



B.Tech II Year II Semester (R09) Supplementary Examinations May/June 2017 **PRODUCTION TECHNOLOGY**

(Mechatronics)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

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- 1 (a) Describe any four types of Pattern allowances in detail.
 - (b) Draw the picture of a typical gating system and show the various elements involved in it and describe the working principle.
- 2 (a) Explain the Canine's method in Risering design.
 - (b) Explain semi centrifugal casting in detail with a neat sketch.
- 3 Explain Thermit welding process with a neat sketch.
- 4 (a) Explain the working principle of a Metal Inert Gas (MIG) welding with a neat sketch.
 - (b) Write a note on welding defects.
- 5 (a) Write the differences of Hot working and Cold working processes.
 - (b) Explain with a schematic diagram of a Rolling process
- 6 (a) Explain Blanking and Piercing operations with a neat sketch.
 - (b) Describe the working principle involved in Tube drawing operation with a neat sketch.

7 (a) Explain backward hot extrusion.

- (b) Describe the working principle of Hydrostatic extrusion with a sketch.
- 8 (a) Explain Smith forging operation in detail.
 - (b) Write a note on Forging defects.