

2007 MAHATMA GANDI UNIVERSITY
B.TECH DEGREE EXAMINATIONS
V SEMESTER MECHANICAL ENGINEERING
MANUFACTURING PROCESS

JANUARY 2007

TIME: 3 HOUR
MAXIMUM MARK :100

Part- A:

Answer all questions. Each question carries 4 marks.

1. What important considerations a pattern-maker has to make before planning a pattern?
2. What is meant by 'binder' and 'additives' in sand moulding?
3. Describe the types of flames with the help of sketches.
4. Explain submerged arc welding
5. Explain the functioning of three-high rolling mill.
6. Define the term deformation velocity and give its importance.
7. How are the presses classified according to the number of Crankshafts?
8. How is wire drawing done?
9. What is die forging?
10. What are the common forging defects? **[10x4 = 40 marks]**

Part- B:

Answer the five questions. Each question carries 12 marks.

11. How is the layout pattern made? State the procedure for pattern construction.
or
12. Illustrate and describe investment casting.
13. What are the electrolytes used in arc welding made of? What are the electrode coverings and why they are provided?
or
14. With the help of a neat sketch, explain thermit welding and its merits and demerits.
15. Discuss the process of tube-producing through rolling process.
or
16. Explain the process of electrohydraulic forming and give its salient characteristics.
17. Analyze the wire drawing process, explain the functions of die-angle in wire drawing.
or
18. Explain the process of calendaring used in plastic materials.
19. What main considerations will you make in designing a forging?
or
20. Describe with a neat sketch the working of a spring hammer. **[5x12 = 60 marks]**