

Duration: 30 Mins

Total Marks: 25

ID: ITISKILL4857CG

Student Name: _____ Roll No: _____

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

- A) Elasticity B) Brittleness
C) Plasticity D) Ductility

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

- A) 2000 watts B) 2020 watts
C) 2030 watts D) 2010 watts

3. Which property of a metal possessed by it melts when heat is applied?

- A) Malleability B) Tenacity
C) Fusibility D) Conductivity

4. Which is the unit electrical power?

- A) Ohms B) Volts
C) Watts D) Ampere

5. What is the formual for induced emf?

- A) $B^2 L \sin \theta$ volts B) $BLV \sin \theta$ volts
C) $B^2 V \sin \theta$ volts D) $BL \sin \theta$ volts

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

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

7. Which mechanical property of a metal offers resistance to elastic deformation in a cutting tool?

- A) Toughness B) Malleability
C) Ductility D) Hardness

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

- A) 1768.25 liters B) 1767.25 liters
C) 1766.25 liters D) 1769.25 liters

9. What is the diagonal of a square plate whose side is 28

cm?

- A) 39.39 cm B) 39.59 cm
C) 39.29 cm D) 39.49 cm

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 B) 1640 m^2
C) 1440 m^2 D) 1540 m^2

11. Which law states that at constant temperature the current passing through a closed circuit is directly proportional to the potential difference and inversely proportional to the resistance?

- A) Lenz's law B) Hooke's law
C) Ohm's law D) Newton's law

12. What is the perimeter of a rectangle whose length and breadth are 20 cm and 18 cm?

- A) 66 cm B) 56 cm
C) 86 mm D) 76 cm

13. What is the density of aluminium?

- A) 4.7 g/cm^3 B) 3.7 g/cm^3
C) 5.7 g/cm^3 D) 2.7 g/cm^3

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

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

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

- A) Rs 220 B) Rs 240
C) Rs 260 D) Rs 200

16. 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 B) 36 km/hour
C) 32 km/hour D) 34 km/hour

17. What is the block weighs (W) in kg, if volume (V) is 320 cm³ and density 8.9 g/cm³?

- A) 2.948 kg B) 2.848 kg
C) 2.648 kg D) 2.448
-

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

- A) 20.89 cm² B) 20.39 cm²
C) 20.98 cm² D) 20.93 cm²
-

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

- A) 350 mm² B) 330 mm²
C) 340 mm² D) 320 mm²
-

20. How much watt second in 1 watt hour?

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

21. What is the area of a (A) semicircle whose dia is 20 cm (d)?

- A) 167.1 cm² B) 157.1 cm²
C) 177.1 cm² D) 147.1 cm²
-

22. Which cast iron cannot be welded?

- A) White cast iron B) Nodular cast iron
C) Grey cast iron D) Malleable cast iron
-

23. What is the ratio of power output to power input?

- A) Energy B) Work
C) Efficiency D) Acceleration
-

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

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

25. Simplify: $(17.49 \times 5.2) / (6.5)$

- A) 13.79 B) 13.69
C) 13.99 D) 13.89
-