Code: ME4T5

II B.Tech - II Semester – Regular/Supplementary Examinations – April 2018

PRODUCTION TECHNOLOGY (MECHANICAL ENGINEERING)

Duration: 3 hours Max. Marks: 70

PART - A

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

 $11 \times 2 = 22$

1.

- a) Mention various products of a casting process.
- b) What is the importance of a draft allowance?
- c) List out various moulding techniques used for plastics.
- d) List out the various types of patterns.
- e) Why hot tear will occur in casting process? Suggest a remedy.
- f) What are applications of investment casting process?
- g) What are the different fluxes are used in welding process.
- h) What is the importance of edge preparation in welding?
- i) What is an impact extrusion process?
- j) What is the importance of clearance in punching operation how it is calculated?
- k) What is the difference between thermo plastics and thermo setting plastics?

PART - B

Answer any *THREE* questions. All questions carry equal marks. $3 \times 16 = 48 \text{ M}$

- 2. a) Explain different types of gating systems with a neat sketch and its importance. 10 M
 - b) Explain about dry sand mould and skin dry sand mould.
 Which is the best sand mould? Justify your answer? 6 M
- 3. a) Explain about centrifuging process and what are its applications. 8 M
 - b) Explain shell moulding process with a neat sketch and write its advantages. 8 M
- 4. a) What are the differences between TIG and MIG welding? 8 M
 - b) Explain any two non destructive testing welds. 8 M
- 5. a) What are the differences between hot working and cold working?

 8 M
 - b) Explain blanking and piercing process with a neat sketch. 8 M

6. a) Explain transfer moulding process.

8 M

b) Describe injection moulding process with a neat sketch.

8 M