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PREVIOUS PAPER

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Based on Memory

1. The cost price of an article was divided among the price of the goods, labour charges and other expenses in the ratio of 3 : 4 : 1. If the cost of the goods is Rs.22.50, what would be the cost of price of the article?

   1) Rs.70   2) Rs.80   3) Rs.60   4) Rs.90

2. Monthly salary of Harish is Rs.12,850. After deducting provident fund, he gets Rs.11,822 per month. What is the pecentage of the salary that is deducted in the form of provident fund?

   1) 8%   2) 8.3%   3) 9%   4) 6%

3. Present age of the son is the half of the present age of the mother. 10 years ago, the mother's age was twice age of the son. What is the present age of the son?

   1) 25 years   2) 30 years   3) 40 years   4) 20 years

4. A rectangular hall of 24m × 18m. Leaving a margin of 1.50m along with the four sides, a carpet is spread of the rate of Rs.23 per square metre. Find out the cost price of the carpet?

   1) Rs.7,145   2) Rs.7,245   3) Rs.7,345   4) Rs.7,100

5. A man spends $\frac{1}{4}$ of his income on food, $\frac{1}{5}$ on rent and the rest Rs.231 on other items. Caluculate his total income?

   1) Rs.420   2) Rs.560   3) Rs.562   4) Rs.400

6. A man swims 1 km in 10 minutes in the direction of current and 1 km in 30 minutes against the direction of the current. What is the speed of the current?

   1) 4 km/hr   2) 2 km/hr   3) 6 km/hr   4) 5 km/hr

7. **A, B, and C can do some work in 12 days, 15 days and 20 days respectively. They started to do the work jointly, but C left the work after 2 days. In how many days will the rest part of the work be completed?**

   1) 6 days   2) 5 days   3) 4 days   4) 7 days

8. **2 k g of tea and 3 kg of sugar together costs Rs.39. The price of tea has risen by 25% and that of sugar by 20%. Hence the same quantities of tea and sugar now cost Rs.48.30. Find the original price of tea per kg.**

   1) Rs.14.90/kg   2) Rs.15.00/kg   3) Rs.16.00/kg   4) Rs.14.40/kg

9. **The ratio of acetylene to oxyzen is approximately ...... for a neutral flame used in gas welding-**

   1) 1 : 1   2) 1 : 2   3) 1 : 3   4) 1 : 0.1

10. **Among the conventional machining process maximum specific energy is consumed in-**

    1) Drilling   2) Planning   3) Grinding   4) Turning

11. **The gas used in welding and cutting of metals is -**

    1) Ethene   2) Ethyne   3) Propane   4) Ethane

12. **If steel is heated bright red hot and is then cooled slowly, the process is called-**

    1) Annealing   2) Tempering   3) Smelting   4) Quenching

13. **An alloy of copper and zinc is called as-**

    1) Bronze   2) Gunmetal   3) Stainless steel   4) Brass

14. **Temporary hardness of water is due to the presence of-**

    1) Magnesium sulphate   2) Calcium hydroxide

    3) Calcium Sulphate   4) Calcium bicarbonate

15. **Which of the following is not a noble gas?**

    1) Neon   2) Argon   3) Hydrogen   4) Helium

16. **White revolution is related to the increase in production of which of the following?**

    1) Wood   2) Milk   3) White Meat   4) Egg

17. **Which of the following vitamins is soluble in water?**

    1) E   2) A   3) C   4) K

18. **Which of the main constituent of bones and teeth?**

    1) Calcium   2) Phosphorous   3) Sulphur   4) Iron

19. **In blood pressure the highest point or the upper reading is called-**

    1) Diastolic   2) High tension

    3) Extreme tension   4) Systolic

20. The members of which of the following have identical chemical properties?

1) Isotopes
2) Allotropes
3) Isotopes and Allotropes both
4) Isobars

21. To obtain Fe and FeO from Fe_2O_3 the reducing agent used in the upper part of blast furanace is-

1) Carbon
2) Carbon monoxide
3) Lime stone
4) Cool

22. Chemical name of plaster of paris is-

1) Calcium hydroxide
2) Calcium oxide
3) Magnesium sulphate
4) Calcium sulphate

23. Who discovered neutron?

1) J.J.Thomson
2) Goldstein
3) James Chadwick
4) None of these

24. Which of the following yields blue-beads in borax test?

1) Co^{2+}
2) Ni^{2+}
3) Cd^{2+}
4) Cr^{2+}

25. Which of the following sales does not display aqueous decomposition?

1) KNO_3
2) $NaCl$
3) K_2SO_4
4) CH_3COONA

26. Stainless steel contains which of the following other than iron and carbon?

1) Cr and Co
2) Co and Mn
3) Mn and Ni
4) Ni and Cr

27. Temperature of a healthy normal person is-

1) $94.6°F$
2) $98.4°F$
3) $98.6°F$
4) $100°F$

28. Which of the following id the acidic oxide?

1) Na_2O
2) CO_2
3) CO
4) BaO

29. Red blood corpuscles are formed in ......

1) Bone marrow
2) liver
3) Lung
4) Kidney

30. The part of the brain, known as the place of memory is ......

1) Cerebrum
2) Cerebellum
3) Carpus callosum
4) Parietal lobe

31. At 290 K temperature and 100.4 KPα pressure the volume of a gas of a mass 0.160 gm is 260 c.c. What would be its vapour density?

1) 14.2
2) 15
3) 7.5
4) 17.9

32. A gas cannot be liquified by exerting high pressure if it is at a temperature higher that its-

1) Reverse Temperature
2) Boyle Temperature
3) Room Temperature
4) Critical Temperature

33. **Out of the following properties of the gas molecules, one property is identical for every gas at a particular specific temperature and that property is ......**

1) Velocity   2) Momentum   3) Kinetic energy   4) Mass

34. **In 1,120 millilitre solution of hydrogen peroxide there is 34 gm of hydrogen peroxide. Find out the volume strength of the solution-**

1) 20   2) 30   3) 32   4) 10

35. **An atom is orbital ......**

1) Shape of the orbit is elliptical

2) Three domains around the nucleus

3) The domain in which there is maximum possibility of avialability of electrons

4) Circular orbit of electron

36. **Raja Rammohan Roy was founder of which one of the following societies?**

1) Brahma Samaj   2) Prarthana Samaj

3) Aarya Samaj   4) Theosophical Society

37. **Temple of ellora was built by which of the following?**

1) Chola   2) Chandel   3) Rashtrakut   4) Chalukya

38. **Ashtang Marg was founded by-**

1) Gautam Buddha   2) Mahaveer

3) Nanak   4) Ballabhacharya

39. **A Particle moves along a straight line such that its displacement at anytime is given by $s = t^3 - 6t^2 + 3t + 4$ metre**

The velocity when the accleration is zero ......

1) $3ms^{-1}$ 2) $-12ms^{-1}$ 3) $42ms^{-1}$ 4) $-9ms^{-1}$

40. **The path of the project when observed from another projectile is .....**

1) Straight line   2) Circular   3) Parabolic   4) None of these

41. **A particle is projected with initial velocity υ making an angel 60° with the horizontal. If it reaches a height of 80 metre. Then the value of υ is-**

1) $10\sqrt{3}$ m/sec   2) $\sqrt{\dfrac{80}{3}}$ m/sec   3) $60\sqrt{3}$ m/sec   4) 20m/sec

42. **When a small solid spherical ball is dropped within a liquid column then it-**

1) Decelerates

2) Accelerates

3) First accelerates and then decelerates

4) Finally moves with constant speed

43. Under a constant pressure head the rate of flow of liquid through a capillary tube is V. If the length of the capillary is doubled and the diameter of the tube is halved, the rate of flow would become.

1) $\dfrac{V}{4}$ 2) $\dfrac{V}{8}$ 3) $\dfrac{V}{32}$ 4) $\dfrac{16}{V}$

44. The angle of the prism is 60°. The refractive index of the material of the prism is $\sqrt{2}$. A ray is incident at an angle of 45°. The angle made by emergent ray is ......

1) 30°   2) 60°   3) 45°   4) 0°

45. An object is placed infront of a thin convex lens of focal length 30 cm and a plane mirror is placed 15cm behind the lens. If the final image of the object coincides with the object the distance of the object from the lens is-

1) 30 cm   2) 25 cm   3) 15 cm   4) 45 cm

46. 64 identical small spherical Hg drops each having energy E, combine to form a large drop. What will be the electrostatic energy of the large drop?

1) 512 E   2) 64 E   3) 32 E   4) 1,024 E

47. A satellite of mass m is revolving round the Earth at a height R above the surface of the Earth. If g is the gravitational field intensity at the Earth's surface and R is the radius. The kinetic energy of the satellite is ......

1) mgR   2) mgR/ 4   3) mgR/ 2   4) 2mgR

48. A man travelling at 10.8 kmh^{-1} in a topless car on a rainy day. He holds an umbrella at an angle of 37° to the vertical to protect himself from the rain which is following vertically downwards. What is the velocity of the rain?

$\left(\text{Given: Cos } 37° = \dfrac{4}{5} \right)$

1) 3ms^{-1} 2) 5ms^{-1} 3) $5\sqrt{3}$ ms^{-1} 4) $3\sqrt{5}$ ms^{-1}

49. Munshi Prem chand is the pen name of which Indian literary personality?

1) Ajaib Lal   2) Dhanpat Rai   3) Diwakar Rai   4) Dhanpat Lal

50. Ibn Batutaa was an African traveller whose account contains detailed information about the reign of ......

1) Babur   2) Akbar

3) Mahmud of Ghazni   4) Muhammad-bin-Tuglaq

51. Who wrote 'Rajatarangine' which tells us about kings of Kashmir?

1) Kalhana   2) Dr. Karan Singh

3) Ranjit Singh   4) Faroq Abdullaha

52. The city of Vijayanagar was established by two brothers Harihara and BukkaRai in the year 1336 A.D. on the banks of which river?

1) Krishna   2) Cauvery   3) Tungabhadra   4) Mahanadi

53. First Battle of Panipat was fought between Babur and Ibrahim Lodi in the year ......

1) 1524 A.D   2) 1526 A.D.   3) 1527 A.D.   4) 1523 A.D.

54. World Environment Day is on .....

1) 28th February   2) 5th August   3) 28th April   4) 5th June

55. Which game is associated with Thomas Cup?

1) Chess   2) Badminton   3) Table Tennis   4) Lawn Tennis

56. Who is the recipient of Nobal Prize 2004 for Literature?

1) Elfried Jelinek   2) Edward Prescott

3) Peter jackson   4) David J.Gross

57. As per Saka Era, When was the National Calendar adopted by the Nation?

1) Chaitra 1, 1950 Saka   2) Chaitra 1, 1947 Saka

3) Chaitra 1, 1879 Saka   4) Chaitra 1, 1957 Saka

58. Which is the last month of National Calendar of India?

1) Chaitra   2) Phalguna   3) Ashadha   4) Bhadra

59. Sariska Sanctuary is located in which state?

1) Assam   2) Kerala   3) Gujarat   4) Rajasthan

60. Bhakra Nangal Dam is built on which river?

1) Krishna   2) Sutlej   3) Cheenab   4) Beas

61. India lies between the longitudes of-

1) 68°7 E to 97° 25 E   2) 72° E to 97° E

3) 77° E to 97° E   4) 62° E to 70° E

62. Which mountain range is situated between rivers Narmada and Tapati?

1) The Sahyadri   2) The Mahadev Hills

3) The Satpuras   4) The Aravallis

63. Which type of soil retain maximum amount of water?

1) Black   2) Clayey   3) Red   4) Loam

64. What is the tenure of the members of Rajya Sabha?

1) 5 Years   2) 6 Years   3) 7 Years   4) 4 Years

65. President of India is elected indirectly by an electrol college consisting of elected members of-

1) Lok Sabha

2) Lok Sabha and Rajya Sabha

3) Lok Sabha, Rajya Sabha and state Legislative Assembly

4) People of India

66. Football World Cup 2006 will be held at-

1) Germany   2) France   3) Spain   4) Brazil

67. Who is the author of the book titled 'Waiting for Mahatma'?

1) jai Prakash Narayan   2) R.K.Narayan

3) Vinoba Bhave   4) Sarojini Niaidu

68. Indian Naval Academy is located at-

1) Panjim   2) Visakhapatnam   3) Chennai   4) Cochin

69. Who started Home Rule League Movement?

1) Annie Besant   2) Mahatma Gandhi

3) Pandit J.L.Nehru   4) B.G.Tilak

70. Who said "Independence is our birth right we shall have it"

1) Bal Gangadhar Tilak   2) Bhagat Singh

3) Ram Prasad Bismil   4) Subhash Chandra Bose

71. Who is known as 'Punjab Kesari'

1) Lala Lajpat Rai   2) Udham Singh

3) Bhagat Singh   4) Bal Gangadhar Tilak

72. Yuvan is the currency of which country?

1) China   2) Japan   3) Korea   4) Vietnam

73. Which of the following countries is called "The land of Morning Calm"?

1) Korea   2) Taiwan   3) China   4) Japan

74. I Megabyte is equal to ...... bytes

1) 10,48,576   2) 1,00,00,000   3) 1.03,40,000   4) 1,024

75. Find out the missing term .....

APOC : ? : : ITSK : MVUN

1) EQRH   2) DQRH   3) ERQF   4) DRQF

76. Which of the following is the classical dance of Andhra Pradesh?

1) Kuchipudi   2) Kathakali   3) Kathak   4) Bhratanatyam

77. Which computer programming language uses letters, instead of digits to express the instructions?

1) Functional Language   2) Imperative Language

3) List Processing   4) Assembly Language

78. Find out the missing term .....

2, 3, 5, 7, ?, 13, 17

1) 15   2) 17   3) 19   4) 11

79. Find out the missing term .....

2, 2, 4, 6, ?, 10, 8, 14, 10, 18, 12

1) 6   2) 7   3) 8   4) 5

80. Find out the missing term

BCDE : VWXY : : ? : QRST

1) HIJK   2) GHIJ   3) MNOP   4) CDEF

81. Head quarters of which of the following U.N. agencies is located in Paris?

1) UNESCO   2) UNICEF   3) UNO   4) None of these

82. In the series 196, 169, 144, 121, 80. Which number is wrong?

1) 121   2) 196   3) 169   4) 80

83. In a code language if FHQK means GIRL, how can WOMEN be written in the same code language?

1) FHQKN   2) XPNFO   3) VLNDM   4) VNLDM

84. If code number of SHARP is 58034 and that of PUSH is 4658, what should be the code number of RUSH?

1) 3568   2) 3658   3) 3583   4) 3685

85. In English alphabet, a letter is located at 5ᵗʰ place from left and the second letter is located at 12ᵗʰ place towards right from this 5ᵗʰ place letter. What is the second letter?

1) Q   2) R   3) S   4) P

86. If GOLFER is coded as HNMEFQ then HUNGER will be coded is-

1) IVOHFS   2) ITODFQ   3) TIDOQF   4) ITOFFQ

87. If GO = 32, SHE = 42, then SOME will be equal to-

1) 60   2) 62   3) 64   4) 58

88. Find the missing term-

17	15	8
99	95	64
36	45	?

1) -129   2) 729   3) 1331   4) -343

89. A speaks truth in 60% cases and B speaks truth in 70% cases. The probability that they will say the same thing while describing single event is-

1) 0.56   2) 0.68   3) 0.94   4) 0.54

90. Three different dice are rolled three times. The probability that they show diferent numbers only two times is .....

1) $\frac{107}{54}$ 2) $\frac{5}{9}$ 3) $\frac{100}{243}$ 4) $\frac{1}{3}$

91. In how many ways can we distribute 5 different balls in 4 different boxes when order is not consider inside the boxes and empty boxes are not allowed?

1) 150   2) 240   3) 280   4) 120

92. The area of the triangle formed by the lines y = 2x, x = 0, y = 2 is-

1) 1/2sq unit   2) 2sq unit   3) 3sq unit   4) 1sq unit

93. If a, b, c, are in A.P then the straight line ax + by + c = 0 will always pass through a fixed point whose coordinates are-

1) (1, -2)   2) (1, 2)   3) (-1, -2)   4) (-1, 2)

94. The maximum number of points of intersection of 8 circles is-

1) 52   2) 48   3) 42   4) 56

95. If a, b, c, are H.P. then 4^{-a}, 4^{-b}, 4^{-c} are-

   1) G.P.   2) H.P.   3) A.P.   4) None of these

96. A man running round a race course notes that the sum of the distance of two flag posts from him is always 10 meters and the distance between the flag post is 8 metres. The area of the path he encloses in square metres is-

   1) 12π 2) 15π 3) 18π 4) 9π

97. A stone thrown vertically upwards rises 's' metres in t seconds, where s = 80t -16t^2, then the velocity after 2 seconds

   1) 24m/ sec   2) 32m/ sec   3) 64m/ sec   4) 16m/ sec

98. In off season, after reduction of 12% the cost of a blanket comes down to Rs.748. What was its original cost?

   1) Rs.820   2) Rs.840   3) Rs.850   4) Rs.815

99. In an examination minimum marks for first division is 60%. Ayush obtain 447 marks which are 3 marks less than the first division minimum marks. What are the maximum marks in the examination?

   1) 720   2) 750   3) 780   4) 600

100. A shopkeeper buys a watch for Rs.400. He marks 25% more on the watch than the cost price. He allows 12% discount at the marked price. What is the percentage of profit?

   1) 11%   2) 13%   3) 15%   4) 10%

ANSWERS

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