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RRB GROUP D

TEST SERIES

DATE- __/__/__

DAY- _____

INSTRUCTION FOR CANDIDATE

TEST SERIES NO.

SG Set - 30

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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1. What is the SI unit of electric current?
(a) Newton (b) Joule
(c) Ampere (d) Watt
2. Red rot disease affects which of the following plants?
(a) Paddy (b) Sugarcane
(c) Mustard (d) Wheat
3. The discoverer of blood groups is
(a) Karl Landsteiner (b) William Harvey
(c) Christian Bernard (d) Louis Pasteur
4. Ozone is an allotrope of oxygen.
(a) Allotrope (b) Isotope
(c) Isobars (d) Isotones
5. The main component of haemoglobin is
(a) White blood cells
(b) Red blood cells
(c) Plasma
(d) All the options are correct
6. How does energy travel from the sun to the earth?
(a) Conduction (b) Convection
(c) Radiation (d) Regulation
7. Which one of the following is not a component of smog?
(a) Volatile organic compounds
(b) Nitrogen oxides
(c) Sulphur dioxide
(d) Chlorine dioxide
8. Snakes, tortoises, lizards and crocodiles belong to which category of animals?
(a) Fish (b) Amphibious animals
(c) Reptiles (d) Birds
9. Which one of the following is an anion?
(a) Aluminium ion (b) Copper ion
(c) Sulphate ion (d) Zinc ion
10. Which one of the following is a bisexual?
(a) Wheat (b) Tomato
(c) Both of the above (d) None of these
11. How many vocal cords are there in the human vocabulary?
(a) One (b) Two
(c) Three (d) Four
12. Which of the following is not a property of electromagnetic waves?
(a) Electromagnetic waves do not show interference and diffraction
(b) Electric and magnetic fields are perpendicular to each other
(c) Electromagnetic waves are transverse waves
(d) Electromagnetic waves do not require any medium to propagate
13. The frictional force between two surfaces increases if
(a) A layer of glue is applied between the two surfaces
(b) Both surfaces are pressed forcefully
(c) An air gap is kept between the two surfaces
(d) Irregularities between the two surfaces are removed
14. Which one of the following is the largest gland in the human body?
(a) Thyroid (b) Liver
(c) Kidney (d) Pancreas
15. Which one of the following is an ore of iron?
(a) Dolomite
(b) Rock salt
(c) Iron-meteor (Siderite)
(d) Galena or ordinary raw lead
16. Albert Sabin is known for developing ...
(a) Smallpox vaccine
(b) Polio vaccine
(c) Penicillin
(d) Hepatitis-B vaccine
17. Aurelia (Medusa) and Adamsia (Polyp) are examples of which phylum?
(a) Ctenophore (b) Annelida
(c) Coelenterata (d) Aschelminthes

18. Powdered glass and a little red are applied on the rubbing surface of a match stick.

- (a) Antimony (b) Arsenic
(c) Silicon (d) Phosphorus

19. Which type of mirror is used in the side mirrors of vehicles?

- (a) Convex (b) Concave
(c) Plane (d) Inverted

20. The state of rest of an object is considered to be the state of motion.

- (a) Increasing (b) Decreasing
(c) Reverse (d) Zero

21. What is an endothermic reaction?

- (a) Reaction in which heat is released
(b) Reaction in which heat is absorbed
(c) Reaction in which neither heat is released nor absorbed
(d) None of the above

22. Which of the following gases leaked during the Bhopal gas tragedy?

- (a) Methyl isocyanate
(b) Sodium isothiocyanate
(c) Nitrogen isothiocyanate
(d) Potassium isothiocyanate

23. is the second largest animal phylum.

- (a) Mollusca (b) Chordata
(c) Coelomates (d) Annelida

24. The tendency of an object to remain at rest or to move with uniform velocity is called acceleration.

- (a) Force (b) Acceleration
(c) Friction (d) Inertia

25. What is the SI unit of power?

- (a) Boyle (b) Watt
(c) Newton (d) Pascal

26. A 250 m long train crosses a 350 m long platform in 50 seconds. In how much time will the train cross a 230 m long platform?

- (a) 60 seconds (b) 45 seconds
(c) 40 seconds (d) 55 seconds

27. 28 men complete $\frac{7}{8}$ th of a work in a week.

How many men will have to be employed to complete the remaining work in one more week?

- (a) 5 (b) 6
(c) 4 (d) 3

28. A shopkeeper buys 80 kg of sugar at the rate of ₹ 13.50 per kg. He mixes 120 kg of sugar costing ₹ 16 per kg in it. If he expects a profit of 20%, at what rate should he sell the mixture?

- (a) ₹18 per kg (b) ₹17 per kg
(c) ₹16.40 per kg (d) ₹15 per kg

29. A thief running at a speed of 8 km/hr is being chased by a policeman whose speed is 10 km/hr. If the thief is 100 m ahead of the policeman, how much time will the police take to catch the thief?

- (a) 2 minutes (b) 6 minutes
(c) 10 minutes (d) 3 minutes

30. If $\frac{(2a+b)}{(a+4b)}=3$, then find the value of $\frac{(a+b)}{(a+2b)}$

- (a) $\frac{2}{7}$ (b) $\frac{5}{9}$
(c) $\frac{10}{7}$ (d) $\frac{10}{9}$

31. If $x = \frac{\sqrt{3}+1}{\sqrt{3}-1}$ and $y = \frac{\sqrt{3}-1}{\sqrt{3}+1}$, then the value of $(x^2 + y^2)$ is

- (a) 15 (b) 14
(c) 13 (d) 10

32. The value of $\frac{753 \times 753 + 247 \times 247 - 753 \times 247}{753 \times 753 \times 753 + 247 \times 247 \times 247}$ is

- (a) $\frac{253}{500}$ (b) $\frac{1}{506}$
(c) $\frac{1}{1000}$ (d) None of these

33. Sati and Rathin invested some money in a business in the ratio 6:5, but after some months Sati withdrew her money. If the profit at the end of twelve months was shared between Sati and Rathin in the ratio 7:10, for how many months did Rathin invest alone?

- (a) 4 (b) 5
(c) 6 (d) 7

34. Samrat's average after completing 11 innings is 51. How many runs does Samrat need to score in his next innings to increase his average by two runs?

- (a) 75 (b) 78
(c) 80 (d) 82

35. 7 experts and 5 trainees can complete a work in 9 days; while 4 experts and 15 trainees can complete it in 12 days. In how many days will 5 experts and 6 trainees complete the same work?

- (a) 10 (b) 12
(c) 14 (d) 15

36. The internal length, breadth and height of a closed box are 10 cm, 8 cm and 6 cm respectively. The total area of the outer surface of the box is 592 cm². If the walls of the box are of uniform thickness x cm, then the value of x is

- (a) 1.5 cm (b) 1.25 cm
(c) 1 cm (d) 0.5 cm

37. When a toy is sold at a loss of 13% and a profit of 11%, the difference in the sale price is ₹108. If the profit earned is 12%, then what is the selling price of the toy?

- (a) ₹440 (b) ₹480
(c) ₹504 (d) ₹514

38. A pair of trousers marked at ₹750 was sold at ₹660 during a discount. What percentage discount was given on it?

- (a) 12% (b) 12.5%
(c) 11.5% (d) 14%

39. The least common multiple (LCM) of 52, 78 and 156 is

- (a) 156 (b) 312
(c) 234 (d) 468

40. Solve the following.

$$256 + 25.6 + 2.56 + 0.256 + 0.0256 = ?$$

- (a) 284.6536 (b) 284.4666
(c) 284.4766 (d) 284.4416

41. ₹x invested at 9% per annum simple interest for 7 years yields the same amount of interest as ₹y invested at 5.25% per annum simple interest for 16 years. Find the value of x : y.

- (a) 10:9 (b) 12:7
(c) 4:3 (d) 16:7

42. Suvik incurred a loss of 12% by selling an article for ₹198. By how much should he have increased the price to earn a profit of 8%?

- (a) ₹25 (b) ₹55
(c) ₹44 (d) ₹45

43. Raksha can finish a piece of work in 12 days while Esther takes 20 days to finish the work. They start working together but Raksha leaves the work 4 days before the completion of the work. For how many days does Esther work?

- (a) 6 (b) 8
(c) 10 (d) 12

44. Which of the following numbers is exactly divisible by 12?

- (a) 14744 (b) 28856
(c) 43976 (d) 57228

45. 78% of 450 is

- (a) 351 (b) 312
(c) 296 (d) 303

46. Find the simplest value of $(x - y)^3 + (y - z)^3 + (z - x)^3$

- (a) $2(x - y)(y - z)(z - x)$
(b) $3(x - y)(y - z)(z - x)$
(c) $5(x + y)(y - z)(z + x)$
(d) $(x + y)(y + z)(z + x)$

47. The largest and second largest angles of a triangle are in the ratio 4:3 respectively. The smallest angle is half of the largest angle. What is the difference between the smallest angle and the largest angle of the triangle?

- (a) 40° (b) 70°
(c) 30° (d) 60°

48. A 15 m long pole rests against a wall at an angle of 60° with the ground. At what height will the pole reach above the wall?

- (a) 10 m (b) 12.99 m
(c) 9 m (d) 11.50 m

49. Find the mode of the given data

9,5,7,9,6,9,10,6,9,4,8 and 11

- (a) 9 (b) 10
(c) 5 (d) 11

50. If a month of a particular year ends on Friday, then how many Tuesdays will be there in that month?

- (a) 4 (b) 5
(c) 3 (d) 6

51. Pointing to a photograph Soni said, "He is the brother of my uncle's daughter." How is the man in the photograph related to Soni?

- (a) Uncle (b) Cousin
(c) Brother-in-law (d) Son

52. X is the sister of Y. Y is the daughter of K. K is the husband of L. How is L related to Y?

- (a) Brother (b) Sister
(c) Father (d) Mother

53. There are four paths. You have come from the south and want to go to the temple. The path on the right takes you away from the coffee house. The path straight ahead takes you to the college. Find in which direction the temple is?

- (a) North (b) South
(c) East (d) West

54. Find the next number in the following series

8,28,116,584, ?

- (a) 1752 (b) 3502
(c) 3504 (d) 3508

55. Find the missing number in the following series

3,10,29,...,127

- (a) 66 (b) 68
(c) 51 (d) 44

Instructions (Q. 56 and 57) There is a certain relationship between the first two letters in the following. Choose the word from the given options which has the same relationship with the third word.

56. Chennai : Tamil Nadu :: Dehradun : ?

- (a) Uttarakhand (b) Jharkhand
(c) Chhattisgarh (d) Uttar Pradesh

57. Medicine : Patient :: Education : ?

- (a) Teacher (b) School
(c) Tuition (d) Student

Instructions (Q. No. 58 and 59) Find the wrong number in the given number series.

58. 6,13,18,25,30,37,40

- (a) 35 (b) 30
(c) 37 (d) 40

59. 46080,3840,384,48,24,2,1

- (a) 1 (b) 2
(c) 24 (d) 384

Instructions (Q. No. 60 and 61) In each question, find the missing term in the given series.

60. c_ca_ab_bc

- (a) abcac (b) babca
(c) ccabb (d) acbba

61. _ab_a_aa_ba_aab

- (a) ababa (b) bbaba
(c) aabbbb (d) aaaaaa

62. Choose the correct option to complete the matching.

FIL : DGJ :: RUX : ?

- (a) GIK (b) BDF
(c) PSV (d) LVP

63. Just as 'Judge' is related to Justice, in the same way 'Playwright' is related to what?

- (a) Studio (b) Film
(c) Theatre (d) Drama

64. Find the odd number in the following number series 210,195,175,151,120

- (a) 210 (b) 151

(c) 175

(d) 195

65. Kareem ranks 16th from the top in a class of 49 students. What will be his rank from the bottom?

(a) 32nd

(b) 33rd

(c) 36th

(d) None of these

66. If the code for FAMOUS in a certain language is JWPLWQ, then what will be the code for MIRACLE?

(a) QUEXJEF

(b) QEUXEJF

(c) PEUXEFJ

(d) PUEXEFJ

67. Introducing a man, a woman said, "His father-in-law's father is my father-in-law." How is the man related to the woman?

(a) Husband

(b) Son

(c) Nephew

(d) Son-in-law

68. A is the son of B. C is the brother of A. D is the son of C. Who is A to D?

(a) Grandfather

(b) Father

(c) Maternal Uncle

(d) Uncle

69. In a sports competition, the position of a player is 8th from the top and 84th from the bottom.

What is the total number of competitors?

(a) 93

(b) 91

(c) 89

(d) 88

70. Independence Day on 15th August, 1999 was Thursday, so on which day was it celebrated in 1993?

(a) Monday

(b) Thursday

(c) Sunday

(d) Saturday

71. Pointing towards a girl, Mohan said, "She is the daughter of the only daughter-in-law of my grandfather." How is Mohan related to that girl?

(a) Uncle

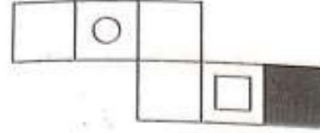
(b) Father

(c) Brother

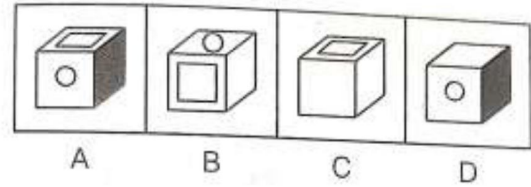
(d) Cousin

72. Choose the answer figure which will be obtained by folding the question figure

Question Figure



Answer Figures



(a) A and D

(b) C and D

(c) A and B

(d) B and D

73. How many such pairs of letters are there in the word DISTURB, each of which has as many letters between its two letters as they have in the English alphabet?

(a) Three

(b) Two

(c) Four

(d) Five

74. Rahul started from point A and went 8 km northwards to point B. Then he turned right and walked 7 km to reach point C. From point C he turned right and reached point D 5 km away. Then he turned right and went 7 km to point E. Finally he turned right and went 3 km to point F. What is the distance between point F and point B?

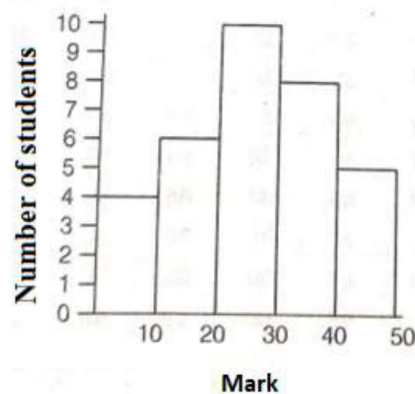
(a) 3 km

(b) 4 km

(c) 1 km

(d) 2 km

Directions (Question Nos. 75 & 76) Study the given bar chart and answer the questions based on it.



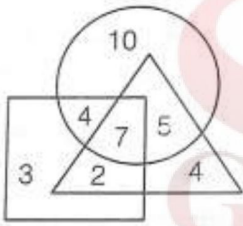
75. What is the total number of students included in the data?

- (a) 42 (b) 32
(c) 43 (d) 33

76. What is the ratio of the number of students securing less than 10 and more than 40 marks

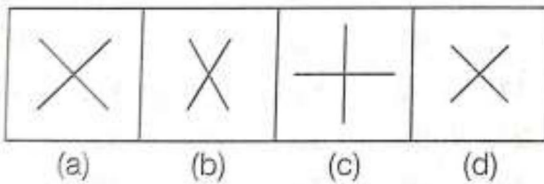
- (a) 5:4 (b) 6:5
(c) 3:4 (d) 4:5

77. In the figure, the circle represents businessmen, the triangle represents educated persons and the square represents persons earning more than ₹ 10,000 per month. The number of educated businessmen earning more than ₹ 10,000 per month is



- (a) 4 (b) 10
(c) 3 (d) 7

78. From the following figures, choose the figure which is different from the others



79. Which term in the given question is wrong or different?

APZ, CQY, ERX, GSV, ITV

- (a) APZ (b) ERX
(c) CQY (d) GSV

80. In a code language, '253' means 'Books are old', '546' means 'Man is old' and '378' means 'Buy good book'. Then which number is used for 'are' in this code language?

- (a) 4 (b) 8

- (c) 6 (d) 2

81. What is the full form of NITI Aayog?

- (a) National Institution for Transforming India
(b) National Institute of Technology in India
(c) National Institute of Tariff in India
(d) New India Technology in India

82. Aga Khan Cup is related to which sport?

- (a) Cricket (b) Football
(c) Basketball (d) Hockey

83. In which schedule of the Constitution, the power, authority and responsibilities of Panchayati Raj are mentioned?

- (a) Eighth (b) Ninth
(c) Eleventh (d) Twelfth

84. 'One Belt One Road' project is related to which country?

- (a) India (b) Myanmar
(c) America (d) China

85. When is 'International Labour Day' celebrated?

- (a) 1 May (b) 1 June
(c) 1 January (d) 1 March

86. 'Madhubani' style is related to which of the following states of India?

- (a) Bihar (b) Madhya Pradesh
(c) West Bengal (d) Rajasthan

87. Which of the following cities is known as 'Pink City'?

- (a) Delhi (b) Agra
(c) Patna (d) Jaipur

88. Which of the following soils is known as cotton soil?

- (a) Sandy soil (b) Clay soil
(c) Black soil (d) Loamy soil

89. Which state of India has the largest forest area?

- (a) Kerala (b) Madhya Pradesh
(c) Maharashtra (d) Bihar

90. Nobel Prize is given in how many fields?

- (a) 4 (b) 6
(c) 5 (d) 7

91. According to which article of the Indian Constitution, a citizen has the right to know about the assets and liabilities of a candidate?

- (a) Article-21 (b) Article-300 (a)
(c) Article-19 (a) (d) Article-14

92. Who gave the slogan 'Do not pay tax'?

- (a) Subhash Chandra Bose
(b) Jawaharlal Nehru
(c) Sardar Vallabhbhai Patel
(d) Mangal Pandey

93. Which of the following monuments was built by the Mughal ruler Akbar?

- (a) Qutub Minar (b) Red Fort of Delhi
(c) Charminar (d) Buland Darwaza

94. What is the ratio of the width of the national flag to its length?

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

95. Which of the following pairs is correctly matched?

- (a) Arthashastra – Kautilya
(b) Mein Kampf – Abul Fazal
(c) Animal Farm – Babur
(d) Divine Comedy – Karl Marx

96. Who among the following was involved in the Alipore Bomb Conspiracy case?

- (a) S.N. Banerjee (b) Bipin Chandra Pal
(c) Jatin Das (d) Aravind Ghosh

97. Which revolutionary was given the title of 'Punjab Kesari'?

- (a) Ranjit Singh
(b) Bhagat Singh
(c) Lala Lajpat Rai
(d) Sardar Baldev Singh

98. What is the name of the planet in the outermost orbit of the solar system at present?

- (a) Saturn (b) Neptune
(c) Mercury (d) Uranus

99. The head office of the Reserve Bank of India is located in which of the following cities?

- (a) Mumbai (b) Gujarat
(c) Kolkata (d) Dehradun

100. Which state of India has the lowest number of women compared to men?

- (a) Bihar (b) Rajasthan
(c) Punjab (d) Haryana