

Sem-IV / Manufacturing Engg-II / PROD / 4-12-15

QP Code : 5395

Duration: 3 hours

Max. Marks: 80

- N.B. (1) Question No. **ONE** is compulsory.
 (2) Attempt any **THREE** Questions from remaining **FIVE** questions.
 (3) Support your answer with sketch wherever necessary.
 (4) All questions carry equal marks.
- Q.1. Explain in brief :- 20
 (a) Resin transfer molding process of composite manufacturing.
 (b) Chemical Machining.
 (c) Thread chasers and self-opening die heads.
 (d) Gear shaping process.
- Q2. (a) Explain the process of Plasma arc Machining with its advantages, limitations and applications. 10
 (b) Explain the composite manufacturing processes of Pultrusion and Filament winding. 10
- Q3. (a) Explain the principle of centerless grinding and what are the advantages of this method over other systems? 10
 (b) Briefly explain the process of thread whirling with its advantages, limitations and applications. 10
- Q4. (a) How automats are classified? Differentiate between parallel action and progressive action multi spindle automats. 10
 (b) Write a short note on cylindrical grinding machine. Also explain the I-S marking system for a grinding wheel? 10
- Q5. (a) Explain with a neat sketch LBM. 10
 (b) Explain about chutes, magazines and hoppers used for feeding in automatic machines. 10
- Q6. (a) Describe in detail the processes of Lapping and Roller Burnishing. 10
 (b) What is gear hobbing? With neat sketches, explain the principles of gear hobbing. 10

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