

Q. No. / Date

H

16/B/C/S-2/4/E

WS/ES,
10th Pass

PAPER-II
(WORKSHOP CALCULATION & SCIENCE AND EMPLOYABILITY SKILLS)
FOR 10th PASS (TWO YEAR TRADES)
(MORNING SESSION)
SEMESTER-II

TIME: 3 HRS.

MARKS:125

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. The value of $10^{-6} \times 10^{10} =$ _____

- a) 10^4
c) 10^{-6}

- b) 10^{-40}
d) $10^4 \times 10^{-3}$

2. Which of the following is a solution of $x+2y=7$

- a) $x=3, y=1$
c) $x=3, y=2$

- b) $x=3, y=5$
d) $x=0, y=7$

$$3x - y = 7$$

3. If $X=3; Y=2$ find the value of $x^3 - x y + y^3$ is-

- a) 18
c) 21

- b) 27
d) 29

4. $a:b=2:3$ and $b:c = 4:5$ Then $a:c$ is-

- a) 8:15
c) 7:15

- b) 8:16
d) 7:16

5. Ratio of circumference to diameter for any circle is-

- a) 6.67
c) 22/7

- b) 22.7
d) 9.81

Contd-----2/-

15. Which of the following is not used for the measurement of temperature?
 a) Thermister
 b) Geaser
 c) Pyrometer
 d) Thermometer
16. Which is not a standard of temperature?
 a) Freezing point of copper ~~copper~~ ^{water}
 b) Boiling point of water
 c) Freezing point of copper
 d) None of above
17. Electricity flows in a circuit due to-
 a) Potential difference
 b) Viscosity
 c) Level difference
 d) Thermal conductivity
18. Voltage 'V' in a circuit is equal to-
 a) l
 b) l^2
 c) l/R
 d) $l \times R$
19. When two resistances 4Ω and 6Ω are connected in parallel, resulting resistance is-
 a) 4Ω
 b) 6Ω
 c) 10Ω
 d) 2.4Ω
20. 0.001 A is equal to-
 a) 1.0 mA ~~10 mA~~
 b) 100 mA
 c) 1000 mA
 d) 1 mA
21. Batteries produce-
 a) Ac
 b) DC
 c) Water
 d) Resistance
22. 1 Horse power in SI units is-
 a) 1 kW
 b) 1 W
 c) 0.746 KW
 d) 736 KW
23. Which of the following is not a lever-
 a) Knife
 b) Scissor
 c) Sea-saw
 d) Bell crank

- ✓ 24. Efficiency of a simple lifting machine is given by where MA means Mechanical Advantage and VR means Velocity Ratio-
- a) MA/VR
 - b) VR
 - c) MA
 - d) Frictional Resistance
25. Efficiency of a self locking machine is-
- a) $>75\%$
 - b) $<50\%$
 - c) 100%
 - d) 0
