

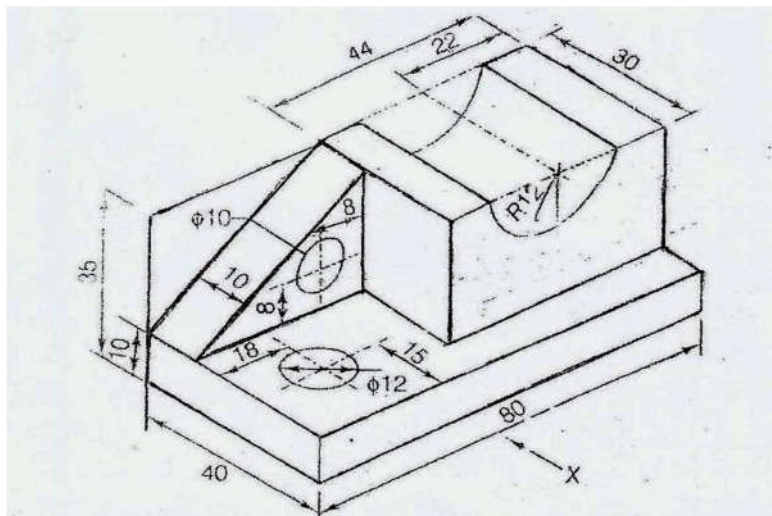
TRADE THEORY

1. Define Law of Atomic Structure.
2. Define different kind of cables.
3. Define Ohm's Law. Explain the Law of Resistance use sketches where necessary.
4. Explain the construction of Lead-Acid Cell and its Chemical action.
5. Explain Merits of AC over DC.
6. Explain the following terms:.
 - (a) Inductive Reactance
 - (b) Resistive Reactance
 - (c) Capacitive Reactance
 - (d) Impedance
7. Write down the procedure for installing plate earthing.
8. Write down the difference between Star and Delta Connections with neat sketches.
9. Write down the definition of Transformer working, Principal and Classification of Transformer.
10. Explain C.T and P.T with neat Sketches.

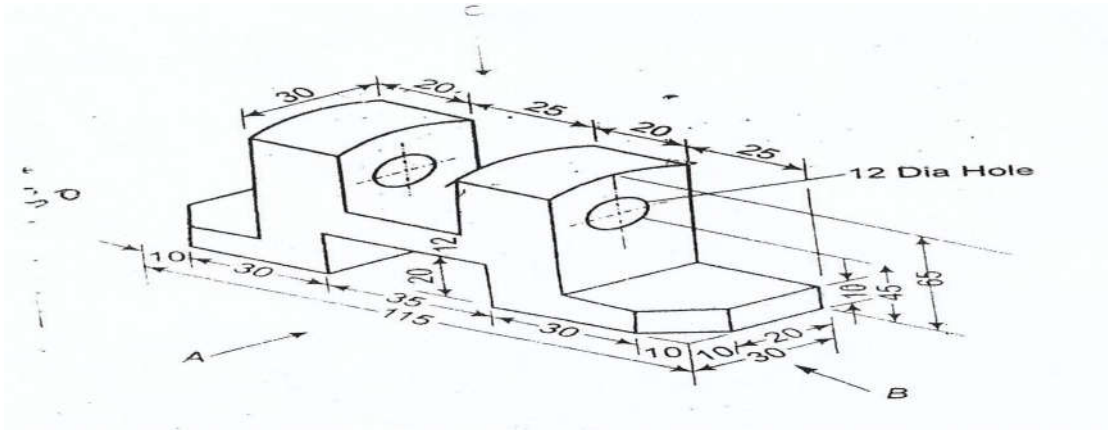
ENGINEERING DRAWING

1. Draw all given Isometric Projection .

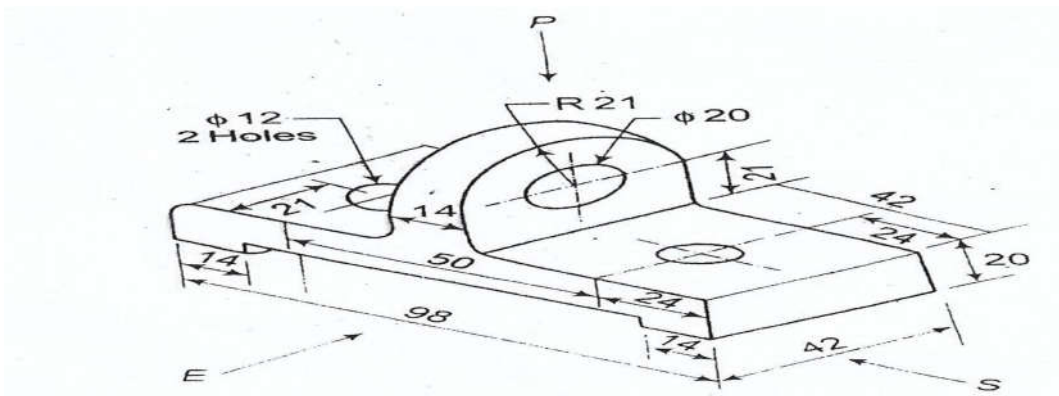
a)



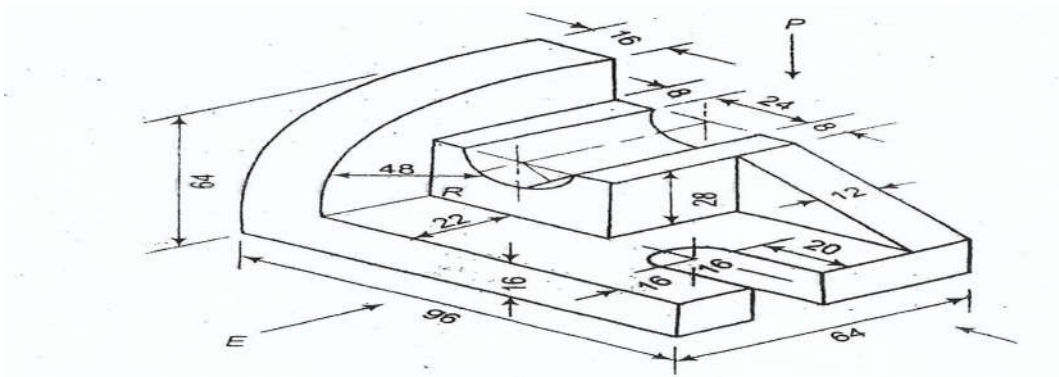
b)



c)



d)



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^3
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

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