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RAILWAYS CBT PRACTICE SET 2016

Part- I (General Awareness)

1. The working principle of a Washing Machine is :
(a) centrifugation (b) dialysis
(c) reverse osmosis (d) diffusion

2. Kerosene oil rises up in the wick of lantern because of :
(a) diffusion of the oil through the wick
(b) surface tension
(c) buoyant force of air
(d) the gravitational pull of the wick

3. The temperature of water at the bottom of a waterfall is higher than that at the top because
(a) water at the bottom has greater potential energy
(b) the surface at the bottom provides heat
(c) kinetic energy of falling water is converted into heat
(d) falling water absorbs heat from the surroundings

4. X-rays are heavily absorbed by lead atoms, but to obtain X-ray photograph of stomach barium sulphate is usually given to the potient instead of lead salt, because
(1) barium salts reflect less
(2) barium salts give brighter image
(3) lead salts are more fainter image
(4) lead salts give fainter image

5. When viewed in white light, soap bubbles show colours because of
(1) interference (2) scattering
(3) diffraction (4) dispersion

6. What is the most commonly used substance in fluorescent tubes?
(1) sodium oxide and argon
(2) sodium vapour and neon
(3) mercury vapour and argon
(4) mercury oxide and neon

7. Neutrino is a particle which
(1) has no charge but has spin
(2) is charged like electron and has spin
(3) has no charge and no spin
(4) none of these

8. When spectral lines obtained from atomic spectra is placed in a magnetic field they are splitted into number of fine lines, this is called ……
(1) Stark's effect (2) Photoelectric effect
(3) Zeeman's effect (4) None of these

9. The difference between a nuclear reactor and atomic bomb is that–
(1) no chain reaction takes place in nuclear reactor while in the atomic bomb there is a chain reaction
(2) the chain reaction in nuclear reactor is controlled
(3) the chain reaction in nuclear reactor is not controlled
(4) no – chain reaction takes place in atomic bomb while it takes place in nuclear reactor

10. The acid used in eye wash is –
(1) Oxalic acid (2) Nitric acid
(3) Boric acid (4) None

11. At constant temperature and pressure the volume of a gas is directly proportional to the number of molecule.
This law had been given by –
(1) Boyle (2) Charle
(3) Avogadro (4) None

12. "If a system A is in thermal equilibrium with B and B is in thermal equilibrium with C, then A and C are in equilibrium with each other." This is a statement of
(1) Cyclic rute
(2) Zeroth law of thermodynamics
(3) First law of thermodynamics
(4) Second law of thermodynamics

13. The screening effect of inner electrons of the nucleus causes –
(1) Decrease in the ionisation energy
(2) Increase in the ionisation energy
(3) No effect on the ionisation energy
(4) Increase in the attraction of the nucleus to the electrons

14. Which of the following shows Tyndall effect–
(1) Emulsion (2) Gel
(3) Sol (4) Solution

15. Annealing process is–
(1) heating the steel bright red and then cooling slowly
(2) heating the steel to a temperature much below redness and cooling it slowly

(3) beating rods of iron embedded in charcoal powder
(4) heating steel to bright red and cooling suddenly

16. Study of internal structure of plant–
(1) Morphology (2) Anatomy
(3) Ecology (4) Taxonomy

17. Smallest organism which cause disease–
(1) Bacteria (2) Virus
(3) Mycoplasm (4) All

18. A flatoxion is –
(1) Poision produced by fungi
(2) Antibiotic (3) Poision in snake
(4) Poision produced by snake

19. Azola anabana is used as fertilizer in growing the crop–
(1) Wheat (2) Rice
(3) Mustard (4) Cotton

20. What is the mode of nutrition of mushroom?
(1) Photosynthetic (2) Chemosynthetic
(3) Parasitic (4) Saprophytic

21. What is the type of movement that occurs during opening and closing of flower–
(1) Nastic movement (2) Tactic movement
(3) Tropic movement (4) Mutation

22. The cell wall of xylem cells is rich in–
(1) Lipid (2) Protein
(3) Lignin (4) Starch

23. Sucidal bag of cell is–
(1) Lysosomes (2) Ribosomes
(3) Nucleosomes (4) Golgibodies

24. A device that provides emergency power to your computer, conditions the voltage, and protects against powers surges is called a …… .
(1) PSU = Power supply unit
(2) USP = Universal Surge Protector
(3) UPPS = Universal Power Protection and Supply
(4) UPS = Uninterruptible Power Supply
(5) None of these

25. Computer language used on the internet is
(1) Basic (2) Cobol
(3) Java (4) Pascal
(5) None of these

26. Which one of the following is **not** erosional landform of wind?
(A) Cirque (B) Inselberg
(C) Mushroom rock (D) Zeugen

27. 'EI Nino' associated with the formation of the South West Monsoon of India is
A. a periodic law pressure centre
B. an abnormally warm ocean current
C. a periodic warm air-mass
D. a periodic warm wind

28. The thermal equator is found
A. A. at the equator
B. at the Tropic of Cancer
C. north of the geographical equator
D. south of the geographical equator

29. A nautical mile is equal to
A. 5060 feet B. 6080 feet
C. 5280 feet D. 6060 feet

30. Horse latitudes lie within the atmosphere pressure belts of
A. Equatorial low B. Polar high
C. Sub-tropical high D. Sub-polar low

31. Which Fundamental Rights Article is not in operation during the emergency—
(A) Article 22 (B) Article 19
(C) Article 23 (D) Article 24

32. Which pair is incorrect?
(A) Fohn—Dry and warm wind
(B) Chinook —Snow eater
(C) Mistral —winter season
(D) Bora —North America

33. Which of the following is not a cyclone?
(A)Tornado (B) Hurricane
(C)Typhoon (D)Sirocco

34. Amongst the following, who cooperated with Raja Ram Mohan Roy in the implementation of his educational programmes?
(a) Dwarkanath Tagore (b) David Hare
(c) Henri Derozio (d) William Jones

35. Consider the following statement
1. Jainism in ancient India condemned the varna system.
2. Jain religious literature was written in Ardhamgadhi.
3. Mahavira admitted women into the order of his follows.
Which if these statements is/are correct?
(a) all of the above (b) 2 and 3
(c) 1 and 3 (d) only 3

36. Which article defines suspension of the provisions of Article 18 during emergency—
(A) Article 344 (B) Article 345
(C) Article 343 (D) Article 358

37. Which constitutional article defines the provision in respect of financial emergency—
(A) Article 359 (B) Article 357
(C) Article 356 (D) Article 350

38. Which constitutional article abolished the Privy Purses—
(A) Article 374 (B) Article 392
(C) Article 363A (D) Article 364

39. Which one among the following rivers does not flow into the bay of Bengal?
A. Tapti B. Mahanadi
C. Godavari D. Cauvery

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40. Which one among the following cities never gets the vertical rays of the Sun all through the year?
A. Mumbai B. Chennai
C. Srinagar D. Kolkata

41. Climate change resulting in the rise of temperature may benefit which of the countries/regions?
A. Russia and Northern Europe
B. South Africa
C. East Indies islands comprising of Java, Sumatra Borneo
D. The western coasts of South America

42. During the Mughal period, which one of the following trades were the first to come to India?
(a) Portuguese (b) Dutch
(c) Danish (d) English

43. Who was the Chairman of the Draft Committee of the Constituent Assembly—
(A) Dr. B. R. Ambedkar (B) K. M. Munshi
(C) Jagjivan Ram (D) None of the above

44. Who was the first Foreign Minister of free India?
(A) GulzariLal Nanda (B) JawaharLal Nehru
(C) LalBahadurShastri (D) John Mathai

45. Khilafat Movement (1919-1920), the movement of Indian Muslims was led by_____?
(A) Muhammad Ali (B) Shaukat Ali
(C) Both A and B (D) None of these

46. Malik Kafur was whose General?
(a) Balban
(b) Ala-ud-din khilji
(c) Muhammad bin Tughluq
(d) Firoz Shah Tughluq

47. The aim of education as stated by the Wood's despatch of 1854 was?
(a) the creation of employment opportunity for native Indians
(b) the spread of western culture in India
(c) the promotion of literacy among the people using English medium of language
(d) the introduction of scientific research and rationalism in the traditional Indian education

48. The warm and dry winds that blow down the steep valleys in Japan are called
A. Yamo B. Zonda
C. Tramontanc D. Santa Ana

49. Among the following provisions, which one comes into force soon after adoption of the Constitution on 26th November, 1949?
(A) Provisions relating to citizenship.
(B) Elections.
(C) Provisional Parliament
(D) All of the above

50. Who prepared the first draft Constitution of India—
(A) JawaharLal Nehru
(B) Gandhiji
(C) Advisory Branch of the Constituent Assembly
(D) SardarBallabhBhai Patel

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Part – II (General Intelligence & Reasoning)

Directions (51-55): Select the related word/ letter/ figure/ number from the given alternatives.

51. 'Usual' is to 'Common' as 'Light' is to
(a) Bright (b) Black
(c) Dark (d) Glow

52. 'Ignite' is to 'Combustion' as 'Trigger' is to
(a) Gun (b) War
(c) Projectile (d) Reaction

53. Anatomy : Zoology :: Pediatrics : ?
(a) Chemistry (b) Medicine
(c) Paleontology (d) children

54. 20 : 11 : : 102 : ?
(a) 49 (b) 52
(c) 61 (d) 98

55. 3265 : 4376 :: 4673 : ?
(a) 2154 (b) 3562
(c) 5487 (d) 5784

Directions (56–58): Read the given information and answer the following questions:
A is the son of B. C, B's sister, has a son D and a daughter E. F is the maternal uncle of D.

56. How is A related to D?
(a) Cousin (b) Nephew
(c) Uncle (d) Brother

57. How is E related to F?
(a) Sister (b) Daughter
(c) Niece (d) Wife

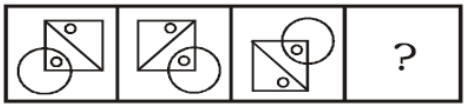
58. How many nephews does F have?
(a) Nil (b) One
(c) Two (d) Three

Directions (59-60): Find out the missing letter number in each of the following questions?

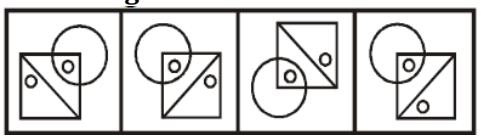
59. 6, 11, 21, 36, 56, ?
(a) 42 (b) 51
(c) 81 (d) 91

60. 1, 2, 3, 6, 9, 18, ?, 54
(a) 18 (b) 27
(c) 36 (d) 81

61. Choose the correct alternative from the given ones that will complete the series.
Question figures :



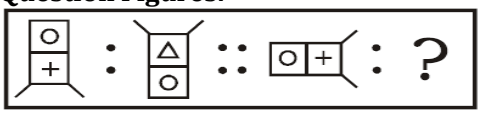
Answer Figures:



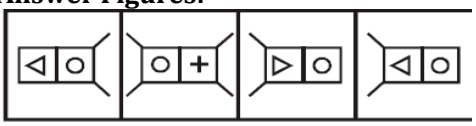
(a) (b) (c) (d)

62. Select the related figure from the given alternatives.

Question Figures:



Answer Figures:



(a) (b) (c) (d)

63. Identify the diagram that best represents the relationship among the classes given below:

Sparrow, Bird, cat

(a) (b)





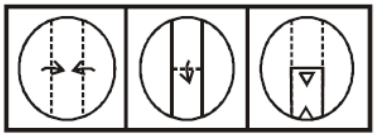
(c) (d)



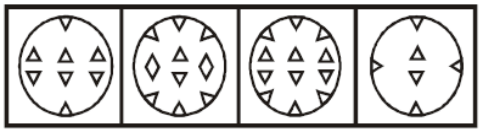


64. A piece of paper is folded and cut/punched as shown below in the question figures.From the given answer figures, indicate how it will appear when opened.

Question figures:



Answer Figures:



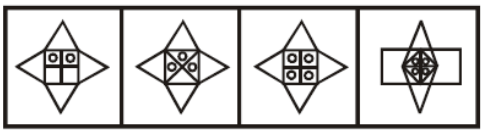
(a) (b) (c) (d)

65. From the given answer figures, select the one in which the question figure is hidden/ embedded.

Questions figure :



Answer Figures:



(a) (b) (c) (d)

66. A man is 24 years older than his son. Two years after, his age will be twice the age of his son. The present age of his son is

(a) 18 years (b) 14 years
(c) 22 years (d) 20 years

67. If W = 23, STRONG = 93, then WEAK =?

(a) 41 (b) 38
(c) 44 (d) 40

68. From the given alternatives select the word which can be formed using the letters given in the word.

PRONUNCIATION

(a) RATION (b) NATURAL
(c) PRINTING (d) PUNCTUATION

69. From the given alternatives select the word which ***cannot*** be formed using the letters of the given word APPEARANCE

(a) REAP (b) PANE
(c) NEAR (d) PEAS

70. Some capital letters are given below in the first line and numbers are assigned to each of them in the second line. The numbers are the codes for the letters and vice-versa

M O E A S J T Z
3 5 7 6 2 9 4 0

Choose the correct number code for the given set of letters.

J E Z T M S

(a) 9 7 0 4 3 2 (b) 9 7 0 4 3 5
(c) 9 7 0 3 4 5 (d) 9 7 0 5 3 4

71. If '÷' means '–', '–' means '×', '×' means '+' and '+' means '÷', then

20 × 60 ÷ 40 – 20 + 10 =?

(a) 80 (b) 0
(c) 40 (d) 60

72. Manisha is sitting in between Kamini and Suvarna. Smita is right to Suvarna. Kamini is left to Manisha. Select the correct seating order.

(a) Kamini, Manisha, Suvarna, Smita
(b) Kamini, Suvarna, Smita, Manisha
(c) Manisha, Suvarna, Smita, Kamini
(d) Kamini, ManishaSmita, Suvarna

73. Two statements are given followed by two conclusions I and II. You have to consider the statements to be true, even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements. Indicate your answer.

Statements:

1. Teachers are role models of the students.

2. Teachers are responsible for developing scientific attitude in their students.

Conclusions:

I. Students do not have scientific attitude.

II. By and large teachers can influence scientific attitude of the students.

(a) Neither conclusion I nor II follows
(b) Only conclusion I follows
(c) Only conclusions II follows
(d) Both conclusion I or II follow

74. Which of the conclusions can be draw from the given statement?

Statement :

Many creative persons become artists.

Conclusion :

(a) Some artists are creative persons.
(b) A creative person will certainly become an artist.
(c) It is not possible to become an artist without creativity
(d) A high level of creativity is needed to become an artist.

75. Select the figure which is different from the rest three



(a) (b) (c) (d)

Part – III (Arithmetic)

76. Find the second largest value among $\sqrt[4]{4}, \sqrt[6]{6}, \sqrt[12]{12}, \sqrt[24]{24}$?

(a) $\sqrt[4]{4}$ (b) $\sqrt[6]{6}$
(c) $\sqrt[12]{12}$ (d) $\sqrt[24]{24}$

77. Amitabh's average expenditure for the January to June is Rs. 4200 and he spends Rs. 1200 in January and Rs. 1500 in July. The average expenditure for the months of February to July is :

(a) Rs. 4250 (b) Rs. 4520
(c) Rs. 4060 (d) None of these

78. The average of 7 consecutive odd numbers if the smallest of those numbers is denoted by k :

(a) k + 4 (b) k + 7
(c) k + 6 (d) 7k

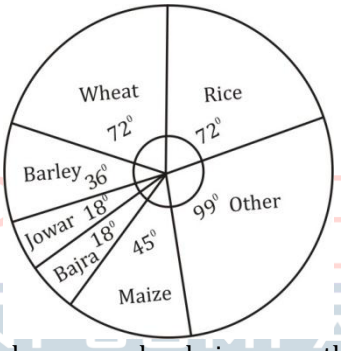
79. The ratio of working efficiency of A and B is 5 : 3 and the ratio of efficiency of B and C is 5 : 8 . Who is the most efficient?

(a) A (b) B
(c) C (d) can't be determined

80. Two boats approach a light house in mid – sea from opposite directions. The angles of elevation of the top of the light house from the two boats are 30^0 and 45^0 respectively. If the distance between the two boats is 100m, the height of the light house is :

(a) 36.6 m (b) 73.2 m
(c) 136.6 m (d) 68.3 m

Directions (81-85): The pie-chart provided below gives the distribution of land (in a village) under various food crops. Study the pie chart carefully and answer the questions from **96 to 100**.



81. If the total area under bajra was three hundred acres, then the total area (in hundred acres) under Rice and Barley together is.

(a) 18 (b) 12
(c) 15 (d) 13

82. The combination of three crops which contribute to more than 50% of the total area under the good crops is

(a) wheat, rice and maize
(b) wheat, rice and jowar
(c) wheat, rice and bajra
(d)rice, barley and maize.

83. The ratio of the land used for rice and barley is -

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

84. If 10% of the land reserved for rice be distributed to wheat and barley in the ratio 2 : 1, then the angle corresponding to wheat in the new pie-chart will be-

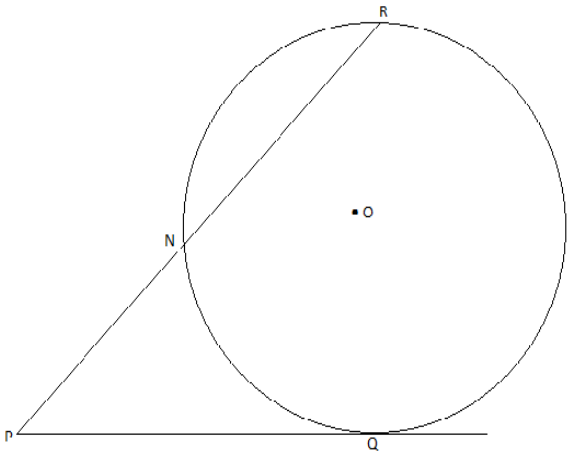
(a) 38.4^0 (b) 76.8^0
(c) 75.6^0 (d) 45.5^0

85. If the production of rice is 5 times that of Jowar and the production of Jowar is 2 times that of Bajra, then the ratio between the yield per acre of rice and Bajra is -

(a) 5 : 2 (b) 3 : 1
(c) 4 : 1 (d) 6 : 1

86. A pump can fill a tank with water in 2 hours. Because of the leak, it took $2^1/_3$ hours to fill the tank. The leak can drain all the water of the tank in:
(a) $4^1/_3$ hours (b) 7hours
(c) 8 hours (d) 14 hours

87. In the given figure, PQ is the tangent of the circle. Line segment PR intersects the circle at N and R. PQ = 15 cm, PR = 25 cm, find PN



(a) 15 cm (b) 10 cm
(c) 9 cm (d) 6 cm

88. The length of Lucknow mail is 120m and that of Punjab mail is 80 m. These two trains are running in the same direction with velocities of 40 km/h and 50 km/h respectively. The time taken by them to cross each other is :
(a) 8 s (b) 72 s
(c) 11.5 s (d) 12.5 s

89. The value of (51 + 52 + 53 + ……. + 100) is :
(a) 2525 (b) 2975
(c) 3225 (d) 3775

90. The cross – section of a canal is in the shape of a trapezium and the area of cross – section is 360 m^2. IF the canal is 12m wide at the top and 8 m wide at the bottom the depth of the canal is :
(a) 36m (b) 180 m
(c) 45 m (d) None of these

91. If a+b+c=0, find the value of $a^2/(bc) + b^2/(ac) + c^2/ab$
(a) 0 (b) 1
(c) 3 (d) 4

92. If $x + 1/x = 2$, find $x^6 + 1/x^6$
(a) 2 (b) 5
(3) 3 (d) None of these

93. The price of onions has been increased by 50% in order to keep the expenditure on onions the same, the percentage of reduction in consumption has to be.
(a) 50% (b) $33\frac{1}{3}\%$
(c) 33% (d) 30%

94. If a circular wheel makes 1000 revolution in travelling a distance of 11 km, then the radius of wheel is (take Π=22/7)
(a) 1.85m (b) 1.80m
(c) 1.75m (d) 1.70m

95. The average of 8 numbers is a and the average of 2 numbers among them is b .if the average of the remaining 6 numbers is c , then
(a) 4a-c = 3b (b) 2c-b = 2a
(c) 3a+b = 4c (d) 4a-b = 3c

96. A student was asked to divide a number by 6 and add 12 to the quotient. He. However, first added 12 to the number and then divided it by 6, getting 112 as the answer. The correct answer should have been.
(a) 124 (b) 172
(c) 118 (d) 122

97. The ratio of the numbers of males and females in a club is 5 : 6. If 22 females leave the club, the ratio becomes reversed. The number of males in the club is
(a) 40 (b) 50
(c) 55 (d) 60

98. The average of marks obtained by 120 candidates in a certain examination is 35. If the average mark of passed candidates is 39 and that of the failed candidates is 15, what is the number of candidates who passed the examination?
(a) 90 (b) 85
(c) 100 (d) 120

99. The average of 11 results is 50. If the average of first six results is 49 and that of last six is 52, find the sixth result?
(a) 45 (b) 46
(c) 55 (d) 56

100. In an examination, a student had to obtain 33% of the maximum marks to pass. He got 125 marks and failed by 40 marks .the maximum marks were :
(a) 500 (b) 600
(c) 800 (d) 1000

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