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Score: 20/25 (80.00%)

Code: 1821

1. Which machine converts mechanical energy into electrical energy?

- A) Battery
C) Heater
B) Generator (Correct)
D) Iron box

2. Which is the unit of resistance?

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

3. What is the resistance?

$I = 11.5$ Amps
 $V = 380$ Volts
 $R = \text{_____}$ Ohms

- A) 13 ohms
C) **33 ohms (Correct)**
B) 23 ohms
D) 43 ohms

4. How much watt second in 1 watt hour?

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

5. How many hours will take for a 100 watts bulb to consume 1 kwh energy?

$W = 1$ Kwh
 $P = 100$ Watts
 $t = \text{_____}$ Hours

- A) **10 hours**
C) 18 hours
B) 12 hours
D) 24 hours (Incorrect)

6. What is the mass in gram, if a force of 15 dyres acting on a mass m producing an acceleration of 2.5 cm/sec^2 ?

- A) 9 grams
C) 7 grams
B) 8 grams
D) **6 grams (Correct)**

7. Which metal contains iron as a major content?

- A) Brass metal
C) Zinc
B) Bronze metal
D) **Ferrous metal (Correct)**

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

A) **Cupola (Correct)**

C) Steel - Rever battery

B) Mild steel - Blast furnace

D) Alloy metal - Electric furnace

9. Which among the following is an insulator?

- A) Copper
C) Silver
B) Aluminium (Incorrect)
D) **Mica**

10. Find the total surface area of a cast iron bar whose length, width and height are 20m, 15m and 12m.

- A) 1340 m^2
C) 1540 m^2
B) **1440 m^2 (Correct)**
D) 1640 m^2

11. What is the formula for total surface area of a cylinder?

- A) **$2 \pi r (h + r)$ (Correct)**
C) $\pi r h$
B) $\pi r (h + r)$
D) $2 \pi r h$

12. How many liters of water a cylindrical tank of radius 75 cm and height 100 cm can hold?

- A) **1766.25 liters (Correct)**
C) 1768.25 liters
B) 1767.25 liters
D) 1769.25 liters

13. 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

14. 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)**

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

- A) **1 Joule**
C) 1 dyne
B) 10 Joules (Incorrect)
D) 10 dynes

16. How many ergs for 1 Joule?

- A) 10^3 ergs
C) **10^7 ergs (Correct)**
B) 10^5 ergs
D) 10^9 ergs

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

A) 726 watts

B) 736 watts

C) 746 watts (Correct)

D) 756 watts

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

A) 620 Joules

B) 625 Joules (Correct)

C) 630 Joules

D) 635 Joules

19. What is the percentage of copper if the casting weight of copper 42.3 kg and tin weight 2.7 kg?

A) Cu 92%

B) Cu 94% (Correct)

C) Cu 96%

D) Cu 98%

20. What is the decimal fraction of conversion of 18.5%?

A) 0.185 (Correct)

B) 0.175

C) 0.165

D) 0.195

21. What are the two classifications of system of units?

A) British and Metric

B) Gravitational and non-gravitational

C) Fundamental and derived (Correct)

D) Metric and International

22. What is the improper fraction for the given mixed fraction ? $7 \frac{3}{7}$

A) (52/7)

B) "7/52"

C) "28/7"

D) "7/28" (Incorrect)

23. What is the area of a rectangle, whose length and breadth are 10cm and 8cm respectively? | ಉದ್ದ ಮತ್ತು ಅಗಲ ಕ್ರಮವಾಗಿ 10 ಸೆ.ಮೀ ಮತ್ತು 8 ಸೆ.ಮೀ. ಇರುವ ಆಯತದ ವಿಸ್ತೀರ್ಣ ಎಷ್ಟು?

A) 75 cm²

B) 80 cm² (Correct)

C) 85 cm²

D) 90 cm²

24. How many millimetres are there in 1 inch? | 1 ಇಂಚಿನಲ್ಲಿ ಎಷ್ಟು ಮಿಲಿಮೀಟರ್‌ಗಳಿವೆ?

A) 2.54 mm

B) 25.4 mm (Correct)

C) 24.5 mm

D) 2.45 mm

25. Which is the unit of current? | ಪ್ರವಾಹದ ಮೂಲಮಾನ ಯಾವುದು?

A) Ampere | ಆಂಪಿಯರ್ (Correct)

B) Volt | ವೋಲ್ಟ್

C) Ohm | ಓಂ

D) Watt | ವ್ಯಾಟ್