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17/A/C/S-1/4/E

(WS)

*Answer*

PAPER-II  
WORKSHOP CALCULATION & SCIENCE & ENGINEERING DRAWING  
SEMESTER-I  
(MORNING SESSION)  
10<sup>th</sup> PASS

TIME: 3 HRS.

MARKS: 150

Note: This paper contains two parts – Part A & Part B.  
Attempt all the questions.  
All questions carry equal marks.  
This paper carries negative marking. 25% marks will be deducted for each wrong answer.

PART - A (WORKSHOP CALCULATION & SCIENCE)

(75)

Choose the correct answers:

1. 0.125 inch =  
a) 3.2 mm                      b) 3.15 mm                      c) 3.175 mm                      d) None of these
2. The value of "a:c" from the following proportion a:b=2:3 and b:c = 4:5 is-  
a) 5:8                      b) 8:5                      c) 4:3                      d) None of these
3. Which among the following is a greater fraction 15/28 or 37/64-  
a) 37/64                      b) 15/28                      c) Both are equal                      d) None of these
4. In a 90 kg non-ferrous casting containing Copper, Tin and Zinc in the ratio of 6:3:1, the weight of copper is-  
a) 27 kg                      b) 9 kg                      c) 54 kg                      d) None of these
5. A 100 meters long rope is cut in two parts, so that one part is 2/5 th of the total length, then length of the two parts separately is-  
a) 20m & 50m                      b) 40m & 60m                      c) 30m & 70m                      d) 50m & 50m
6. The value of  $0.1 \times 0.01$  is-  
a) 0.1                      b) 0.01                      c) 0.001                      d) None of these
7. The weight of a 1560cc stainless steel part having specific gravity 7.60 is-  
a) 118.56 Kg                      b) 11856 grams.                      c) 1.1856 Kg                      d) None of these
8. The value of "X" in the following ratio  $X:4 = 9:6$  is-  
a) 2.66                      b) 13.5                      c) 6                      d) 2.166

Contd...2/-

9. Multiply  $25 \times \frac{3}{7}$  -  
 a)  $\frac{75}{175}$       b)  $\frac{28}{7}$       c)  $\frac{3}{175}$       d)  $\frac{75}{7}$
10. Property of material which allows it to be drawn out into wires is -  
 a) Ductility      b) Solderability      c) Malleability      d) Conductivity
11. One of the physical properties of material is -  
 a) Latent heat      b) Porosity      c) Elasticity      d) Acidity
12. Value of  $-0.05 + 5.252 - 0.101 + 1.005$  is equal to -  
 a) 6.206      b) 6.208      c) 6.452      d) 6.675
13. Product  $2 \frac{1}{2} \times \frac{3}{5}$  is equal to -  
 a) 6.5      b) 7.75      c) 8.75      d) 9
14. Four pieces of 20 kg each & 2 pieces of 25 kg each are moulded from cast iron and if 12% of cast iron is wasted the total cast iron required is -  
 a) 150 kg      b) 1477.3 kg      c) 147.73 kg      d) 130 kg
15. X% of x is the same as 10% of -  
 a)  $\frac{x}{10}$       b)  $\frac{x^2}{10}$       c)  $\frac{x^3}{10}$       d) None of these
16. A 250 meters long train will cross an electric pole with a speed of  $\frac{50}{4}$  meters/sec in -  
 a) 5 seconds      b) 6.25 secs      c) 20 seconds      d) 3.125 secs
17. The initial velocity of a stone thrown vertically upwards to reach a height of 10 meters is -  
 a) 4.427 meters/sec      b) 14 meters/sec  
 c) 4.472 meters/sec      d) 196 meters/sec
18. Shape, size are belongs to which type of properties of the material -  
 a) Thermal      b) Magnetic      c) Physical      d) Chemical
19. Copper is an example for \_\_\_\_\_ metal -  
 a) Alloy metal      b) Non Ferrous metal  
 c) Ferrous metal      d) Non metal
20. A piece of wood having 80cc volume when floated on water, remains 60cc volume above water then density of wood is -  
 a) 1.75 grams/cc      b) 0.75 grams/cc      c) 0.25 grams/cc      d) 1.55 grams/cc

21.  $\sqrt{529} =$  \_\_\_\_\_  
a) 19                      b) 13                      c) 23                      d) 33
22. A mass of 3 grams is moving with a constant velocity of 4m/sec, its kinetic energy is-  
a) 24 ergs                      b) 24 joules                      c) 24 dynes                      d) None of these
23. The potential energy of a body whose mass is 5 Kg is kept on a pole of height 20 meter is-  
a) 9.8 joules                      b) 980 joules                      c) 100 joules                      d) None of these
24. If a 80 meters long train passes a railway station platform of 120 meters length in 10 seconds, then its speed is-  
a) 10 meters/sec                      b) 12 meters/sec                      c) 20 meters/sec                      d) 8 meters/sec
25. When Rs 1500 is divided among 3 persons in the ratio of 3:4:8, then the share of the three persons is-  
a) 800, 200 & 500                      b) 400, 300 & 800                      c) 300, 400 & 800                      d) 800, 400 & 300
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