

MAY 2006

2006 MAHARSHI DAYANAND UNIVERSITY
B.E/ B.TECH I SEMESTER REGULAR EXAMINATION
MECHANICAL ENGINEERING
WORKSHOP TECHNOLOGY

TIME : 3 HOUR
MARK : 80

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

1. (a) Explain how raw materials are converted into Product/Services in a workshop.
(b) What are the objectives of making plant layout? Explain various types of plant layouts.
2. (a) Justify the statement, "Accident does not happen. It is caused " Explain the various causes of accidents.
(b) What are the causes of Fire in Industries? How fire can be prevented and fought?
3. (a) Draw the sketch of a Vernier Height Gauge. List its parts, their materials and least counts.
(b) Sketch and describe five hand tools used in Foundry Shop.
4. What is pattern? Sketch and explain various types of patterns used in Foundry. Write the name of pattern making materials.
5. (a) Differentiate between Shaper and Planer Machine.
(b) Explain the process of Metal Cutting. Write the types of chips and the parameters responsible for their production. Supplement your answers with sketches.
6. (a) Give the various classifications of Welding. Explain them in brief.
(b) Sketch a Gas welding set and label its parts. Show various types of Flames with temperature.
7. (a) Step-by-step describe making a Sheet Metal component with sketches.
(b) What is Forming Process? How it is done? What are its merits and demerits?
8. Write short notes on any three:
 - (a) Extrusion
 - (b) Power Metallurgy
 - (c) Principles of Hot Working
 - (d) Casting defects
 - (e) Function of a Riser.