhahood) in the present area of
- (A) Bodh Gaya in Bihar, India
 - (B) Lumbini, in the Rupandehi District of Nepal
 - (C) Kushinagar, close to the modern Kasia (Uttar Pradesh), India
 - (D) Sarnath, formally Isipathana, Uttar Pradesh, India
16. The heart is covered by a membrane called
- (A) epidermis
 - (B) dermis
 - (C) cerebellum
 - (D) pericardium

17. The Periyar Game Sanctuary is renowned for
- (A) lions
 - (B) spotted deer
 - (C) two-humped Bactrian camels
 - (D) wild elephants
18. Which of the following components of blood protects human beings from infection?
- (A) Plasma
 - (B) Platelets (thrombocytes)
 - (C) Red blood cells (erythrocytes)
 - (D) White blood cells (leukocytes)
19. What is 'Kalaripayattu' ?
- (A) It is an ancient martial art and a living tradition in some parts of South India
 - (B) It is an ancient style bronze and brass work still found in southern part of Coromandel area
 - (C) It is an ancient form of dance-drama and a living tradition in the northern part of Malabar
 - (D) It is an ancient Bhakti cult of Shaivism still prevalent in some parts of South India
20. 'Dakshin Gangotri' is located in
- (A) Uttarakhand
 - (B) Arctic
 - (C) Himalaya
 - (D) Antarctica

21. Who proposed the Preamble before the Drafting Committee of the Constitution?

- (A) Jawaharlal Nehru
- (B) Dr. B. R. Ambedkar
- (C) B. N. Rao
- (D) Mahatma Gandhi

22. Consider the following statements regarding blood pressure:

1. It is the pressure exerted by the blood on the walls of any vessel.
2. It decreases in the arteries as the distance from the heart increases.
3. It is lower in the capillaries than in the arteries.
4. It is usually lower in women than in men.

Of these

- (A) only 1 and 4 are correct
- (B) all are correct except 4
- (C) all are correct except 1
- (D) all of them are correct

23. Which is the World's longest railway line?

- (A) Trans-Siberian line
- (B) Texas Railway line
- (C) Trans-Austin line
- (D) Trans-American line

24. Which of the following can initiate the process of impeachment of the President of India?

- (A) Any house of the Parliament
- (B) The Lok Sabha alone
- (C) The Rajya Sabha alone
- (D) The Supreme Court of India

25. The UNESCO Mahatma Gandhi Institute of Education for Peace and sustainable development (MGIEP), is presently housed in the first floor of ICSSR building at

- (A) New Delhi
- (B) Ahmedabad
- (C) Mumbai
- (D) Pune

26. The longest day in Australia is

- (A) 22 June
- (B) 22 December
- (C) 21 March
- (D) 22 September

27. During Rig-Vedic Age the normal form of Government was

- (A) republic
- (B) democracy
- (C) monarchy
- (D) None of the above

28. During the Gupta period of Ancient India, administration was

- (A) democratic
- (B) republic
- (C) monarchical
- (D) None of the above

29. The Mughal Empire extended up to Tamil territory in the South under the reign of
- (A) Jahangir
 - (B) Akbar
 - (C) Aurangzeb
 - (D) Shahjahan
30. The Grand Trunk Road which ran from the Indus to Sonargaon (in Bangladesh) was renovated in the Medieval times by
- (A) Shahjahan
 - (B) Jahangir
 - (C) Sher Shah
 - (D) Akbar
31. Which of the following institutions was not founded by Mahatma Gandhi?
- (A) Sabarmati Ashram
 - (B) Sevagram Ashram
 - (C) Vishwa Bharati
 - (D) Tolstoy Farm
32. Which of the following factors influenced the British to transfer power to the Indians?
- (A) The Indian armed forces could no longer be relied upon for their loyalty to the British
 - (B) Revolutionary activities had affected law and order system
 - (C) Large scale labour unrest and hostile public mood
 - (D) The Second World War had weakened Britain economically and politically

33. Of the following, whose ideas had influenced Mahatma Gandhi's thought?

- (A) Lenin
- (B) Tolstoy
- (C) Hitler
- (D) Karl Marx

34. Who marched with the slogan 'Dilli Chalo' ?

- (A) Sardar Vallabhbhai Patel
- (B) Subhas Chandra Bose
- (C) Jawaharlal Nehru
- (D) Mohandas Karamchand Gandhi

35. Under which Article of Constitution Jammu and Kashmir does enjoy special constitutional position?

- (A) Article-370
- (B) Article-356
- (C) Article-170
- (D) Article-124

36. Instrument used to detect earthquake is known as

- (A) seismometer
- (B) quadrometer
- (C) barometer
- (D) nanometer

37. Which from the following is a land-locked sea?

- (A) North Sea
- (B) Timor Sea
- (C) Red Sea
- (D) Aral Sea

38. Great Barrier Reef is near of

- (A) Australia
- (B) Uganda
- (C) Mexico
- (D) San Francisco

39. Selva Amazonica are

- (A) an amazonian musical instrument
- (B) mountain range of Brazil
- (C) deadly fish of amazon river
- (D) equatorial rainforests of Brazil

40. The Channel Tunnel, or Chunnel connects

- (A) France and Denmark
- (B) Spain and Italy
- (C) England and France
- (D) England and Wales

41. Which of the following is astronomically correct with respect to 'Great Bear' ?

- (A) Planet
- (B) Galaxy
- (C) Star
- (D) Constellation

42. The differences between asteroids and comets are given in three sentences :

- I. Asteroids are small rocky planetoids, while comets are formed of frozen gases held together by rocky and metallic material
- II. Asteroids are found mostly between the orbits of Jupiter and Saturn, while comets are found mostly between Venus and Mercury
- III. Comets show a perceptible glowing tail, while asteroids do not

Which of the following statements given above is/are correct?

- (A) I and II only
- (B) I and III only
- (C) III only
- (D) I, II and III

43. The speed of rotation of the earth is the highest

- (A) along the equator
- (B) at the North-pole
- (C) along the Tropic of Cancer
- (D) along the Arctic Circle

44. Rana Pratap Sagar Plant (Rajasthan) is associated with

- (A) crude oil
- (B) nuclear power
- (C) solar energy
- (D) hydroelectricity

45. Which State is the largest producer of onion in India?
- (A) Maharashtra
 - (B) Madhya Pradesh
 - (C) Karnataka
 - (D) Andhra Pradesh
46. Japanese iron and steel industry is an example of industry based on
- (A) export of skilled labour
 - (B) export of local raw material
 - (C) export of value added local raw-material
 - (D) export of value added imported raw-material
47. Which country is the largest exporter of coal?
- (A) Poland
 - (B) Australia
 - (C) India
 - (D) Czechoslovakia
48. Largest producer of paper pulp is
- (A) Kyoto of Japan
 - (B) Melbourne of Australia
 - (C) China
 - (D) None of the above

49. Which one of the following National Parks is situated in Gujarat?
- (A) Corbett National Park
 - (B) Gir National Park
 - (C) Kaziranga National Park
 - (D) Kanha National Park
50. In which one of the following areas in Chipko Movement in India was started first of all?
- (A) Garhwal area
 - (B) Narmada Valley
 - (C) Himachal region
 - (D) Jammu and Kashmir
51. What was the name of football in FIFA World Cup 2018?
- (A) Brazuca
 - (B) Telstar
 - (C) Teamgeist
 - (D) Jabulani
52. Who sang the theme song of FIFA World Cup 2014?
- (A) Pitbull and Jennifer Lopez
 - (B) Kesha Rose Sebert
 - (C) Lady Gaga
 - (D) Enrique Iglesias

53. Who became the first cricketer to score four successive one day international centuries during World Cup 2015?
- (A) Virat Kohli
 - (B) Kumara Sangakkara
 - (C) Martin Guptil
 - (D) Hashim Amla
54. Cricket World Cup 2015 was jointly hosted by
- (A) Australia and New Zealand
 - (B) India and Bangladesh
 - (C) South Africa and Zimbabwe
 - (D) Australia and West-Indies
55. A person standing in front of a mirror finds his image larger than himself. This implies that the mirror is
- (A) concave
 - (B) plane
 - (C) convex
 - (D) cylindrical with bulging side outwards
56. Electric transformers are used to
- (A) filter current
 - (B) regulate current
 - (C) serve as fuse
 - (D) change voltage

57. Of the following the poorest heat insulator is

- (A) air
- (B) glass
- (C) aluminum
- (D) rock

58. Alcohol is used as a thermometric liquid when it is desired to measure

- (A) high temperature
- (B) very high temperature
- (C) low temperature
- (D) sun temperature

59. When an oil film on water is seen in daytime, it shows beautiful colours.
This phenomenon is due to

- (A) diffraction
- (B) refraction
- (C) polarization
- (D) interference

60. A re-usable space rocket is called

- (A) Apollo
- (B) Satellite
- (C) Space shuttle
- (D) Skylab

61. The same side of the moon always faces the earth because
- (A) earth moves with same speed around the peripheral boundary of the moon
 - (B) moon cannot change its position with respect to its position relative to the sun
 - (C) moon and earth have gravitational force that cancels each other
 - (D) the period of rotation of moon is nearly equal to the period of its revolution around the earth
62. Which of the following substances is produced during photosynthesis in plant leaves?
- (A) Fat
 - (B) Carbohydrate
 - (C) Amino acid
 - (D) Protein
63. Who invented the transistor?
- (A) Edward Jenner
 - (B) J. Whinfield and J. Dickson
 - (C) Bardeen, Shockley and Brattain
 - (D) Banting, MacLeod and Best
64. Enzymes are
- (A) inorganic compounds
 - (B) benevolent set of fungi
 - (C) micro-organisms
 - (D) macromolecular biological catalysts

65. Of the following the only metal that is produced directly from its ore by an electrical process is

- (A) aluminum
- (B) copper
- (C) zirconium
- (D) steel

66. Water get cooled in earthen pot and not in a metal or glass pot because

- (A) earthen walls are bad conductor so heat does not affect the water
- (B) earthen walls of the pot absorb heat of water
- (C) evaporation through micro pores on walls of the earthen pot
- (D) None of the above

67. The spice 'clove' is obtained from

- (A) bud
- (B) stem
- (C) root
- (D) fruit

68. Goitre is caused due to deficiency of

- (A) potassium
- (B) calcium
- (C) molybdenum
- (D) iodine

69. Colours on the screen of a TV are produced by mixing
- (A) red, yellow and green
 - (B) red, green and blue
 - (C) red, blue and white
 - (D) red, yellow and blue
70. Which of the following gases combines together to produce ammonia gas?
- (A) Nitrogen and Oxygen
 - (B) Nitrogen and Helium
 - (C) Nitrogen and Hydrogen
 - (D) Nitrogen and Carbon dioxide
71. The device used for converting alternating current to direct current is
- (A) transformer
 - (B) transistor
 - (C) resistor
 - (D) rectifier
72. An apparatus used by the physician is
- (A) sphygmomanometer
 - (B) ammeter
 - (C) multimeter
 - (D) venturi meter

73. Which of the following is usually made of glass?
- (A) Pliers
 - (B) Test tube
 - (C) Arm chair
 - (D) Cryogenic fuel
74. Who helps to carry luggage at a railway station platform?
- (A) Plumber
 - (B) Porter
 - (C) Gastronome
 - (D) Bouncer
75. Sundar Pichai is the CEO of
- (A) Motorola
 - (B) Google Inc
 - (C) Pepsico
 - (D) Coca Cola
76. Tobacco major ITC started a farmer empowerment scheme named
- (A) ITC farm
 - (B) Mera Maati
 - (C) Aakash Ganga
 - (D) E-Choupal

77. The plinth area of a building does not include
- (A) area of the walls at the floor level
 - (B) internal shaft for sanitary installations up to 2 sq.m. in area
 - (C) lift and wall including landing
 - (D) area of cantilevered porch
78. In time-cost optimization of a project, crashing is done
- (A) on all the activities
 - (B) on all the activities lying on the critical path
 - (C) on original critical activities and those that become critical at any stage of crashing in the order of ascending cost slope
 - (D) only on activities lying on the original critical path and having flatter cost slopes
79. The original cost of an equipment is Rs. 10,000. Its salvage value at the end of its total useful life of five years is Rs. 1,000. Its book value at the end of two years of its useful life (as per straight line method of evaluation of depreciation) will be
- (A) Rs. 8,800
 - (B) Rs. 7,600
 - (C) Rs. 6,400
 - (D) Rs. 5,000
80. Cast iron piles
- (A) are useful for heavy vertical loads
 - (B) resist shocks or vibrations
 - (C) are suitable for use as batter piles
 - (D) are suitable for works under seawater
81. Next term of the sequence 2, 6, 11, 17, 24 will be
- | | |
|--------|--------|
| (A) 30 | (B) 31 |
| (C) 32 | (D) 33 |

82. $(0.1 \times 0.01 \times 0.001 \times 10^7)$ is equal to

- (A) $1/10$
- (B) $1/100$
- (C) 1
- (D) 10

83. If the sides of a square is increased by 10%, the area increases by

- (A) 10%
- (B) 21%
- (C) 100%
- (D) 42%

84. A 2 mm aluminum wire of length 36 m is melted to form a solid sphere whose radius will be

- (A) 3 mm
- (B) 30 mm
- (C) 9 mm
- (D) 27 mm

85. If you deposit INR 12,000 at a certain compound interest to double after five years, how much will you get after twenty years under the same scheme?

- (A) INR 1,92,000
- (B) INR 1,78,000
- (C) INR 2,08,000
- (D) INR 1,44, 000

86. If the sum of certain three consecutive natural numbers is 27, then the sum of next three natural numbers is

- (A) 42
- (B) 36
- (C) 34
- (D) 32

87. If an article is sold at 200% profit, then the ratio of its cost price to its selling price will be
- (A) 1 : 2 (B) 2 : 1
(C) 1 : 3 (D) 3 : 1
88. For a designer jacket with a certain sticker price, the difference in selling price with a flat discount of 30% and two consecutive discounts of 20% and 10% is INR 72. What is the sticker price of the jacket?
- (A) INR 3,600
(B) INR 3,000
(C) INR 2,400
(D) INR 2,500
89. Rohington rows a boat along the stream flow to cover a kilometer in 5 minutes. On his upstream paddling, he took an hour to cover 6 kilometers. What is the speed to water-flow in the stream where Rohington plies his boat?
- (A) 12 kmph
(B) 6 kmph
(C) 9 kmph
(D) 3 kmph
90. A number when divided by 136 leaves remainder 36. If the same number is divided by 8, the remainder will be
- (A) 2
(B) 7
(C) 6
(D) 4
91. Pick the odd one out from the following :
- (A) Lion
(B) Tiger
(C) Wolf
(D) Elephant

92. What would be the last letter of the longest sensible word possible by unscrambling TIKNET?

- (A) N (B) T
(C) K (D) I

93. Find a single letter the provided options which if substituted in the following words would form entirely new words :

“ROBE, JUST, MEND, ROYAL”

- (A) D (B) M
(C) S (D) L

94. Which of the following should not belong to the group?

- (A) Socks
(B) Boots
(C) Mittens
(D) Shoes

95. What would be the next letter in the series B, E, J, Q?

- (A) Z (B) Y
(C) U (D) V

96. If the 2nd, 3rd, 5th, 10th, 15th and 20th letters of English alphabet is unscrambled to form a sensible word, which letter will come at second last position. But if more than one word can be made, mark S, and if no words can be made, mark X?

- (A) B
(B) X
(C) C
(D) S

97. Which of the following pairs do not belong to the group?

- (A) Bus and Diesel
- (B) Fire and Water
- (C) Car and Petrol
- (D) Lamp and Oil

98. Identify the odd one out after unscrambling the following to make meaningful words

- (A) RAUGAJ
- (B) NAHTLEEP
- (C) NOIL
- (D) RETBUT

99. From the options given below, which letter can be prefixed to the following words to make another set of meaningful words :

ASH, ATE, APE, AID

- (A) R
- (B) H
- (C) M
- (D) S

100. Horse : Leg : Hoof :: Man : Hand :?

- (A) Palm
- (B) Wrist
- (C) Nails
- (D) Hair
