RRB (NON TECHNICAL) MODEL PAPER

No. of Questions: 100   **Marks: 100**   **Time: 90 Mnts.**

GENERAL AWARENESS

1. Which of the following crops is regarded as a plantation crop?

1) Coconut   2) Cotton   3) Sugarcane   4) Rice

2. Which of the following is used in oven?

1) X–rays   2) UV rays   3) Microwaves   4) Radioactive

3. Gamma rays can cause .....

1) gene mutation   2) sneezing   3) burning   4) fever

4. Which element found in all organic compounds?

1) Carbon   2) Nitrogen   3) Calcium   4) None of them

5. Alloys made with mercury as one metal are called?

1) Mixtures   2) Emulsions   3) Solders   4) Amalgams

6. All noble gases are .....

1) Colourless   2) Colour

3) Colourless and odourless   4) Colourless and but have odour

7. What is the hardest form of carbon?

1) Coke   2) Graphite   3) Charcoal   4) Diamond

8. What is hottest part of the gas flame is called ....

1) blue zone   2) luminous zone

3) dark zone   4) non–luminous zone

9. Which type of lens is used to correct myopia?

1) Convex lens   2) Concave lens   3) Biconcave lens   4) Biconvex lens

10. Which one of the following is used to coat household articles?

1) Lead   2) Silver   3) Chromium   4) Tin

11. Which one of the following radioactive elements is used in heart pacemakers?

1) Platinum   2) Cobalt   3) Iodine   4) Iron

12. What is the chemical name of a substance which kills rats?

1) White phosphorus   2) Red phosphorus

3) Potassium cyanide   4) Ethyl Alcohol

13. The boiling point of water can be raised by..

1) reducing pressure   2) increasing pressure

3) reducing heat supply   4) increasing heat supply

14. Optic fibre are used in:

1) CAT scans   2) X–ray photos   3) Ultrasound scans   4) Endoscopy

15. "curie" is unit of:

    1) Radioactivity   2) Temperature   3) Heat   4) Energy

16. Which of the following types of soil are mostly confined to river basins and coastal plains of India?

    1) Alluvial soils   2) Black soils   3) Laterite soils   4) Red soils

17. T.V. antennas are usually made up of .....

    1) Copper   2) Steel   3) Aluminium   4) Brass

18. The natural region which holds the Indian subcontinent is ....

    1) equatorial climate change region   2) hot desert

    3) monsoon   4) Mediterranean

19. Which of the following diseases is caused by a virus?

    1) Diabetes   2) Malaria   3) Smallpox   4) Tuberculosis

20. What is the mainstay of Indian economy?

    1) Manufacturing   2) Business   3) Public sector   4) Agriculture

21. Name the poison present in tobacco.

    1) Coniine   2) Nicotine   3) Theobromine   4) Narcotine

22. Alcoholic drink contains ......

    1) Butyl Alcohol   2) Ethyl Alcohol   3) Propyl Alcohol   4) Methyl Alcohol

23. Which of the following dams has generations of power more than irrigation as its main purpose?

    1) Gandhi Sagar   2) Hirakud   3) Periyar   4) Tungabhadra

24. Which of the following areas or regions is most prone to earthquakes?

    1) Ganga−Brahmaputra valley   2) Deccan plateau

    3) Plains of Northern India   4) Western ghats

25. For which Diode is used?

    1) Modulation   2) Oscillation   3) Amplification   4) Purification

26. Name the gas used for making vegetable ghee.

    1) Nitrogen   2) Oxygen   3) Sulphur   4) Hydrogen

27. In summer, the mirages are seen due to the phenomenon of ....

    1) reflection of light   2) total internal reflection

    3) interference of light   4) diffraction of light

28. Electron microscope was invented by .....

    1) Knoll and Ruska   2) Robert Koch

    3) Leeuwenhoek   4) CPS Wanson

29. Which metal does not undergo corrosion due to the formation of oxide layer?

    1) Copper   2) Iron   3) Aluminum   4) Zinc

30. The chemical part of the dye that absorbs light and produces colour is called ....

    1) Neon   2) a chromophore   3) a photochrome   4) a pigment

31. A nautical mile is equal to ....

1) 5060 feet   2) 6080 feet   3) 5280 feet   4) 6060 feet

32. What is viewed through an electron microscope?

1) electrons and other elementary particles   2) structure of bacteria and viruses

3) inside of human stomach   4) inside of the human eye

33. 'Vinegar' is commercial name of ....

1) Oxalic acid   2) Hydrochloric acid   3) Acetic acid   4) Citric Acid

34. The study of Dendrology is associated with:

1) Flowers   2) Trees   3) Shrubs   4) Plants

35. The food poisoning is caused by .....

1) Clostridium tetani   2) Clostridium botulinum

3) Salmonella toyphosis   4) Baslils anthresis

36. The Bhopal gas tragedy was caused by the gas ....

1) Methyl chloride   2) Methyl Iso cyanide

3) Methyl Iso Cyanate   4) Methyl Cyanide

37. Molasses a by–product in the manufacture of sugar, is converted into ....

1) Alcohol   2) Paper   3) Fuel   4) Pulp

38. The thermal equator is found .....

1) at the equator   2) at the Tropic of Cancer

3) north of the geographical equator   4) south of the geographical equator

39. A large blood vessel that carries blood away from the heart is called.....

1) a vein   2) an artery   3) a capillary   4) nerve

40. Horse latitudes lie within the atmosphere pressure belts of ....

1) Equatorial low   2) Polar high   3) Sub–tropical high   4) Sub–polar low

41. Name the Continents that form a mirror image.

1) Asia and Africa   2) North America and South America

3) Africa and South America   4) Europe and Asia

42. Which of the following is an air–borne disease?

1) Measles   2) Pink eye   3) Typhoid   4) Tuberculosis

43. Plants which grow on saline soils are ......

1) Xerophytes   2) Hydrophytes   3) Halophytes   4) Succulents

44. Which component of plants receives stimulus for flowering?

1) Stems   2) Branches   3) Leaves   4) Roots

45. Which one of the following hormones is a steroid?

1) Cortisone   2) Glucagon   3) Insulin   4) Oxytocin

46. Fungi are plants that lack ....

1) Oxygen   2) Carbon dioxide   3) Chlorophyll   4) None of these

47. Submarines move under water. They have engines that run on ......

1) Petrol and oxygen   2) Diesel   3) Batteries   4) Stream

48. Reptiles are ......

1) Cold blooded   2) Warm blooded   3) Non−hearing   4) Egg−laying

49. Camberts law is related to .....

1) Reflection   2) Refraction   3) Interference   4) Illumination

50. Which one among the following is a major source of sugar?
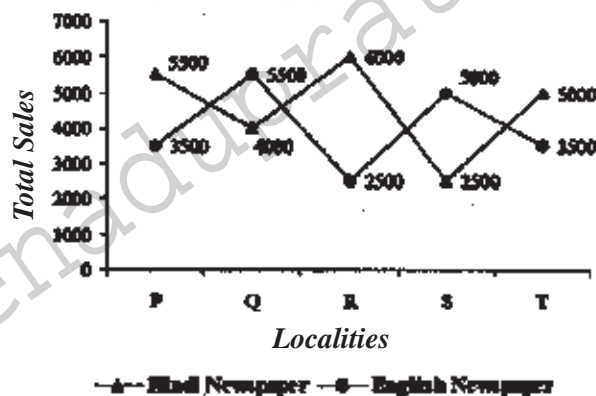
1) Watermelon   2) Beetroot   3) Sugarcane   4) Date

ARITHMETIC

51. If the length of a certain rectangle is decreased by 4 cm and the width is increased by 3 cm, a square with the same area as the original rectangle would result. Find the perimeter of the original rectangle.

1) 40 cm   2) 45 cm   3) 50 cm   4) 52 cm

52. A room is half as long again as it is broad. The cost of carpeting the room at Rs.5 per sq. m is Rs.270 and the cost of papering the four walls at Rs.10 per m^2 is Rs.1420. If a door and 2 windows occupy 8 sq.m, find the height of the room.

1) 4 m   2) 4.5 m   3) 5 m   4) 5.5 m

53. A ratio between the area of a square of side a and an equilateral triangle of side a is ...

1) $2 : \sqrt{3}$ 2) $1 : \sqrt{3}$ 3) $\sqrt{3} : 1$ 4) $4 : \sqrt{3}$

54. Length and breadth of a rectangle is 7 m and 3.5 m respectively. Find the area of circle of maximum radius ......

1) 9.625   2) 9.74   3) 9.8   4) 9.725

55. Find the area of a rhombus one side of which measures 20 cm and one diagonal is 24 cm.

1) 370 cm^2 2) 365 cm^2 3) 380 cm^2 4) 384 cm^2

56. In an examination, a student was asked to find $\frac{3}{14}$ of a certain number. By mistake, he found $\frac{3}{4}$ of it. His answer was 150 more than the correct answer. Find the given number.

1) 120   2) 160   3) 181   4) 280

57. There are 20 students with an average height of 105 cms in a class. Then 10 students with an average height of 120 cms join the class. What will be the average height of the class now?

1) 100   2) 110   3) 120   4) 130

58. A walks from P to Q @ 3 km/hr and from Q to P @ 6 km/hr. What is his average speed?

1) 4.3 km/hr   2) 4.6 km/hr   3) 4 km/hr   4) 3 km/hr

59. (51 + 52 + 53 + ... + 100) is equal to:

1) 2525   2) 2635   3) 3775   4) 3565

60. A mixture of 20 kg of spirit and water contains 10% water. How much water must be added to this mixture to raise the percentage of water to 25%?

1) 4   2) 8   3) 12   4) 16

61. The profit obtained by selling an article for Rs.56 is the same as the loss obtained by selling it for Rs.42. What is the cost price of the article?

1) 46   2) 47   3) 48   4) 49

62. An article is sold at a certain price. By selling it at $\frac{2}{3}$ of that price one loses 10%. Find the gain percent at original price.

1) 15 2) 25 3) 35 4) 40

63. A boat moves upstream at the rate of 1 km in 20 minutes and down stream 1 km in 12 minutes. The speed of the current is :

1) 1 2) 2 3) 3 4) 4

64. When simplified, the product $\left(1 - \frac{1}{2}\right)\left(1 - \frac{1}{3}\right)\left(1 - \frac{1}{4}\right) ...... \left(1 - \frac{1}{n}\right)$ gives:

1) $\frac{1}{n}$ 2) $\frac{2}{n}$ 3) $\frac{2(n-1)}{n}$ 4) $\frac{2}{n(n+1)}$

65. If the speed of a man is 45 km per hour, then what is the distance travelled by him in 30 seconds?

1) 355 2) 365 3) 375 4) 385

66. If A is thrice as fast as B and together can do a work in 21 days. In how many days A alone can do the work?

1) 21 2) 28 3) 35 4) 42

67. The interest on a certain deposit at 4.5% p.a. is Rs.405 in one year. How much will the additional interest in one year be on the same deposit at 5% p.a.?

1) 50 2) 45 3) 10 4) 35

68. A man invested an amount of Rs.8,000 in a fixed deposit scheme for 2 years at compound interest of 5% per annum. How much amount will he get on maturity of the fixed deposit?

1) 5620 2) 8820 3) 8260 4) 8230

69. A and B started a business investing Rs.90,000 and Rs.20,000 respectively. In what ratio the profit earned after 2 years be divided between A and B respectively?

1) 9 : 2 2) 6 : 5 3) 8 : 3 4) 6 : 1

Directions (70 – 75): Study the following graph carefully and answer the questions below:

Total Sales of Hindi and English newspapers in five different localities of a city

70. What is the difference between the total sale of Hindi newspaper and the total sale of English newspaper in all the localities together?

1) 4000 2) 5000 3) 3000 4) 2500

71. The sale of Hindi newspaper in locality P is approximately what percent of the total sale of Hindi newspaper in all the localities together?

1) 20% 2) 15% 3) 18% 4) 24%

72. What is the ratio of the sale of Hindi newspaper in locality R to the sale of English newspaper in locality T?

   1) 12 : 7   2) 11 : 7   3) 7 : 12   4) 8 : 12

73. The sale of English and Hindi newspaper in locality P is what percent of the sale of English and Hindi newspaper in locality S?

   1) 220   2) 125   3) 120   4) 135

74. What is the total sale of English newspaper in all the localities together?

   1) 22000   2) 20000   3) 25000   4) 21000

75. What is the average sale of English and Hindi newspaper in locality R and S?

   1) 9000   2) 14000   3) 12000   4) 8000

GENERAL INTELLIGENCE & REASONING

76. In the following question from the given alternatives select the word which cannot be formed using the letters of the given word.

   COMPLICATED

   1) CAMEL   2) COMPACT   3) COMPEL   4) DUPLICATE

77. In the following question from the given alternatives select the word which cannot be formed using the letters of the given word.

   REFRIGERATOR

   1) REGENERATE   2) FREE   3) REFER   4) REGRET

78. If 324 + 289 = 35

   441 + 484 = 43

   625 + 400 = 45

   Then, 256 + 729 = ?

   1) 35   2) 34   3) 32   4) 43

79. If 2 ★ 6 = 32; 7 ★ 4 = 27, then 7 ★ 6 = ?

   1) 73   2) 37   3) 67   4) 42

80. If 15 + 23 = 11 and 22 + 32 = 10 then 42 + 36 =?

   1) 26   2) 28   3) 33   4) 24

81. If in a certain code FLOWER is written as JPSAIV. How will CURTAIN be written in that code?

   1) UGYEMRX   2) GYVXEMR   3) YUERMX   4) GYUEMRX

82. Which alternative provides the answer?

   If 2 + 3 = 8; 2 + 3 = 10; 3 + 4 = 21, then 3 + 5 = ?

   1) 45   2) 18   3) 24   4) 30

83. If 'PUNCTUATION' is coded as 'QVODUVBUJPO' and 'SING' as 'TJOH', then how is 'PARLIAMENT' coded?

   1) QTBSMJOFOU   2) QASTMJNFOU
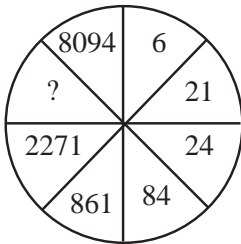
   3) QBSMJKNFMU   4) QBSMJBNFOU

84. A carriage driving in a fog passed a man who was walking at the rate of 3 km an hour in the same direction. He could see the carriage for 2 minutes and it was visible to him upto a distance of 100 m. What was the speed of the carriage?

    1) 2 km/hour   2) 4 km/hour   3) 6 km/hour   4) 8 km/hour

85. A man walked 10 km towards South from his house. Then he turned right and walked 6 km. He again turned right and walked 10 km. Thereafter, he turned right and walked 6 km, how far was he from the starting point?

    1) 3 km   2) 4 km   3) 2 km   4) 0 km

86.

Circle divided into 8 segments:
8094 | 6
? | 21
2271 | 24
861 | 84

    1) 2245   2) 2454   3) 2154   4) 2254

87. 818 (27) 926

703 (?) 639

    1) 20   2) 28   3) 16   4) 17

88.

9	3	8
6	6	6
15	8	11
12	11	?

    1) 8   2) 9   3) 7   4) 10

89. John walks 8 metres towards East and then back 13 metres; then he turns left and walks 4 metres; then walks 5 metres after turning left; he turns left again and walks 3 metres. How far is he from the starting point?

    1) 5 metres   2) 2 metres

    3) 1 metre   4) 3 metres

90. Which of the following sets of operation with the usual notation replacing the star in their order makes the statement valid?
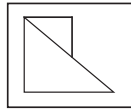
10 ★ 2 ★ 10 ★ 10

    1) $\uparrow, <, \times$ 2) $\times, >, \uparrow$ 3) $\uparrow, \geq, \times$ 4) $\uparrow, >, \times$

91. If South − East becomes North, North − East becomes West, then what will North −West becomes?

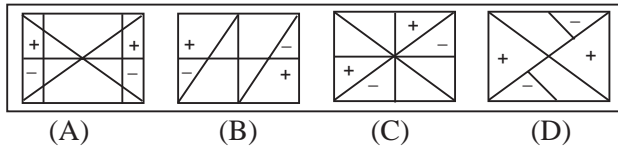   1) South − West   2) South − East

    3) East   4) South

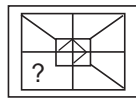**92.** Which one of the answer figures is hidden in the given question figure?
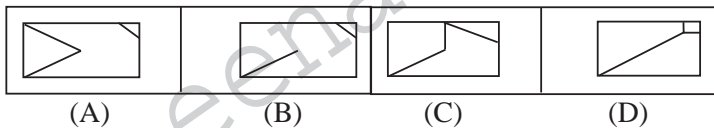
Question figure:

Answer Figures:

(A)   (B)   (C)   (D)

1) A   2) B   3) C   4) D

93. Which answer figure will complete the form in the question figure?

Question figure:

Answer Figures:

(A)   (B)   (C)   (D)

1) A   2) B   3) C   4) D

94. If a mirror is placed on the line MN, then which, of the answer figures is the right image of the given figure?
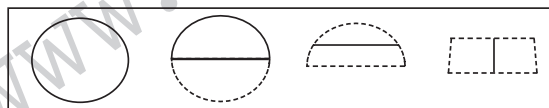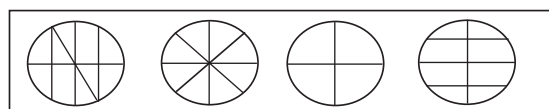
Question figure:

Answer Figures:

(A)   (B)   (C)   (D)

1) A   2) B   3) C   4) D

95. A sheet of paper has been folded as shown by the question figures. You have to figure out from amongst the four answer figures, how it will appear when opened?

Question figure:

Answer Figures:

1) A   2) B   3) C   4) D

96. 82 : 06 : : 76 : ?

    1) 15   2) 01   3) 12   4) 24

97. BED : GJI : : LON : ?

    1) QTS   2) PTS   3) QST   4) KNH

98. CDGF : HILK : : NORQ : ?

    1) UVWY   2) PQTS   3) STWX   4) IGNL

99. Reference material : Dictionary : :

Periodical : ?

    1) Book   2) Atlas   3) Biography   4) Newspaper

100. KMNP : ACDF : : PRSU : ?

    1) STVW   2) TVWY   3) VXYZ   4) LNPR

KEY

1-1; 2-3; 3-1; 4-1; 5-4; 6-3; 7-4; 8-4; 9-2; 10-1; 11-1; 12-1; 13-2; 14-4; 15-1; 16-1; 17-3; 18-3; 19-3; 20-4; 21-2; 22-2; 23-1; 24-1; 25-4; 26-2; 27-2; 28-2; 29-3; 30-4; 31-2; 32-2; 33-3; 34-2; 35-2; 36-3; 37-1; 38-3; 39-2; 40-3; 41-3; 42-1; 43-3; 44-3; 45-1; 46-3; 47-2; 48-1; 49-3; 50-3; 51-3; 52-3; 53-4; 54-1; 55-4; 56-4; 57-2; 58-3; 59-3; 60-1; 61-4; 62-3; 63-1; 64-1; 65-3; 66-2; 67-2; 68-2; 69-1; 70-3; 71-4; 72-1; 73-3; 74-2; 75-4; 76-4; 77-1; 78-4; 79-2; 80-1; 81-2; 82-3; 83-4; 84-3; 85-4; 86-2; 87-3; 88-2; 89-3; 90-3; 91-3; 92-3; 93-2; 94-3; 95-4; 96-2; 97-1; 98-2; 99-4; 100-2.

(ఈ నమూనా ప్రశ్నపత్రాన్ని రూపొందించింది... **Sreedhar's CCE**, హైదరాబాద్)