

Student: **SANJAY C M**Score: **36/40 (90.00%)**Code: **1034**

1. Which is the unit of current?

- A) Ampere (Correct)** B) Volt
C) Ohm D) Watt

2. Which is the unit of resistance?

- A) Ampere B) Volt
C) Ohm (Correct) D) Watt

3. What is the flow of electrons in any conductor?

- A) Voltage **B) Current (Correct)**
C) Resistance D) Power

4. Which property of a substance is opposing the flow of electric current?

- A) Current B) Voltage
C) Resistance D) EMF (Incorrect)

5. Which is same in series connection of resistors in a circuit?

- A) Current (Correct)** B) Voltage
C) Resistance D) Power

6. What is the current?

R = 50 Ohms

220 Volts

I = ____Amps

- A) 4.1 Amps B) 4.2 Amps
C) 4.3 Amps **D) 4.4 Amps (Correct)**

7. How much watt second in 1 watt hour?

- A) 1000 watt sec B) 2000 watt sec (Incorrect)
C) 3600 watt sec D) 4000 watt sec

8. How much power does it consumes if an electric heater draws a current of 10 amps at 200 volts?

- A) 2000 watts (Correct)** B) 2010 watts
C) 2020 watts D) 2030 watts

9. What is the resistance of an electric iron if the rating of electric iron is 220 V and 500 watts?

- A) 94.8 ohms B) 95.8 ohms
C) 96.8 ohms (Correct) D) 97.8 ohms

10. What is the unit of intensity of magnetic field?

- A) wb/m** B) m/wb (Incorrect)
C) Hertz D) Coloumb

11. What does EMF stands for?

- A) Electronic Magnetic Force **B) Electro Motive Force**
C) Electro Magnetic Force D) Electromated Force (Incorrect)

12. Which one of the following properties is the mechanical properties of metal?

- A) Fusibility **B) Ductility (Correct)**
C) Corrosion D) Structure

13. Which is brittle metal?

- A) Cast iron (Correct)** B) Steel
C) Mild steel D) Alloy steel

14. Which property of material enables to formation of permanent deformation without fracture?

- A) Elasticity **B) Plasticity (Correct)**
C) Ductility D) Brittleness

15. Which metal cannot be forged?

- A) Alloy steel B) Mild steel
C) Steel **D) Cast iron (Correct)**

16. What is the name of furnace to obtained cast iron?

- A) Cupola (Correct)** B) Mild steel - Blast furnace
C) Steel - Rever battery D) Alloy metal - Electric furnace

17. What is the carbon percentage in medium carbon steel?

- A) 0.05% to 0.15% B) 0.15% to 0.25%
C) 0.25% to 0.5% (Correct) D) 0.5% to 1.5%

18. What is the carbon percentage in high carbon steel?

- A) 0.02% to 0.03% B) 0.15% to 0.25%
C) 0.25% to 0.50% **D) 0.50% to 1.50% (Correct)**

19. Which among the following is an insulator?

- A) Copper
C) Silver

- B) Aluminium
D) Mica (Correct)

20. What is the area of a right angled triangle having a base 10 cm and height 5 cm?

- A) 20 sq.cm
C) 30 sq.cm
B) 25 sq.cm (Correct)
D) 35 sq.cm

21. What is the area of a circle of diameter 50 cm?

- A) 1932.5 cm^2
C) 1952.5 cm^2
B) 1942.5 cm^2
D) 1962.5 cm^2 (Correct)

22. What is the area of a sector of a circle of radius 5 cm and its angle is 96 Degree?

- A) 20.39 cm^2
C) 20.89 cm^2
B) 20.93 cm^2 (Correct)
D) 20.98 cm^2

23. What is the area of an ellipse if the major and minor axes are 5 cm and 3 cm respectively?

- A) 27 cm^2
C) 47 cm^2 (Correct)
B) 37 cm^2
D) 57 cm^2

24. What is called if a body does not change its position with respect to its surroundings?

- A) Body at motion
C) Speed
B) Body at rest (Correct)
D) Velocity

25. What is called if a body changes its position with respect to its surroundings?

- A) Body at rest
C) Speed
B) Body at motion (Correct)
D) Velocity

26. What is velocity of a body travels a distance of 168 metres in a line in 21 seconds?

- A) 6 m/sec
C) 10 m/sec
B) 8 m/sec (Correct)
D) 12 m/sec

27. What is the speed of a train of 80 metre long train passes a railway station platform of 120 metres length in 20 seconds?

- A) 30 km/hour
C) 34 km/hour
B) 32 km/hour
D) 36 km/hour (Correct)

28. What is the retardation of a car moving with a velocity of 50 km/hr is brought to rest in 45 seconds?

B) 0.30

- A) 0.40 m/sec^2
C) 0.20 m/sec^2
B) 0.30 m/sec^2 (Correct)
D) 0.10 m/sec^2

29. What maximum height a stone will reach if it is thrown upwards with a velocity of 20 m/sec ? ($g = 10 \text{ m/sec}^2$)

- A) 10 m
C) 30 m
B) 20 m (Correct)
D) 40 m

30. What is the work done in unit time?

- A) Energy
C) Force
B) Power (Correct)
D) Acceleration

31. What is the potential energy in a body of mass 10 kg kept on the top of a pole 20 metres height?

- A) 1942 Joules
C) 1962 Joules (Correct)
B) 1952 Joules
D) 1972 Joules

32. Convert 0.456 decimal fraction into percentage?

- A) 0.456
C) 45.6 (Correct)
B) 0.0456
D) 0.000456

33. What is the x value for $x^2 + 62 = 126$?

- A) 4
C) 8 (Correct)
B) 6
D) 10

34. What is the length L_2 , if total length (L) is 2.75 metre and $L_1:L_2 = 2:3$?

- A) 1.1 metre
C) 1.65 metre (Correct)
B) 1.25 metre
D) 1.75 metre

35. How many days a mechanic takes to assemble 64 machines if he assembles 8 machines in 3 days?

- A) 20 days
C) 24 days (Correct)
B) 22 days
D) 26 days

36. Simplify: $(\frac{3}{4}) + (\frac{2}{5}) - (\frac{5}{20})$

- A) $(\frac{3}{10})$
C) $(\frac{12}{10})$
B) $(\frac{9}{10})$ (Correct)
D) $(\frac{13}{10})$

37. What is the length of each part is a copper wire of 225 metre long is cut into 900 equal parts?

- A) 0.23 metre
C) 0.28 metre
B) 0.25 metre (Correct)
D) 0.29 metre

38. What is the boiling point of water? | ನೀರಿನ ಕುದಿಯುವ ಬಿಂದು ಯಾವುದು?

- A) 0°C
B) 32°C

C) 100°C (Correct)

D) 212°C

39. What is the ratio of power output to power input? | ವಿದ್ಯುತ್ ಉತ್ಪಾದನೆಯ ವಿದ್ಯುತ್ ಇನ್ಪುಟ್ ಅನುಪಾತ ಎಷ್ಟು?

A) Work

B) Energy

C) Efficiency (Correct)

D) Acceleration

40. What is the value of $\tan 45^\circ$ if $\sin 45^\circ = 1/\sqrt{2}$? | $\sin 45^\circ = 1/\sqrt{2}$ ಆಗಿದ್ದರೆ $\tan 45^\circ$ ಮೌಲ್ಯ ಎಷ್ಟು?

(A) $\frac{1}{\sqrt{2}}$

(B) $\frac{\sqrt{3}}{2}$

(C) 1

(D) $\frac{1}{\sqrt{3}}$

A) A

B) B

C) C (Correct)

D) D