

SEAL

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Question Booklet No.

102401

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R/A/A/EXAM.

2021

RECRUITMENT TEST

Series

A

Time : 2 Hours

Maximum Marks : 100

ROLL NO.

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R/A/A/EXAM. 2021/119-A

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1. 1 crore = \_\_\_\_\_ million.

- (A) 10
- (B) 100
- (C) 1000
- (D) None of the above

2. Roman numerals of 98 is

- (A) LXVIII
- (B) XCVIII
- (C) LCVIII
- (D) CXVIII

3. Choose the greatest digit in the blank space of the following number so that the number thus formed is divisible by 3 :

\_\_\_\_\_ 6724

- (A) 5
- (B) 6
- (C) 7
- (D) 8

4. The least number, which when divided by 6, 15 and 18 leaves remainder 5 in each case, is

- (A) 98
- (B) 105
- (C) 109
- (D) None of the above

5. A rectangular piece of land measures 0.7 km by 500 m. Each side is to be fenced with 4 rows of wires. The length of the wire needed for this job is

- (A) 10250 m
- (B) 9600 m
- (C) 9.5 km
- (D) 10.2 km

6. Additive identity for the set of integers is

- (A) 1
- (B) -1
- (C) 0
- (D) None of the above

7. If  $\frac{45}{60}$  is equivalent to  $\frac{3}{x}$ , then  $x =$

- (A) 20
- (B) 10
- (C) 5
- (D) 4

8. The mean, median and mode of the observations

106, 110, 123, 125, 117, 120, 112, 115, 110, 120, 115, 102, 115, 115, 109, 115, 101

are respectively

- (A) 115, 110, 109
- (B) 110.5, 109, 115
- (C) 101.8, 120, 102
- (D) 113.5, 115, 115



9. The perimeter of the rectangle whose length is 40 cm and a diagonal is 41 cm is

- (A) 89 cm
- (B)  $89 \text{ cm}^2$
- (C) 98 cm
- (D) None of the above

10. Which of the following is **not** a congruence criterion of triangles?

- (A) SSS congruence criterion
- (B) AAA congruence criterion
- (C) SAS congruence criterion
- (D) ASA congruence criterion

11. Rahul bought a sweater and saved ₹ 20 when a discount of 25% was given. The price of the sweater before the discount was

- (A) ₹ 100
- (B) ₹ 80
- (C) ₹ 120
- (D) ₹ 75

12. The area of the triangle whose two sides are 18 cm and 10 cm respectively and perimeter is equal to 42 cm, is

- (A)  $20\sqrt{11} \text{ cm}^2$
- (B)  $19\sqrt{11} \text{ cm}^2$
- (C)  $22\sqrt{11} \text{ cm}^2$
- (D)  $21\sqrt{11} \text{ cm}^2$

13. Which of the following is **not** a measure of central tendency?

- (A) Standard deviation
- (B) Mean
- (C) Median
- (D) Mode

14. A path 5 m wide runs inside a square park of side 100 m. The cost of cementing the path at the rate of ₹ 250 per  $10 \text{ m}^2$  is

- (A) ₹ 49,000
- (B) ₹ 48,000
- (C) ₹ 47,500
- (D) ₹ 48,500

15. The value of  $\left\{ \left( \frac{1}{3} \right)^{-2} - \left( \frac{1}{2} \right)^{-3} \right\} + \left( \frac{1}{4} \right)^{-2}$  is

- (A)  $\left( \frac{1}{2} \right)^4$
- (B)  $\left( \frac{1}{3} \right)^2$
- (C)  $2^4$
- (D)  $\frac{3}{8}$

16. The digits of a two-digit number differ by 3. If the digits are interchanged and the resulting number is added to the original number, we get 143. What can be the original number?

- (A) 63
- (B) 96
- (C) 74
- (D) None of the above



17. Present ages of Sumita and Utpal are in the ratio 4 : 5. Eight years from now, the ratio of their ages will be 5 : 6. Their present ages are

(A) 28 years and 35 years

(B) 36 years and 45 years

(C) 24 years and 30 years

(D) 32 years and 40 years

18. For any three integers  $a, b, c$ ; the property  $a \times (b \times c) = (a \times b) \times c$  is known as

(A) closure property

(B) commutative property

(C) associative property

(D) distributive property

19. The numbers \_\_\_\_\_ and \_\_\_\_\_ are their own reciprocals.

(A) 0 and 1

(B)  $1/2$  and 2

(C) 1 and -1

(D) None of the above

20. If the slant height of a cone is 21 cm and diameter of the base is 24 cm, the total surface area of the cone is

(A) 1200.77 sq.cm

(B) 1177 sq.cm

(C) 1222.77 sq.cm

(D) 1244.57 sq.cm

21. The denominator of a rational number is greater than its numerator by 8. If the numerator is increased by 17 and the denominator is decreased by 1, the number obtained is  $3/2$ . What is the rational number?

(A)  $13/21$

(B)  $7/15$

(C)  $9/17$

(D)  $15/23$

22. Which of the following quadrilaterals has two pairs of adjacent sides equal and its diagonals intersect at right angles?

(A) Square

(B) Kite

(C) Rhombus

(D) Rectangle

23. A batsman hits boundaries for 6 times out of 30 balls. Find the probability that he does not hit the boundaries.

(A)  $1/5$

(B)  $2/5$

(C)  $3/5$

(D)  $4/5$

24. \_\_\_\_\_ gives the number of times a particular entry occurs.

(A) Organisation of data

(B) Collection of data

(C) Representation of data

(D) Frequency distribution table



25. Which of the following is the Pythagorean triples whose smallest number is 8?

- (A) 8, 16, 17
- (B) 8, 17, 18
- (C) 8, 15, 17
- (D) 8, 15, 16

26. Which of the following is Hardy-Ramanujan number?

- (A) 1724
- (B) 1725
- (C) 1727
- (D) 1729

27. If E, F, G and H are the mid-points of the sides of a parallelogram ABCD respectively, then  $\text{Ar}(EFGH)$  is equal to

- (A)  $\frac{1}{2} \text{Ar}(ABCD)$
- (B)  $\frac{1}{4} \text{Ar}(ABCD)$
- (C)  $2 \text{Ar}(ABCD)$
- (D)  $\text{Ar}(ABCD)$

28. The cost of an article was ₹ 15,500 and ₹ 500 was spent on its repairing. If it is sold for a profit of 15%, the selling price of the article is

- (A) ₹ 16,400
- (B) ₹ 17,400
- (C) ₹ 18,400
- (D) None of the above

29. An algebraic expression that contains only one term is called

- (A) monomial
- (B) binomial
- (C) trinomial
- (D) None of the above

30. For a polyhedron, if  $F$  stands for number of faces,  $V$  stands for number of vertices and  $E$  stands for number of edges, then which of the following relationships is named as Euler's formula?

- (A)  $F + V = E + 2$
- (B)  $F + E = V + 2$
- (C)  $V + E = F + 2$
- (D)  $F + V = E - 2$

31. The heights of two right circular cylinders are the same. Their volumes are respectively  $16\pi \text{ m}^3$  and  $81\pi \text{ m}^3$ . The ratio of their base radii is

- (A) 16 : 81
- (B) 2 : 3
- (C) 9 : 4
- (D) 4 : 9

32. If  $x$  and  $y$  are inversely proportional, then

- (A)  $x + y = \text{constant}$
- (B)  $x - y = \text{constant}$
- (C)  $xy = \text{constant}$
- (D)  $x/y = \text{constant}$



33. The factorisation of  $1 + p + q + r + pq + qr + pr + pqr$  is

- (A)  $(1 + p)(1 + q)(1 + r)$
- (B)  $(1 - p)(1 - q)(1 - r)$
- (C)  $(1 - p)(1 - q)(1 + r)$
- (D)  $(1 + p)(1 - q)(1 - r)$

34. A graph that displays data that changes continuously over periods of time is called

- (A) bar graph
- (B) pie chart
- (C) histogram
- (D) line graph

35. Which of the following is an irrational number?

- (A) 0.4014001400014...
- (B) 0.14
- (C)  $0.\overline{1416}$
- (D)  $0.14\overline{16}$

36. Which of the following is a polynomial?

- (A)  $\sqrt{2x} - 1$
- (B)  $\frac{x-1}{x+1}$
- (C)  $x^2 + \frac{3x^{\frac{3}{2}}}{\sqrt{x}}$
- (D)  $\frac{x^2}{2} - \frac{2}{x^2}$

37. If the coordinates of two points  $P$  and  $Q$  are  $(-7, 5)$  and  $(-6, 9)$  respectively, then (abscissa of  $P$ ) - (abscissa of  $Q$ ) is

- (A) -3
- (B) 1
- (C) -2
- (D) -1

38. The linear equation  $4x - 10y = 14$  has

- (A) a unique solution
- (B) two solutions
- (C) infinitely many solutions
- (D) no solution

39. The first known proof that 'the circle is bisected by its diameter' was given by

- (A) Pythagoras
- (B) Thales
- (C) Euclid
- (D) Hypatia

40. In triangles  $ABC$  and  $PQR$ ,  $AB = AC$ ,  $\angle C = \angle P$  and  $\angle B = \angle Q$ . The two triangles are

- (A) isosceles but not congruent
- (B) isosceles and congruent
- (C) congruent but not isosceles
- (D) neither congruent nor isosceles



**Direction :** Arrange the following jumbled phrases into a proper sentence (Q. Nos. 41 to 45) :

41. the piece of bread as he could  
a b  
and ran away as fast the stray  
c  
dog picked up  
d

(A) abcd

(B) dacb

(C) dcba

(D) bcda

42. roll down the hill the boy let the  
a b  
bicycle up in the air while he  
c  
kept his legs  
d

(A) badc

(B) bcda

(C) acdb

(D) bdca

43. considered sighting people  
a b  
in earlier times as a sign of  
c  
misfortune a shooting star  
d

(A) cdba

(B) cabd

(C) badc

(D) dbca

44. to the top of the tree the monkey  
a b  
climbed and began to mock  
c  
at the passers-by  
d

(A) abcd

(B) badc

(C) bacd

(D) dcba

45. even though her mother jumping  
a  
in the puddle shouted at her  
b c  
the little girl continued  
d

(A) dcba

(B) cabd

(C) dacb

(D) dbac

**Direction :** Choose the correct form of the verb for the given sentences (Q. Nos. 46 to 50) :

46. Having travelled a long distance, the man \_\_\_\_\_ that he had taken the wrong direction.

(A) realize

(B) realizes

(C) realized

(D) had realized

47. They \_\_\_\_\_ in this city since 2010.

(A) live

(B) lived

(C) have lived

(D) have been living



48. The jeweller \_\_\_\_\_ the necklace to the satisfaction of his customer.

(A) sale

(B) sold

(C) selling

(D) sell

49. The workers \_\_\_\_\_ their work by this time tomorrow.

(A) finish

(B) will finish

(C) will have finished

(D) will finished

50. After \_\_\_\_\_ the toy herself, the child could not find it anymore.

(A) having hidden

(B) had hidden

(C) hidden

(D) hide

**Direction :** Choose the correct option from the given alternatives (Q. Nos. 51 to 60) :

51. I need an \_\_\_\_\_ in the measurement of my coat.

(A) alter

(B) altar

(C) alternatate

(D) alteration

52. One should not let the \_\_\_\_\_ moment pass by.

(A) opportunity

(B) opportune

(C) beneficiary

(D) benefit

53. We are all \_\_\_\_\_ to each other by means of the common thread of brotherhood.

(A) bound

(B) bonded

(C) bind

(D) bondage

54. Human life is as \_\_\_\_\_ as the flame of a candle.

(A) transitory

(B) transparent

(C) translucent

(D) transform

55. The beggars were awe-stricken by the \_\_\_\_\_ gesture of the landlord.

(A) benevolence

(B) generous

(C) benediction

(D) generosity



56. The tired traveller took shelter \_\_\_\_\_ the shade of a tree.
- (A) in  
(B) below  
(C) under  
(D) at
57. Don't reason \_\_\_\_\_ me about that matter.
- (A) to  
(B) for  
(C) by  
(D) with
58. Anxiety preyed \_\_\_\_\_ his mind.
- (A) with  
(B) to  
(C) upon  
(D) for
59. Water is \_\_\_\_\_ in desert.
- (A) scare  
(B) scarce  
(C) spruce  
(D) sparse
60. I \_\_\_\_\_ of visiting your garden in your absence.
- (A) take liberties  
(B) took the liberty  
(C) take concern  
(D) take to task

61. What is the diminutive form of 'corn'?
- (A) Kernel  
(B) Coronet  
(C) Cornel  
(D) Corny
62. Choose the appropriate collective word for the following :
- A \_\_\_\_\_ of grains.
- (A) swarm  
(B) pack  
(C) sheaf  
(D) course
63. What is the opposite of 'simple'?
- (A) Different  
(B) Impure  
(C) Ignoble  
(D) Intricate
64. What is the causative form of the verb 'see'?
- (A) Show  
(B) Seen  
(C) Saw  
(D) Sight
65. Which word is closest in meaning to the word 'smooth'?
- (A) Coarse  
(B) Even  
(C) Ridged  
(D) Roll
66. What does the idiom 'dark horse' mean?
- (A) A black horse  
(B) A famous and rich personality  
(C) An unknown and unexpected winner  
(D) A harmful animal



67. In the sentence— "He is a close-fisted man"—what does the expression 'close-fisted' imply?

- (A) A miser
- (B) An angry person
- (C) A sick man
- (D) A fighter

68. The meaning 'dominated' finds expression in which of the following?

- (A) As a rule
- (B) Lock and key
- (C) Watch and ward
- (D) Under the thumb

69. Which of the following is an optative sentence?

- (A) You must get the work done.
- (B) May God bless us all.
- (C) Did she finish her work in time?
- (D) No one can say that he is not honest.

70. What type of sentence is— "Though he was poor, he was honest"?

- (A) Simple sentence
- (B) Complex sentence
- (C) Compound sentence
- (D) Negative sentence

71. Which of the following sentences is correct?

- (A) Why did you take my this book?
- (B) She is in temper.
- (C) I get up early in the morning.
- (D) I took short sleep.

72. Find out the incorrect sentence from the following :

- (A) Look up the word in the dictionary.
- (B) He knows how to swim.
- (C) A quarrel ensued.
- (D) Neither of them saw the other.

73. What type of clause is the underlined phrase— "We read that we may learn." ?

- (A) Adverbial clause of result
- (B) Adverbial clause of purpose
- (C) Adverbial clause of concession
- (D) Adverbial clause of comparison

74. What is the adjective form of the word 'pretend' ?

- (A) Pretentious
- (B) Pretence
- (C) Pretension
- (D) Pretext

75. What does the word 'populace' mean?

- (A) Densely populated
- (B) The number of people residing at a particular place
- (C) The common people
- (D) Well known



76. Who is the current Chairman of the Election Commission of India?

- (A) Arvind Saxena
- (B) Sunil Arora
- (C) Rajiv Mehrishi
- (D) R. K. Shukla

77. Nand Kumar Sai is the Chairman of which of the following bodies?

- (A) NITI Aayog
- (B) Lokpal and Lokayukta
- (C) National Human Rights Commission
- (D) National Commission for Scheduled Tribes

78. What is the score of Arunachal Pradesh in India Innovation Index 2020 for North-Eastern and Hill States?

- (A) 16.38
- (B) 14.90
- (C) 12.84
- (D) 20.28

79. Arunachal Pradesh could become India's major producer for which of the following chemical metals?

- (A) Vanadium
- (B) Uranium
- (C) Manganese
- (D) Bauxite

80. Colonel Bikumalla Santosh Babu was awarded with which award posthumously?

- (A) Mahavir Chakra
- (B) Kirti Chakra
- (C) Shaurya Chakra
- (D) Vir Chakra

81. What is the ceiling for the Urgent Capital Acquisition Cases for the Armed Forces as entrusted by the DAC?

- (A) 100 crores
- (B) 200 crores
- (C) 300 crores
- (D) 400 crores

82. On which date is International Day of Non-Violence observed?

- (A) 26th September
- (B) 2nd October
- (C) 9th November
- (D) 1st December

83. What is India's position in Global Terrorism Index 2020?

- (A) 7th
- (B) 8th
- (C) 9th
- (D) 10th



84. What is the full form for CBDT?

- (A) Central Board of Direct Taxes
- (B) Central Board of Debit and Taxation
- (C) Controller's Board for Direct Taxes
- (D) Creditor and Borrower's Debit Tribunal

85. Which of the following mobile applications provides a single platform for all Indian citizens to access pan e-Gov services?

- (A) BHIM
- (B) M-KAVACH
- (C) CBEC
- (D) UMANG

86. In 2021-22, the IPO of which of the following companies will be launched as a part of the Government's strategy towards disinvestment?

- (A) Life Insurance Corporation of India
- (B) Shipping Corporation of India
- (C) Reliance Digital
- (D) Air India

87. Which cricketer was awarded the ICC Spirit of Cricket Award of the Decade?

- (A) Mahela Jayawardene
- (B) Virat Kohli
- (C) M.S.Dhoni
- (D) AB de Villiers

88. Who won the Nobel Prize in Literature in 2020?

- (A) Peter Handke
- (B) Louise Gluck
- (C) Olga Tokarczuk
- (D) Kazuo Ishiguro

89. Senior scientist Hemant Kumar Pandey was awarded the DRDO's Scientist of the Year Award for his contribution in which field of science?

- (A) Space research
- (B) Agriculture
- (C) IT
- (D) Medicine

90. The Arunachal Pradesh Government has dedicated 2021 as the

- (A) Year of Ecological Conservation
- (B) Year of Women Empowerment
- (C) Year of Education
- (D) Year of Health

91. What is the position of India on the Climate Change Performance Index, 2021?

- (A) 7th
- (B) 10th
- (C) 12th
- (D) 15th



92. Who is the author of the book *The Commonwealth of Cricket*?
- (A) Sunil Gavaskar  
(B) Chetan Bhagat  
(C) Ramachandra Guha  
(D) R. Kaushik
93. Which of the following is **not** a feature of the Foreign Contribution (Regulation) Amendment Bill, 2020?
- (A) Prohibiting public servants from receiving any foreign funding  
(B) Prohibiting any transfer of foreign contribution to any association or person  
(C) Allowing eligible functionaries to receive foreign contribution on the basis of their PAN identification  
(D) Reducing the use of foreign funds to meet administrative costs by NGOs from 50% to 20%
94. Which of the following Central Government schemes launched during the pandemic was aimed at providing micro-credit facility to street vendors?
- (A) PM SVANidhi Scheme  
(B) Mission Karmayogi  
(C) PM FME  
(D) Samarth Scheme
95. The Fundamental Duties of the Indian citizen are laid down under which Article of the Indian Constitution?
- (A) Article 21 A  
(B) Article 51 A  
(C) Article 53  
(D) Article 64
96. Which Article of the Indian Constitution provides free and compulsory education to children between 6 and 14 years?
- (A) Article 21 A  
(B) Article 51 A  
(C) Article 53  
(D) Article 64
97. Which Act under the British Government introduced the Dual Government in India?
- (A) Charter Act, 1793  
(B) Pitt's India Act, 1784  
(C) Rowlatt Act, 1919  
(D) Government of India Act, 1935
98. When was the Battle of Saraighat fought?
- (A) 1671  
(B) 1679  
(C) 1681  
(D) 1682
99. Who was the first Governor of Arunachal Pradesh?
- (A) Gopal Singh  
(B) R. D. Pradhan  
(C) Bhishma Narain Singh  
(D) V. C. Pande
100. Which artist won the Album of the Year in the Grammy Awards this year?
- (A) Billie Eilish  
(B) BTS  
(C) Ariana Grande  
(D) Taylor Swift