

18. What is the weight of the iron ball has volume of 250 cc and density 7.5 gm/cc?

- A) 1750 gram
C) 1975 gram
B) **1875 gram (Correct)**
D) 1785 gram

19. What is the total cost of painting of a class room including ceiling, if the size of length is 6m, breadth is 5m and height is 4m. (Painting + labour cost Rs.150/- per sq.m)

- A) Rs.15000/-
C) **Rs.17700/-**
B) Rs.16700/-
D) Rs.18700/- (Incorrect)

20. What is the total cost of Air-conditioners installed in a college, 40 class room-each 1 Air-conditioner, Computer lab 5 Air- conditioners and conference hall 5 Air-conditioners (Cost of one air conditioner Rs.30000/- including installation)?

- A) Rs.10 lakhs
C) Rs. 12 lakhs
B) Rs. 20 lakhs
D) **Rs. 15 lakhs (Correct)**

21. Which affects the centre of gravity of the object

- A) Weight
C) Density (Incorrect)
B) **Mass**
D) Shape

22. What is the centre of gravity of a right circular cone from its base?

- A) h/2
C) **h/4**
B) h/3 (Incorrect)
D) h/5

23. What is the value in degree centigrade for 20 Degree F?

- A) -6.37 Degree C
C) -6.57 Degree C
B) -6.47 Degree C (Incorrect)
D) **-6.67 Degree C**

24. What is the change in length per unit original length per degree rise in temperature is called?

- A) Co-efficient of friction
C) Co-efficient of superficial expansion (Incorrect)
B) **Co-efficient of linear expansion**
D) Co-efficient of cubical expansion

25. What is term used for 2 x linear expansion?

- A) Co-efficient of friction
C) **Co-efficient of superficial expansion (Correct)**
B) Co-efficient of linear expansion
D) Co-efficient of cubical expansion

26. What is called for the amount of heat required to raise the temperature of unit mass of a substance through 1 Degree C?

- A) Sensible heat (Incorrect)
C) **Specific heat**
B) Latent heat
D) Mixing of heat

27. Which insulating material is most widely used in refrigerators?

- A) Thermocole
C) Glass wool
B) **Polyurethane**
D) Cork sheet (Incorrect)

28. What is known for the temperature at which any solid melts into liquid?

- A) Boiling point
C) Latent heat of fusion (Incorrect)
B) **Melting point**
D) Latent heat of vaporisation

29. Which process produce equilibrium conditions?

- A) Annealing and Hardening
C) **Annealing and Normalising**
B) Normalising and Tempering (Incorrect)
D) Normalising and Tempering

30. What is the purpose of tempering a steel?

- A) **To reduce the brittleness (Correct)**
C) To increase the hardness
B) To remove the ductility
D) To increase the brittleness

31. Which is example for second order lever?

- A) Common balance
C) **Bottle opener**
B) A pair of scissors
D) Human forearm (Incorrect)

32. What is called the ratio between the density of a substances density of water at 4 Degree Centigrade?

- A) Density
C) Mass
B) **Specific gravity (Correct)**
D) Weight

33. What is the density of aluminium?

- A) **2.7 g/cm³**
C) 4.7 g/cm³
B) 3.7 g/cm³ (Incorrect)
D) 5.7 g/cm³

34. What is the specific gravity of the metal, if the piece of metal weighs 150 grams in air and 125 grams in water?

- A) **6**
C) 15
B) 10
D) 25 (Incorrect)

35. Which property of metal has its power of returning to its original shape after the applied force is released?

- A) Malleability
C) **Elasticity (Correct)**
B) Tenacity
D) Plasticity

36. What metals contained in brass alloy?

- A) Copper and aluminium (Incorrect)
B) **Copper and lead**

C) Copper and zinc

D) Copper and tin

37. Which rubber is used as insulator for power cables and control wires?

A) Butyl

B) Hypalone

C) Silicon

D) Nitrite butadiene
(Incorrect)

38. Which alloy steel is using for making precious instrument?

A) Silicon steel

B) Manganese steel

C) Invar steel (Correct)

D) Vanadium

39. What is the diagonal of a square plate whose side is 28 cm?

A) 39.29 cm

B) 39.39 cm (Incorrect)

C) 39.49 cm

D) 39.59 cm

40. Which is the short form of profit and loss statement?

A) P & L (Correct)

B) PR & LS

C) PRO & LOS

D) L & P

41. How the years is denoted in simple interest calculations?

A) P

B) I

C) n (Correct)

D) r

42. What is the maturity amount if Rs.20000 is deposited at 5% compound interest per annum for 2 years?

A) Rs.22000

B) Rs.22050

C) Rs.22500

D) Rs.25000 (Incorrect)

43. How many watts for 1 horse power in metric system?

A) 725.5 watts

B) 735.5 watts

C) 745.5 watts (Incorrect)

D) 755.5 watts

44. How many watts for 1 horse power in British system?

A) 726 watts

B) 736 watts (Incorrect)

C) 746 watts

D) 756 watts

45. What is the equivalent unit for 1 horse power in metric system?

A) 75 kg.m/sec

B) 76 kg.m/sec (Incorrect)

C) 77 kg.m/sec

D) 78 kg.m/sec

46. What is the work done in joules if a load of 15.5 kg is lifted through a height of 4.4 metres?

A) 639 Joules

B) 649 Joules

C) 659 Joules

D) 669 Joules (Correct)

47. What is the definition of ratio?

A) Relation of two quantities of the same kind

B) Relation of two quantities of the different kind
(Incorrect)

C) Equality between two ratios

D) Inequality between two ratios

48. Convert 52% into fraction?

A) (9/25)

B) (11/25)

C) (13/25) (Correct)

D) (17/25)

49. What is equal to $\cos \theta$?

A) Hypotenuse/Adjacent Side

B) Adjacent Side/Hypotenuse (Correct)

C) Opposite side/Hypotenuse

D) Hypotenuse/Opposite Side

50. What is the height of the building if a ladder at 45 Degree touches the building placed 16 m from the base of the building?

A) 15 m (Incorrect)

B) 16 m

C) 17 m

D) 18 m