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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(ME) (2011 Onwards) (Sem.-4)

MANUFACTURING PROCESSES-II

Subject Code : BTME-405

M.code : 59133

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A**1. Answer briefly :**

- a) Define metal forming.
- b) Write various applications of rolling.
- c) Distinguish between piercing and blanking.
- d) What is meant by shear on punch/die in press tool operations?
- e) What is the significance of shear angle?
- f) List the various cutting forces.
- g) Write the composition of alloy carbon steel.
- h) Distinguish between up milling and down milling.
- i) Define significance of dressing of grinding wheels.
- j) Define feed, and write its units.

SECTION-B

2. Describe various rolling defects, causes and remedies.
3. Explain extrusion process in detail with neat sketch.
4. What do you mean by powder metallurgy? Write advantages and limitations of powder metallurgy.
5. Explain the geometry of single point cutting tool with help of neat sketch.
6. Describe the working of a broaching machine with suitable sketch.

SECTION-C

7. Explain the following sheet metal forming operations with neat sketches :
 - a) Embossing,
 - b) Squeezing,
 - c) Coining,
 - d) Bending
 - e) Drawing.
8. a) Explain the following types of tool wear with neat sketches :
 - i) Crater wear
 - ii) Flank wear.
b) Briefly explain the desirable properties of a cutting tool material.
9. Briefly explain various lathe operations with neat sketches.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.