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Score: 25/25 (100.00%)

Code: 3133

1. What is the resistance?

I = 11.5 Amps

V = 380 Volts

R = _____ Ohms

A) 13 ohms

B) 23 ohms

C) 33 ohms (Correct)

D) 43 ohms

2. What is the voltage?

R = 250 Ohms

I = 0.44 Amps

V = _____ Volts

A) 100 Volts

B) 105 Volts

C) 108 Volts

D) 110 Volts (Correct)

3. Which is equal to electric power?

A) $R^2 I$ watts

B) $I^2 R$ watts (Correct)

C) RI

D) IRA

4. Which law states about electromagnetic induction?

A) Ohm's law

B) Hooke's law

C) Lenz's law

D) Faraday's law (Correct)

5. What is the formula for induced emf?

A) $B^2 L \sin \theta$ volts

B) $BL \sin \theta$ volts

C) $BLV \sin \theta$ volts (Correct)

D) $B^2 L^2 V \sin \theta$ volts

6. How much voltage will be required to illuminate a 40 watts fluorescent lamp draws a current of 0.10 amperes?

A) 390 volts

B) 395 volts

C) 400 volts (Correct)

D) 405 volts

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

A) Density

B) Specific gravity (Correct)

C) Mass

D) Weight

8. What is the mass if the density of a body is 7.6

g/cm³ and its volume is 25 cm³?

A) 190 grams (Correct)

B) 200 grams

C) 210 grams

D) 220 grams

9. 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)

10. What is the area of an equilateral triangle of side 450 mm?

A) 856.82 cm²

B) 866.82 cm²

C) 876.82 cm² (Correct)

D) 886.82 cm²

11. What is the cross sectional area of a circular ring of D = 38 mm d = 32mm?

A) 320 mm²

B) 330 mm² (Correct)

C) 340 mm²

D) 350 mm²

12. Find the total surface area of cube whose side is 25 cm.

A) 3740 cm²

B) 3745 cm²

C) 3750 cm² (Correct)

D) 3755 cm²

13. What is called if a body possesses only magnitude or size alone?

A) Speed

B) Velocity

C) Vector quantity

D) Scalar quantity (Correct)

14. What is the formula for acceleration?

A) Metre/second

B) Metre/second² (Correct)

C) Metre/minute

D) Metre/hour

15. What is called if a force of 1 Newton acts on a body and moves it through a distance of 1 metre?

A) 1 Joule (Correct)

B) 10 Joules

C) 1 dyne

D) 10 dynes

16. How many newtons for 1 kilogram?

- A) 981 Newtons
C) **9.81 Newtons (Correct)**
- B) 98.1 Newtons
D) 0.981 Newtons

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

- A) 726 watts
C) **746 watts (Correct)**
- B) 736 watts
D) 756 watts

18. What is the formula for kinetic energy?

- A) $(1/2) mv$ joule
C) $(2/3) mv^2$ joule
- B) **$(1/2) mv^2$ joule (Correct)**
D) $(2/3) mv$ joule

19. What is the work done, if a force of 250 newtons acted upon a body and the body has been moved through a distance of 15 metres?

- A) 3720 Joules
C) 3740 Joules
- B) 3730 Joules
D) **3750 Joules (Correct)**

20. What is the kinetic energy of a bullet of mass 5gm travels with a speed of 500 m/sec?

- A) 620 Joules
C) 630 Joules
- B) **625 Joules (Correct)**
D) 635 Joules

21. What is the ratio of 4 kg to 800 grams?

- A) **05:01 (Correct)**
C) 08:04
- B) 04:08
D) 02:04

22. A motor cycle tyre is sold for Rs 300/- what is the purchase price if 25% profit is added to it.

- A) Rs 200
C) **Rs 240 (Correct)**
- B) Rs 220
D) Rs 260

23. What is the square root of 529?

- A) 12
C) 33
- B) **23 (Correct)**
D) 43

24. Convert 0.456 decimal fraction into percentage? | 0.456 ದಶಮಾಂಶ ಭಾಗವನ್ನು ಶೇಕಡಾವಾರು ಆಗಿ ಪರಿವರ್ತಿಸಿ?

- A) **45.6% (Correct)**
C) 0.456%
- B) 0.0456
D) 0.0456%

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

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

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

(C) **1**

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

- A) A
C) **C (Correct)**
- B) B
D) D