

DO NOT OPEN THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

# RRB GROUP D

## TEST SERIES

DATE- \_\_/\_\_/\_\_

DAY- \_\_\_\_\_

INSTRUCTION FOR CANDIDATE

TEST SERIES NO.

SG Set - 25

QUESTION- 100

MARKS- 100

NEGATIVE MARK- 0.33

DURATION- 90 MIN.

1. Use only ball pens with black or blue ink
2. As soon as the examination starts, you must check this question booklet and if there is any unprinted, mutilated or partially printed page or question in it, then replace it with the correct question booklet through the examiner.
3. There are a total of 100 questions in this question booklet.
4. This is an objective test, in which four options are given for the answer to each question, you have to choose only one option with the correct answer out of these four options.
5. Answers to all questions are to be written on separate answer sheets.

6. Instructions for filling the answer sheet are written on the back side of the answer sheet, read them carefully before filling the answer sheet.
7. Blank pages are available in this question booklet for rough work.
8. Candidates cannot leave the room before the end of the examination.
9. After the examination is over, you can go out only with his permission after submitting the ORIGINAL COPY of the answer sheet to the invigilator.
10. After the completion of the examination, the candidate is allowed to take the question booklet and answer sheet with him/her.
11. 1 marks will be given for each correct answer and 0.33 marks will be deducted for each wrong answer.

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- The disease called Osteomalacia is caused by the deficiency of which vitamin?  
(a) Vitamin-A (b) Vitamin-K  
(c) Vitamin-D (d) Vitamin-C
- If the electronic configuration of an element is 2,8,4, then in which group will it be placed?  
(a) Metal (b) Non-metal  
(c) Metalloid (d) None of these
- Marsh gas is  
(a) Methane (b) Propane  
(c) Butane (d) Ethane
- The formula of potash alum is  
(a)  $K_2SO_4 \cdot Cr_2(SO_4)_3 \cdot 24H_2O$   
(b)  $(NH_4)_2SO_4 \cdot Fe(SO_4)_3 \cdot 24H_2O$   
(c)  $K_2SO_4 \cdot Al_2(SO_4)_3 \cdot 24H_2O$   
(d)  $(NH_4)_2SO_4 \cdot Al_2(SO_4)_3 \cdot 24H_2O$
- Which of the following is the set of combination of parts of human digestive system, which is not a part of digestive system Which of the following does not perform digestive function?  
(a) Oesophagus, large intestine, rectum  
(b) Oral cavity, esophagus, rectum  
(c) Oral cavity, esophagus, colon  
(d) Oral cavity, colon, rectum
- Which of the following can be used to form a virtual and magnified image of an object?  
(a) Both convex mirror and convex lens  
(b) Only convex lens  
(c) Both concave mirror and convex lens  
(d) Only concave lens
- An object is vibrating at 5000 Hz. The time period of the sound produced is  
(a) 0.005 sec (b) 0.02 sec  
(c) 0.0002 sec (d) 0.5 sec
- A bus covers the first 10 km of its journey at an average speed of 40 km/hr and the remaining 45 km at an average speed of 60 km/hr. The average speed of the bus for the entire journey is  
(a) 52.5 km/h (b) 55 km/h  
(c) 50 km/h (d) 57.5 km/h
- Tartaric acid is found in  
A. Lemons B. Amla  
C. Raw mangoes D. Grapes  
(a) A and C (b) A and B  
(c) C and D (d) B and C
- Which of the following is the correct order of the urethra in the human excretory system?  
(a) Kidney → urethra → bladder → ureter  
(b) Kidney → ureter → bladder → ureter  
(c) Kidney → bladder → ureter → urethra  
(d) Kidney → bladder → urethra → ureter
- The edible part of which of the following is not correctly matched?  
(a) Peanut-seed (b) Sugarcane-stem  
(c) Carrot-root (d) Onion-root
- Choose the correct statement from the following.  
(a) Only plants with green leaves can carry out photosynthesis.  
(b) Leaves of all colours carry out photosynthesis.  
(c) Plants can carry out photosynthesis even in the absence of chlorophyll.  
(d) None of the above
- Which of the following is not a conductor of electricity?  
(a) Salt water (b) Distilled water  
(c) Vinegar (d) Lemon juice
- Which of the following fuels has the highest thermal conductivity?  
(a) Petrol (b) Hydrogen  
(c) Diesel (d) Coal
- The most abundant excretory product in humans is  
(a) Ammonia (b) Ammonium chloride  
(c) Urea (d) Uric acid
- The laws that describe the motion of planets are called  
(a) Newton's laws (b) Kepler's laws



(c) Avogadro's laws (d) De Morgan's laws

17. Which is the longest bone in the human body?

- (a) Fabula (b) Tibia  
(c) Stapes (d) Femur

18. Which one of the following is not a heterogeneous mixture?

- (a) Air (b) Milk  
(c) Smoke (d) Jelly

19. Which of the following gases is heavier than oxygen?

- (a) Carbon dioxide (b) Ammonia  
(c) Methane (d) Helium

20. From which part of the plant is cinnamon obtained?

- (a) Stem (b) Root  
(c) Bark (d) Fruit

21. What is the other name of platelets?

- (a) Leucocyte (b) Erythrocyte  
(c) Platelets (d) Thrombocyte

22. Which of the following pairs is incorrect?

- I. Parsec—Distance II. Barrel—Liquid  
III. Light year—Time

- (a) Only III (b) I and III  
(c) Only II (d) All are correct

23. Xylem helps in the transportation of which of the following?

- (a) Food (b) Water  
(c) Nutrients (d) Both food and water

24. Which of the following is not a hormone of the plant kingdom?

- (a) Gibberellin (b) Auxin  
(c) Cytokinin (d) Thyroxin

25. The process of providing electrons is called.

- (a) Oxidation (b) Reduction  
(c) Radiation (d) 'a' and 'b'

26. The simplest form of  $\frac{128352}{238368}$  will be

- (a)  $\frac{3}{4}$  (b)  $\frac{7}{13}$   
(c)  $\frac{9}{13}$  (d)  $\frac{5}{13}$

27. The product of two co-prime numbers is 117.

Their least common multiple must be

- (a) 1  
(b) 117  
(c) equal to their greatest common factor  
(d) cannot be calculated

28. What is the largest four-digit number which is divisible by 12, 18, 21, 28?

- (a) 9848 (b) 9864  
(c) 9828 (d) 9836

29. The value of  $[(0.98)^3 + (0.02)^3 + 3 \times 0.98 \times 0.02 - 1]$  is

- (a) 0 (b) 1  
(c) 1.09 (d) 1.98

30. Which of the following is a fraction between  $\frac{3}{5}$  and  $\frac{2}{3}$ ?

- (a)  $\frac{2}{5}$  (b)  $\frac{1}{3}$   
(c)  $\frac{1}{15}$  (d)  $\frac{31}{50}$

31. If  $\sqrt{2401} = \sqrt{7^x}$ , then  $x = ?$

- (a) 4 (b) 2  
(c) 6 (d) 8

32. The average age of a class is 15.8 years. The average age of boys in the class is 16.4 years and that of girls is 15.4 years. What is the ratio of boys and girls in the class?

- (a) 1:2 (b) 1:1  
(c) 3:4 (d) 2:3

33. If the product of three consecutive integers is 120, then what will be the sum of the integers?

- (a) 18 (b) 12  
(c) 14 (d) 15

34. The ratio of the ages of Ajay and Vijay is 3:4. After 5 years, the new ratio of their ages will be 4:5. What is the age of Vijay at this time?

- (a) 20 years (b) 18 years  
(c) 15 years (d) 24 years

35. In an election, 8% of the voters did not cast their vote. There were only two candidates in the

election. The winner got 48% of the total votes and defeated his opponent by 1100 votes. What was the total number of voters in the election?

- (a) 21000 (b) 22000  
(c) 23500 (d) 27500

36. A mixture of 40 litres of milk and water contains 10% water. How much more water should be added to it so that the new mixture contains 20% water?

- (a) 2.5 litres (b) 5 litres  
(c) 6 litres (d) 5.5 litres

37. The price of an item is marked at ₹900 and two successive discounts of 8% and 8% are given on it. What would be the loss or profit of the seller if instead of these two discounts, one discount of 16% was given?

- (a) Profit, ₹4.76 (b) Loss, ₹5.76  
(c) Profit, ₹5.76 (d) Loss, ₹4.76

38. Three numbers A, B and C are in the ratio 1 : 2 : 3. Their average is 600. If A is increased by 10% and B is decreased by 20%, then how much increase must be made in C to get a 5% increase in the average?

- (a) 90 (b) 100  
(c) 180 (d) 150

39. 10 women can complete a work in 8 days and 10 children can complete that work in 12 days. Tell in how many days 6 women and 3 children together will complete that work?

- (a) 10 days (b) 12 days  
(c) 8 days (d) None of these

40. A and B agree to do a work for ₹4500. A alone can complete the work in 8 days and B alone can complete the work in 12 days. With the help of C, they complete the work in 4 days. What will be C's share in this amount?

- (a) ₹375 (b) ₹750  
(c) ₹1500 (d) ₹2250

41. A car covers four successive distances of 3 km each at a speed of 10 km/h, 20 km/h, 30 km/h and

60 km/h respectively. What was its average speed in this distance?

- (a) 10 km/hr (b) 25 km/hr  
(c) 20 km/hr (d) 30 km/hr

42. The height of an equilateral triangle is x. What will be the area of the triangle?

- (a)  $x^2$  (b)  $\frac{1}{2}x^2$   
(c)  $\frac{\sqrt{3}}{2}x^2$  (d)  $\frac{\sqrt{3}}{3}x^2$

43. The area of a circle increases by 22 cm<sup>2</sup> when its radius is increased by 1 cm. The original radius of the circle is

- (a) 6 cm (b) 3.2 cm  
(c) 3 cm (d) 3.5 cm

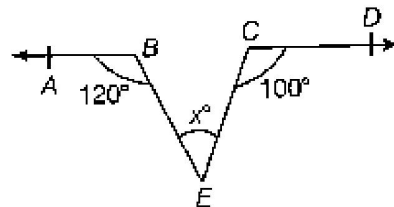
44. If the height of a cylinder is increased by 15% and the radius of its base is decreased by 10%, then tell what will be the percentage change in its curved surface area?

- (a) 3.5% decrease (b) 3.5% increase  
(c) 5% decrease (d) 5% increase

45. If one of the roots of  $x^2 - 6Kx + 5 = 0$  is 5, then what is the value of K?

- (a)  $-\frac{1}{2}$  (b) -1  
(c) 1 (d) 2

46. In the given figure,  $AB \parallel CD$ ,  $\angle ABE = 120^\circ$ ,  $\angle DCE = 100^\circ$  and  $\angle BEC = x^\circ$ , then the value of x is



- (a) 40° (b) 50°  
(c) 60° (d) 70°

47. If  $\cos \theta + \sec \theta = \frac{5}{2}$ , then  $(\cos^2 \theta + \sec^2 \theta) = ?$

- (a)  $\frac{33}{4}$  (b)  $\frac{21}{4}$   
(c)  $\frac{29}{4}$  (d)  $\frac{17}{4}$

48. If  $2^a + 3^b = 17$  and  $2^{a+2} - 3^{b+1} = 5$ , then



(a)  $a = 2, b = 3$  (b)  $a = -2, b = 3$

(c)  $a = 2, b = -3$  (d)  $a = 3, b = 2$

49. If the roots of the equation  $ax^2 + bx + c = 0$  are equal, then what is the value of c?

(a)  $\frac{b}{2a}$  (b)  $-\frac{b}{2a}$

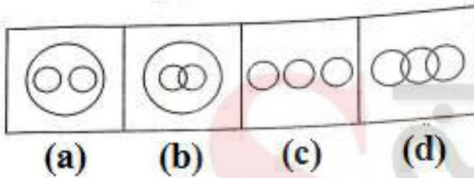
(c)  $\frac{b^2}{4a}$  (d)  $-\frac{b^2}{4a}$

50. If  $\frac{(6.4)^2 - (5.4)^2}{(8.9)^2 + (8.9 \times 2.2) + (1.1)^2} = x$ , then the value of x is

(a) 0.118 (b) 0.92

(c) 1.5 (d) 1

51. Which of the following figures represents clothes, flowers and white?



52. If A=1, FAT=27, then FAINT= ?

(a) 44 (b) 42

(c) 41 (d) 50

53. Which number will come in place of question mark (?) in the given series? 4, 7, 12, 19, 28, ?

(a) 30 (b) 36

(c) 39 (d) 49

54. Which number will come in place of question mark (?) in the given series?

2, 3, 8, 27, 112, ?

(a) 565 (b) 452

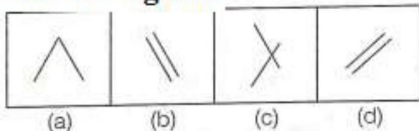
(c) 339 (d) 226

55. Select the figure from the given options which will be suitable in place of question mark (?)

**Question figures**



**Answer figures**



56. Which number will come in place of question mark (?) in the given series?

4, 6, 9, 13.5, ?

(a) 17.5 (b) 19.5

(c) 20.25 (d) 22.75

57. Which number will come in place of question mark (?) in the given series?

18, 27, 49, 84, 132, ?

(a) 188 (b) 193

(c) 168 (d) None of these

58. The mirror image of which of the following words will be exactly the same?

(a) OHATAHO (b) HATOHA

(c) OHATOAH (d) OHAOTHA

Directions (Q. Nos. 59-62) Study the following information carefully and answer the questions given below.

A, B, C, D, E, F, G H and K are sitting around a circle facing the centre. B is fourth to the left of G, who is second to the right of C. F is fourth to the right of C and second to the left of K. A is fourth to the right of K. D is not the immediate neighbour of either K or B. H is third to the right of E.

59. Who is fourth to the left of E?

(a) A (b) C

(c) G (d) Data inadequate

60. Who is second to the right of K?

(a) C (b) H

(c) F (d) E

61. Who is third to the right of H?

(a) A (b) D

(c) G (d) F

62. Who is fourth to the right of D?

(a) K (b) H

(c) E (d) B

63. A man walks 1 km towards east and then he turns towards south and walks 5 km. He again turns towards east and walks 2 km. After this he turns

towards north and walks 9 km, tell how far is he from his starting point now?

- (a) 3 km (b) 4 km  
(c) 5 km (d) 7 km

64. Which number will come in place of question mark (?) in the given series?

9, 27, 31, 155, 161, 1127, ?

- (a) 316 (b) 1135  
(c) 1288 (d) 2254

65. If  $879 = 8,625 = 1$  and  $586 = 9$ , then  $785 = ?$

- (a) 6 (b) 7  
(c) 8 (d) 9

66. Which of the following will be the correct meaningful sequence of the following ?

A. Stem B. Flower C. Root D. Fruit E. Leaves

- (a) C, A, B, E, D (b) C, A, E, B, D  
(c) C, E, A, B, D (d) C, B, E, A, D

67. A coded statement is written in the language STREAMLINE BFSUTDMHKL. Tell how SCIENTIFIC will be written in the same coded language ?

- (a) OFJDTDGJUT (b) OFJTBDHESH  
(c) OFJDTDJGU (d) OFJDTBHEHS

68. Just as 'protein' is related to 'growth', similarly 'carbohydrate' is related to ?

- (a) Resistance (b) Disease  
(c) Energy (d) Strength

69. Three of the following options are alike in some way. So form a group. Choose the word which is different from the other three

- (a) Crocodile (b) Dolphin  
(c) Zebra (d) Tiger

70. Just as 'market' is related to 'demand', similarly 'agriculture' is related to ?

- (a) Farmer (b) Monsoon  
(c) Supply (d) Grain

71. Three days after a month, on the 4th, Saturday falls. What day will be on the 27th of the same month?

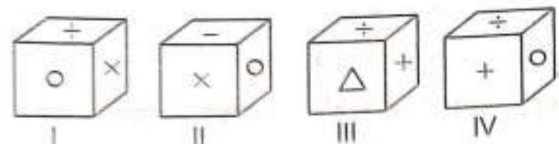
- (a) Monday (b) Thursday

- (c) Friday (d) Sunday

72. In a row of students, Manvi is 11th from the left and 19th from the right. If Meenu is 13th from the right in the same row, then what will be Meenu's position from the left in this row?

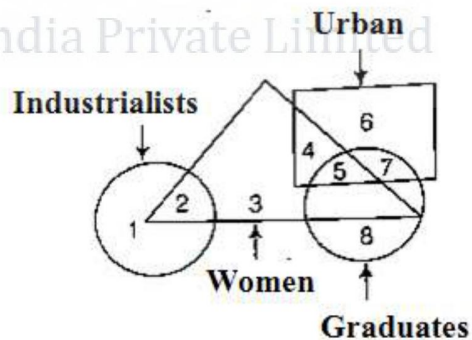
- (a) 17<sup>th</sup> (b) 20<sup>th</sup>  
(c) 16<sup>th</sup> (d) 18<sup>th</sup>

73. Four patterns of a dice are shown below. In this dice, which symbol will be on the face just opposite to the symbol  $\Delta$ ?



- (a)  $\times$  (c) 0  
(b)  $\div$  (d) +

74. Which region represents graduate urban women?



- (a) 4 (b) 5  
(c) 2 (d) 8

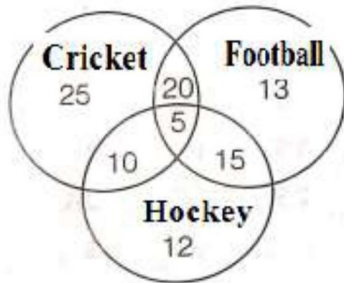
75. What is the number of triangles in the figure given below?



- (a) 32 (b) 18  
(c) 24 (d) 30

76. The following diagram shows 100 players playing different games. How many players play football and hockey but not cricket?

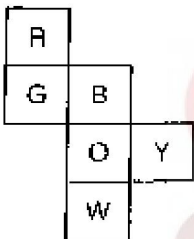




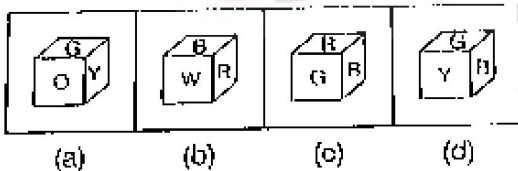
- (a) 15 (b) 5  
(c) 20 (d) 25

77. Which of the following answer figures can be formed by folding the question figure?

**Question figures**



**Answer figures**



78. How many such pairs of letters are there in the word ENGLISH which have exactly as many letters between them as they have between them in the English alphabet?

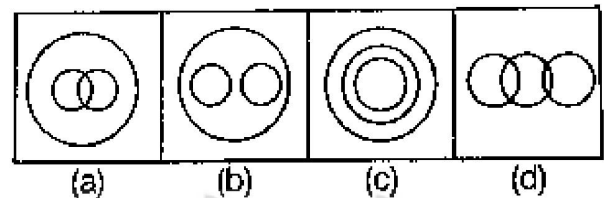
- (a) Two (b) Four  
(c) One (d) Three

79. A statement is given, followed by two assumptions I and II. You have to keep in mind that the statement is true even if it seems to be at variance from commonly known facts. You have to decide which of the given assumptions can definitely be drawn as correct? Indicate your answer  
Statement All people in Kerala are literate.  
Assumptions

- I. People of Kerala are well educated and cultured.  
II. People of Kerala are hard working and loyal.  
(a) Only II is implicit  
(b) Both I and II are implicit  
(c) Only I is implicit  
(d) None of I and II is implicit

80. Choose the diagram that correctly represents the relationship between the classes given below.

Players, Cricketers, Batsmen



81. 'Gangaur' is the folk dance of which state?

- (a) Gujarat (b) Madhya Pradesh  
(c) Rajasthan (d) Chhattisgarh

82. Adam's Bridge is located

- (a) Between India and Bangladesh  
(b) Between India and Pakistan  
(c) Between India and Sri Lanka  
(d) Between India and Myanmar

83. Who was the only woman ruler of the Delhi Sultanate?

- (a) Mehrunnisa (b) Mumtaz Mahal  
(c) Razia Sultan (d) None of the above

84. Which is the first green airport of Asia?

- (a) Bangalore Airport  
(b) Rajiv Gandhi Airport  
(c) Cochin Airport  
(d) Indira Gandhi Airport

85. Who founded the 'Swaraj Party'?

- (a) C.R. Das and Motilal Nehru  
(b) Surendranath Banerjee  
(c) Hakim Ajmal Khan  
(d) Bal Gangadhar Tilak

86. Which is famous as 'Ruler of India' and Iron and Steel Belt of India?

- (a) Malwa Plateau

- (b) Vindhya Plateau  
(c) Meghalaya Plateau  
(d) Chotanagpur Plateau
87. How many verses are there in Rigveda?  
(a) 1000 (b) 1028  
(c) 1058 (d) 1035
88. Which of the following is the capital of more than one state?  
(a) Kolkata (b) Patna  
(c) Lucknow (d) Chandigarh
89. Kaziranga Wildlife Sanctuary is famous for what?  
(a) Lion (b) Tiger  
(c) One-horned Rhinoceros (d) Deer
90. The highest peak of South India is  
(a) Doddabetta (b) Gurushikhar  
(c) Anaimudi (d) Kodaikanal
91. The national anthem 'Jana-Gana-Mana' was composed by Rabindranath Tagore, which was first published in which article in January, 1912?  
(a) Bharat Vidhata (b) Tattvabodhini  
(c) Rashtra Jagrukta (d) None of these
92. Which of the following constitutional provisions get suspended during emergency imposed under Article-352?  
(a) Constitution Amendment Procedure  
(b) Fundamental Rights  
(c) Directive Principles of State Policy  
(d) All of the above
93. What should be the minimum age of an Indian citizen to be elected as the President of India?  
(a) 30 years (b) 35 years  
(c) 40 years (d) 50 years
94. Which of the following is a surface to surface missile?  
(a) Nag (b) Trishul  
(c) Prithvi (d) Vayu
95. Who wrote 'India Wins Freedom'?  
(a) Pandit Jawaharlal Nehru  
(b) J. B. Kriplani  
(c) Vallabhbhai Patel  
(d) Abul Kalam Azad
96. 'An Era of Darkness' is the book of?  
(a) Maneka Gandhi (b) Shashi Tharoor  
(c) Arundhati Roy (d) Narendra Modi
97. At present, the longest railway platform in India is  
(a) Kharagpur (b) Patna  
(c) Shri Siddharudha Swami Ji (d) Bhopal
98. What is the provision in Articles 36 to 51 in the Indian Constitution?  
(a) Fundamental Rights  
(b) Preamble  
(c) Directive Principles of State Policy  
(d) Fundamental Duties
99. Which is the largest continent?  
(a) Europe (b) Asia  
(c) South America (d) North America
100. Hyderabad and Secunderabad 'twin cities' are connected by?  
(a) Ranjit Sagar (b) Hussain Sagar  
(c) Nizam Sagar (d) Nagarjuna Sagar