

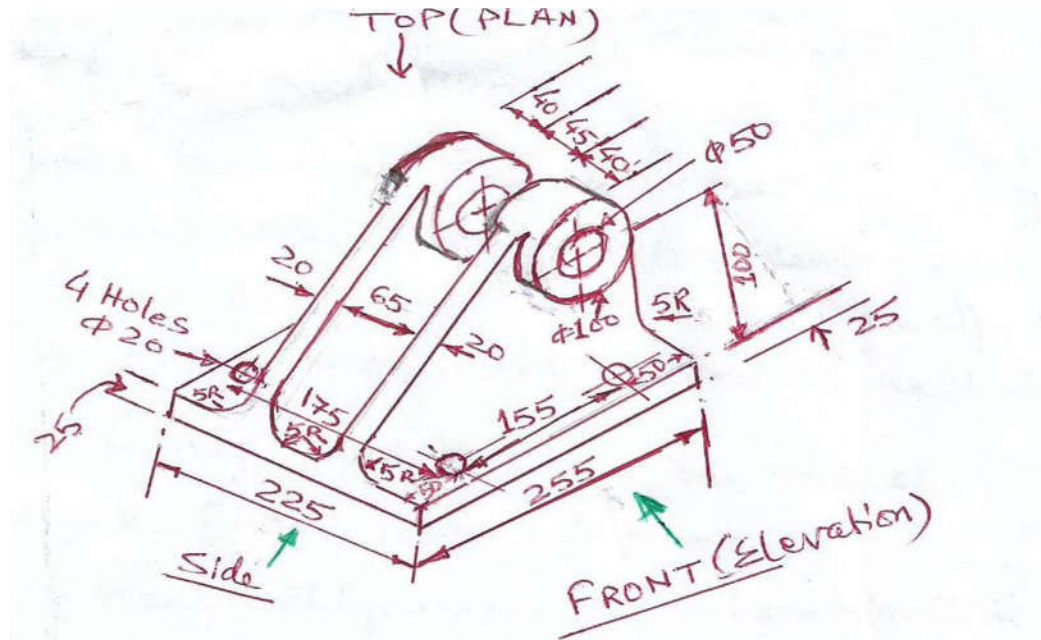
TRADE THEORY

Answer the following Questions –

1. What are 5 'S' and PPES.
2. What is Fitter Trade?
3. What is the different between –
 - (a) Vernier Callipers and Micrometer
 - (b) Cow mouth chisel and Flat Chisel
 - (c) Ball Pein Hammer and Cross Pein Hammer
 - (d) Mallet and Sledge Hammer
 - (e) Bench Vice and Machine Vice
4. Write down the types of Forging and the tools used with Sketches & details.
5. What is Sheet Metal work? Describe its workings tools with neat diagram.
6. What is rivet? Write down the classification of rivet and difference between Lap Joint and Butt Joint.
7. Difference between Arc welding and gas welding. Explain gas welding equipments give details & diagram.
8. What is Interchangeability? Differentiate Limit, Fit & Tolerance.
9. Write down the production process for Pig iron, cast Iron and Wrought Iron.
10. Give details of Sheet metal L.D. process. Write diagram.

Given the Answer of all Questions: -

1. Draw Plan, Side & Front view of given Bracket in Third Angle Projection –



2. Draw the conventional Representations of following Materials –

- (a) Heavy Materials, As – Steel.
- (b) Light Materials, As – Tin.
- (c) Packing & Insulating Materials, As – Glass Wool.
- (d) Wood
- (e) Water, Oil, Petrol.
- (f) Earth, Rubber.
- (g) Brick Work, Masonary.

3. Draw Free Hand sketch of the following –

- (a) Pipe Cutter
- (b) Crimping Tool
- (c) Plump Bob
- (d) Measuring Tape

- (e) Inking Pen
- (f) Small Bow Compass
- (g) Drawing Pin

4. Draw an Eclipse which major Axis is 75 mm and Minor Axis is 45 mm.

5. Draw –

- (a) Hexagonal Head bolt
- (b) Eye Bolt
- (c) Terms Related to Gear
- (d) Foundation Bolts
 - a. Eye Bolt
 - b. Rag Bolt
 - c. Lewis Bolt
 - d. Cotter Bolt

WORKSHOP CALCULATION & SCIENCE

1. What are units? Write the classification of units.
2. The temperature of water is 70° C. Express the temperature in Kelvin and reamer.
3. If a van covers 100m in 4 s, then how many kilometres will it run in 1 h?
4. If $\sqrt{75.24 + x} = 8.71$ then find x
5. $\sqrt{\frac{0.00001225}{0.00005329}}$ is equal to –
6. If A:B = 6:7, B:C = 4:5 find A:B:C
7. What will be the density (ρ) of iron cube, if mass (m) of metal = 5kg, volume (v) = 685cm^2
8. Calculate the perimeter of a triangle whose side are 20 cm, 18 cm and 10 cm.
9. Find the area of the right angled triangle whose base is 20 cm and height 8 cm?
10. Find the value of x , if $\frac{x+1}{2} - \frac{x+2}{5} = \frac{x-1}{2}$
11. The product of two numbers is – 96 but their sum is 4, then find the numbers
12. If $\frac{8}{7}$ of a number is 48, then find the number.
13. Write the difference between Mass and Weight. The weight of a ball is 2.125 kg and volume is 280 cc. Calculate the density of a material?
14. Write the different types of metals. Also explain the Physical and Mechanical properties of Metals.
15. Derive an expression $v^2 - u^2 = 2as$
A body was thrown vertically upward and rises to a height of 10 m. Calculate
 - (a) The velocity with which the body was thrown upwards.
 - (b) The time taken by the body to reach the highest point.

EMPLOYABILITY SKILLS

1. Write a note on “ world wide web “ and give it’s attributes .
2. What is communication? Explain the process of communication.
3. What is Motivation? Explain “MOSLAW ‘S NEED HIERARCHY THEORY “.
4. “We cannot manage the time, but we must manage ourselves according to time “Explain.
5. What are the Do’s and Don’ts while facing an interiors ?
6. What are the differences between values and Ethics?
7. What is Entrepreneurship? Discuss the Barriers faced by Entrepreneurs.
8. What do you mean by Small Scale Industries (SSI)?
9. Explain “SWOT “Analysis.
10. Explain “TQM”.
