

II B. Tech II Semester Regular/Supplementary Examinations, November - 2020
PRODUCTION TECHNOLOGY
 (Com to ME, AME)

Time: 3 hours

Max. Marks: 70

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- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
 2. Answer **ALL** the question in **Part-A**
 3. Answer any **FOUR** Questions from **Part-B**
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PART -A

1. a) Write about the various advantages of casting process? (3M)
- b) Explain about solidification of pure metals? (2M)
- c) What are the advantages and disadvantages of DC and AC welding? (2M)
- d) Give the causes and remedies of rolling defects. (3M)
- e) Write about applications of powder metallurgy? (2M)
- f) What is extrusion ratio? (2M)

PART -B

2. a) Explain the following with suitable sketches. (7M)
 (i) Cope and drag pattern (ii) Skeleton pattern
- b) Explain the terms shrinkage allowance and machining allowance. (7M)
3. a) Discuss briefly on solidification of castings of pure metals and alloys. (7M)
- b) What is the function of riser? What is its preferred shape and briefly write about nucleation and grain growth related to casting. (7M)
4. a) Explain Oxy- Acetylene Gas cutting in detail? (7M)
- b) Explain about TIG and MIG welding techniques. Give the applications of each. (7M)
5. a) Write a short note on (i) Wire drawing and (ii) Tube drawing. (7M)
- b) Explain soldering? What fluxes are generally used in soldering? (7M)
6. a) Write the expression for determining the force required to produce an extrusion and discuss the effect of various parameters on the extruding force? (7M)
- b) Describe the method, advantages and application of powder metallurgy. (7M)
7. a) Derive the force and power requirements in blanking operation. (7M)
- b) Explain about bending, spring back and its remedies? (7M)

