

Roll No.

Total No. of Pages : 2

Total No. of Questions : 09

B.Tech (AE) (Sem.-4)
MANUFACTURING PROCESSES
Subject Code : AE-204
Paper ID : [A0710]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY.**
2. **Attempt any FOUR questions from SECTION-B.**
3. **Attempt any TWO questions from SECTION-C.**

SECTION-A

(10 × 2 = 20 Marks)

1. Answer the following :
 - (a) Name the different types of pattern allowances.
 - (b) What is core baking?
 - (c) Differentiate between soldering and brazing.
 - (d) State the advantage of metal casting.
 - (e) Define forging.
 - (f) What are various types of Extrusion?
 - (g) What is counter boring and counter sinking in drilling?
 - (h) What is tool signature?
 - (i) Write the function of lubricants in metal cutting?
 - (j) Differentiate between up milling and down milling.

SECTION-B

(4 × 5 = 20 Marks)

2. What are the different types of pattern materials? Explain
3. What are the equipments required for electric arc welding? Explain
4. Explain in detail extrusion process with the help of diagram.

5. Explain the mechanism of chip formation. Also explain the various methods of classifying machine tools.
6. Describe with the help of suitable diagrams, the constructional features of a planner?

SECTION-C

(2 × 10 = 20 Marks)

7. Describe the different elements of a gating system? How riser & gating system is designed.
8. Explain the principle and working of lathe machine with help of diagram.
9. Write short notes on
 - (i) Differential Indexing.
 - (ii) Cemented carbides.
 - (iii) Specifications of shape
 - (iv) MIG Welding