

Manufacturing Engg. II

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 :-
(a) Pultrusion process of composite manufacturing.
(b) Abrasive Jet machining.
(c) Thread Whirling process.
(d) Grit, grade, and structure in the context of grinding wheels.
- Q2. (a) Explain the process of Electrical Discharge Machining with its advantages, limitations and applications. 10
(b) Explain the processes of filament winding and spray up, used for composite manufacturing. 10
- Q3. (a) Explain in detail the process of centerless grinding. 10
(b) Briefly, explain the process of thread rolling with its advantages limitations and applications. 10
- Q4. (a) How automats are classified? Explain in detail the construction, working and application of 3 axis CNC machining center. 10
(b) How grinding wheels are dressed and balanced? 10
- Q5. (a) Explain with a neat block diagram ECM. 10
(b) Explain with a neat sketch Swiss type Automatic machine. 10
- Q6. (a) Briefly, explain different types of surface grinding machines. 10
(b) Write a detailed note on gear hobbing and gear shaping methods. 10

