

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI • EXAMINATION – SUMMER 2013****Subject Code: 162504****Date: 30-05-2013****Subject Name: Allied Manufacturing Processes****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Describe various types of threads with neat sketch and applications. **07**
(b) What is a hob? How it is useful in manufacturing? Which products can be manufactured with it? Describe the process. **07**

- Q.2** (a) Why coating is required on a product? What precautions should be carried out before coating? State only methods of coating. **07**
(b) Explain electro plating with neat sketch, merits, demerits and applications. **07**

OR

- (b) Explain chrome plating with neat sketch, merits, demerits and applications. **07**

- Q.3** (a) Classify plastics with their relative merits, demerits and applications. **07**
(b) Explain injection molding process with merits, demerits and applications. **07**

OR

- Q.3** (a) Describe characteristics of plastic compared to metal. Also state in which way, plastic is better than metal? What are its limitations? **07**
(b) State various methods of plastic manufacturing and explain one with its merits, demerits and applications. **07**

- Q.4** (a) What is gear shaving? Explain it in detail with neat sketch. **07**
(b) What is a tap? Where it is used in manufacturing? Which products can be manufactured? Explain the process. **07**

OR

- Q.4** (a) What is a dielectric? Explain the process in which it is used. **07**
(b) Describe a process where a jet of water is used for manufacturing. **07**

- Q.5** (a) Explain a process where a vibrating tool is used for manufacturing.. **07**
(b) Describe a process where an electron beam is used for manufacturing. **07**

OR

- Q.5** (a) Explain plasma arc machining process in detail. **07**
(b) Explain laser beam machining in detail. **07**
