

Code: ME4T5

II B.Tech - II Semester – Regular/Supplementary Examinations
October - 2020

PRODUCTION TECHNOLOGY
(MECHANICAL ENGINEERING)

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks

11 x 2 = 22 M

1.

- a) Write short notes on pattern allowances.
- b) Discuss any two properties essentially required for moulding sand.
- c) What is the role of a raiser in casting?
- d) Explain the merits of centrifugal casting process.
- e) Discuss cold shut and run out defects in casting.
- f) Why Tungsten is used as an electrode in TIG welding?
- g) Differentiate brazing and soldering.
- h) Differentiate forward and backward extrusion.
- i) What is the role of clearance in sheet metal operations?
- j) Compare thermo plastics and thermosetting plastics.
- k) Explain the principle of Transfer moulding process.

PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Explain sand casting process with the help of a neat diagram. 8 M
- b) Discuss the design considerations for gating system in casting. 8 M
3. a) Explain Shell moulding process with a neat diagram. 8 M
- b) Differentiate hot chamber and cold chamber die casting processes. 8 M
4. a) Discuss the principle in TIG welding and the two modes of polarities. 8 M
- b) Explain submerged arc welding process with a neat diagram. 8 M
5. a) Differentiate between blanking and piercing operation. 8 M
- b) Illustrate wire drawing operation with a neat sketch. 8 M
6. a) What is a polymer material? Classify polymers. 8M
- b) Explain blow moulding operation with a neat sketch. 8 M