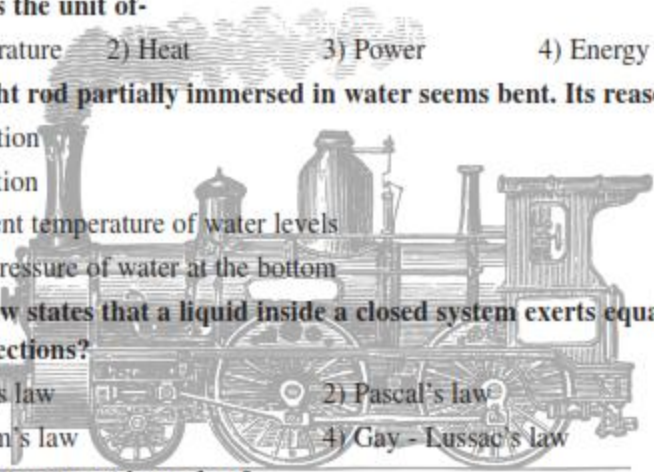


R.R.B.

Assistant Loco Pilot

Based on Memory

- 
- 1. Manometer is used to measure-**
1) Pressure 2) Gravity 3) Humidity 4) Volume
 - 2. Calorie is the unit of-**
1) Temperature 2) Heat 3) Power 4) Energy
 - 3. A straight rod partially immersed in water seems bent. Its reason is-**
1) Refraction
2) Reflection
3) Different temperature of water levels
4) High pressure of water at the bottom
 - 4. Which law states that a liquid inside a closed system exerts equal pressure in all directions?**
1) Boyle's law 2) Pascal's law
3) Graham's law 4) Gay - Lussac's law
 - 5. An electro-magnet is made of-**
1) Soft iron 2) Copper 3) Hard Steel 4) Zinc
 - 6. Only two elements are in liquid state at room temperature. They are**
1) Bromine, Iodine 2) Hafnium, Mercury
3) Bromine, Mercury 4) None of these
 - 7. A stone was dropped freely in a river flowing down a bridge. The stone takes 2 seconds in touching the water surface. The height of the bridge is-**
1) 9.8 m 2) 19.6 m 3) 39.2 m 4) Data inadequate
 - 8. 1 micron is equal to-**
1) 0.1 mm 2) 0.01 mm 3) 0.001 mm 4) 0.0001 mm

- 9. The most abundant gas found in earth's atmosphere is-**
1) Oxygen 2) Carbon dioxide
3) Hydrogen 4) None of these
- 10. The Chemical formula of Caustic Soda is-**
1) Na(OH)₂ 2) Na₂CO₃ 3) NaOH 4) NaCl
- 11. Air cooler will be most effective in-**
1) Kolkata 2) Guwahati 3) Puri 4) New Delhi
- 12. A certain distance was covered at a certain speed. If half of the distance is covered in twice time, the ratio between new speed and original speed is-**
1) 1 : 2 2) 1 : 4 3) 2 : 1 4) 4 : 1
- 13. The number of electrons in Na⁺ is-**
1) 11 2) 10 3) 12 4) 13
- 14. The most electro negative element in the following is-**
1) F 2) Cl 3) Br 4) I
- 15. Rh factor is related to-**
1) Blood Transfusion 2) Atmospheric Pressure
3) Blood Pressure 4) Space
- 16. A force of 50N acts on a body and moves the body on a straight path to a distance of 4 metres. Find the work done if the force acts at an angle of 60 with horizontal.**
1) 100J 2) 300J 3) 10J 4) 200J
- 17. The length of pendulum is reduced to one fourth. Its time period will be-**
1) Twice 2) Eight times 3) Half 4) None of these
- 18. An element which changes the rate of a chemical reaction but does not undergo any change in itself, is called-**
1) Electrolyte 2) Catalyst 3) Lubricant 4) Litmus
- 19. At constant temperature the volume of a given mass of a gas is inversely proportional to the pressure. It is known as-**
1) Charles' Law 2) Boyle's Law
3) Avogadro's Law 4) Dalton's Law
- 20. The resistance of an electric circuit/ implement is measured by-**
1) Meggar 2) Ammeter 3) Ohm-meter 4) None of these

- 21. Solenoid is a-**
- 1) Shaft
 - 2) Hollow tube
 - 3) Tube on which wire is coiled
 - 4) Cell
- 22. At a uniform acceleration which of the motion equations is correct-**
- 1) $v = u - at$
 - 2) $v = u + at$
 - 3) $s = ut - \frac{1}{2}at^2$
 - 4) $u = v + at$
- 23. A body starts from rest at an acceleration of 2m/sec^2 . The distance covered by the body in 2 seconds is-**
- 1) 2 m
 - 2) 8 m
 - 3) 4 m
 - 4) 1 m
- 24. The c.g.s. unit of density is-**
- 1) gm/cm^3
 - 2) gm/cm^2
 - 3) gm/cm
 - 4) kg/cm^3
- 25. When a body is partially or fully immersed in a liquid it experiences a loss in its weight that is equal to the weight of liquid displaced by its immersed part. This principle is of-**
- 1) Boyle
 - 2) Pascal
 - 3) Terricelli
 - 4) Archimedes
- 26. The unit of force in cgs unit is-**
- 1) Newton
 - 2) Dyne
 - 3) ms^{-2}
 - 4) K
- 27. Humidity in the atmosphere is measured by-**
- 1) Hydrometer
 - 2) Hygrometer
 - 3) Manometer
 - 4) Pyrometer
- 28. Density of pure water at 4°C is-**
- 1) 100 kg./m^2
 - 2) 1000 kg/m^3
 - 3) 1000 gm/cm^3
 - 4) 1000 gm/cm^2
- 29. Momentum, mass and velocity are related as-**
- 1) Momentum = mass/velocity
 - 2) Momentum = mass \times velocity
 - 3) Velocity = mass \times momentum
 - 4) Mass = momentum \times velocity
- 30. 1 second is part of a mean solar day.**
- 1) $\frac{1}{84600}$
 - 2) $\frac{1}{85000}$
 - 3) $\frac{1}{86400}$
 - 4) $\frac{1}{80000}$
- 31. The unit of Young's Modulus of Elasticity in MKS system is-**
- 1) Nm^{-2}
 - 2) N/cm^2
 - 3) Dynes/cm
 - 4) Dynes/cm^2

32. The property of a metal which reduces its strength when it is subjected to reversal of stress is called-
- 1) Fatigue 2) Creep 3) Resilience 4) Elasticity
33. Melting point of cast iron (in °C) is in the range of-
- 1) 1150-1300 2) 1800-1900 3) 1450-1600 4) 600-700
34. The buckling loads depend upon-
- 1) slenderness ratio 2) cross-sectional area
3) modulus of elasticity 4) All of the above
35. 'Anvil' is used in the work of-
- 1) Forging 2) Welding 3) Fitting 4) Machining
36. In an electrical circuit resistance is 55 Ohms and current 4 amperes. What is voltage?
- 1) 220V 2) 13.75V 3) 0 4) 110V
37. Bell metal contains Cu and
- 1) Al 2) Sn 3) Zn 4) Ni
38. To produce flat surfaces by a reciprocating type of machine tool is called-
- 1) Lathe 2) Shaper 3) Drill 4) Milling
39. Which is the most elastic material?
- 1) Rubber 2) Timber 3) Plastic 4) Steel
40. Which of the following has the highest Poisson's ratio?
- 1) Steel 2) Copper 3) Aluminium 4) Rubber
41. D.C. Generator works on the basis of-
- 1) Faraday's law of e.m.induction 2) Ohm's law
3) Lenz's law 4) Newton's law
42. When $x = 2$, the value of $\left(0.5 - \frac{1}{x}\right) = ?$
- 1) 1.5 2) -1.5 3) 0.5 4) 0
43. What number has to be added to the terms of 3 : 5 to make the ratio 5 : 6?
- 1) 13 2) 7 3) 12 4) 6
44. Find the value of $\left\{8 - 2 \times \frac{8 - 2}{8 + 2} \times 5\right\}$
- 1) 3 2) 2 3) 6 4) 4

45. The sum of three consecutive numbers is 18; find the sum of the next three consecutive numbers?
- 1) 24 2) 30 3) 27 4) 35
46. $\log_5 125 = x$; $x = ?$
- 1) 25 2) 3 3) 2 4) 5
47. Find the value of x in $(2^2)^{\frac{1}{3}} \left(2x + \frac{1}{2} \right) = 2^{-5}$
- 1) -4 2) +4 3) -2 4) +2
48. A two digit number is 7 times the sum of its two digits. The number that is formed by reversing its digits is 18 less than the original number. What is the number?
- 1) 52 2) 42 3) 62 4) 27
49. A sum of money becomes Rs. 20,925 in 2 years and Rs. 24,412.50 in 5 years. Find the rate of interest and the sum of money
- 1) 8%, Rs.17,560 2) 6.25%, Rs.18,600
3) 7%, Rs.18,000 4) 6.75%, Rs.17,775
50. Find the sum fraction which becomes $\frac{1}{2}$ when denominator is increased by 4; the same fraction becomes $\frac{1}{8}$ when the numerator is reduced by 5.
- 1) $\frac{3}{5}$ 2) $\frac{5}{8}$ 3) $\frac{6}{8}$ 4) $\frac{8}{12}$
51. Lux is the unit of
- 1) magnetic flux 2) frequency
3) sound intensity 4) level of illumination
52. MISTAKE = 9765412, NAKED = 84123 then STAIN = ?
- 1) 65478 2) 98175 3) 89483 4) 68194
53. GAMBLE = ICODNG; FLOWER = ?
- 1) GMPXFS 2) HNQYGT 3) GMPVDS 4) None of these
54. Ram started from his house and walked 2km North, then 3 km west and finally 6 km south. How far is he from his house?
- 1) 5 km 2) 11 km 3) 4 km 4) 7 km
55. Arrange the following words in the order they appear in an English dictionary?
1. Literature 2. Little 3. Liberty 4. Library
- 1) 4, 3, 2, 1 2) 3, 4, 1, 2 3) 2, 1, 3, 4 4) 4, 3, 1, 2

56. Insert the missing numbers-

| | | | |
|----|----|----|----|
| 2 | 6 | ? | ? |
| 54 | 18 | 81 | 27 |

- 1) 3 and 9 2) 5 and 18 3) 6 and 12 4) 3 and 21

57. Which tool is used for chipping?

1. Chisel 2. Drill 3. Pliers 4. Hammer

58. "PICO" means-

- 1) 10^{-15} 2) 10^{-9} 3) 10^{-12} 4) 10^{-6}

59. 1 nanometre = ?

- 1) 10^{-7} m 2) 10^{-8} m 3) 10^{-9} m 4) 10^{-6} m

60. The relation between wave velocity (V), frequency (f) and wave - length (λ) is-

- 1) $V = f\lambda$ 2) $\lambda = Vf$ 3) $f = \frac{\lambda}{V}$ 4) $f = \lambda V$

61. 100K = ?

- 1) 170°C 2) -173°C 3) -273°C 4) 273°C

62. At 1.45 PM, the hour hand will be in the direction-

1. North - west 2. South - east 3. West 4. North - east

63. House, bedroom and bathroom are best represented by which venn diagram?



64. If the 26th August in a month is Friday, then the number of Tuesdays in that month will be-

- 1) 4 2) 5 3) 6 4) None of these

65. If the diameter of a sphere is 6 meters, its hemisphere will have a volume of-

- 1) 36π 2) 72π 3) 18π 4) None of these

66. What part of an hour elases from 4.56PM to 5.32 PM?

- 1) $\frac{1}{4}$ 2) $\frac{3}{4}$ 3) $\frac{3}{5}$ 4) $\frac{1}{2}$

67. "Newton's Disk" when rotated rapidly appears

- 1) Yellow 2) White 3) Black 4) Green

68. Red Hematite is the ore of

- 1) Copper 2) Zinc 3) Aluminium 4) Iron

69. Specific Latent heat of vapourization of water is-

- 1) 540 calories/ gm 2) 80 calories/ gm
3) 540 k.calories/ gm² 4) 80 k.calories/ gm²

70. What percent of CO² by volume constitutes the atmosphere?

- 1) 1% 2) 0.03% 3. 0.1% 4) 2%

71. Which Gupta ruler was crowned with the title of Vikramaditya?

- 1) Chandragupta-I 2) Chandragupta-II
3) Skundgupta 4) Samudragupta

72. The father of Rabindrabhanath Tagore was-

- 1) Ratindranath 2) Dwarkanath
3) Avanindranath 4) Devendranath

73. Which of the following filmstars was lovingly called "Dadamuni"?

- 1) Sanjeev Kumar 2) Asit sen
3) Ashok Kumar 4) Kishore Kumar

74. The unit to measure the speed of ships is-

- 1) mile 2) kmph 3) knot 4) mph

75. National Defence Academy is situated in-

- 1) Dehradun 2) New Delhi
3) Kharagwasala 4) Nasik

76. Dhanpat Rai is popularly known as-

1. Nirala 2. Hari Audh 3. Bachchan 4. Premchand

77. The Khajuraho temples are situated in-

- 1) Madya pradesh 2) Uttar Pradesh
3) Rajasthan 4) Bihar

78. The famous "Gateway of India" is situated in

- 1) Mumbai 2) Agra 3) New Delhi 4) Kolkata

79. Which has pink colour ?

- 1) India Gate 2) Victoria Memorial
3) Hawa Mahal 4) Lotus Temple

80. Hinyana and Mahayana are two sects of

- 1) Sikhism 2) Hinduism 3) Buddhism 4) Jainism
- 81. Status of Liberty is situated in-**
1) Spain 2) UK 3) US 4) Italy
- 82. Who is called Bharatendu?**
1) Rabindranath 2) Premchand
3) Hrishchandra 4) Bachchan
- 83. Euro is the currency of**
1) Germany 2) New Zealand 3) Canada 4) Mexico
- 84. NaCl is the chemical formula of-**
1) Urea 2) Salt 3) Baking soda 4) Lime
- 85. Seismology is the scientific study of**
1) Earthquake 2) Weather conditions
3) Volcanoes 4) Rocks
- 86. Who was the last viceroy of India?**
1) C.Rajgopalachari 2) Lord Wavell
3) Lord Canning 4) Mountbatten
- 87. Haldiya oil refinery is situated in-**
1) Bihar 2) Jharkand 3) Orissa 4) W.Bengal
- 88. Which of the following cities is also called Prayag?**
1) Lucknow 2) Allahabad 3) Patna 4) Nasik

ANSWERS

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