

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV(NEW) – EXAMINATION – SUMMER 2019****Subject Code:2141908****Date:25/05/2019****Subject Name: Manufacturing Processes -II****Time:02:30 PM TO 05:00 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 the pattern colour code normally used in foundries. **03**
(b) Explain why the understanding of manufacturing processes is essential for better products? **04**
(c) Give the broad classifications of manufacturing processes. **07**

- Q.2** (a) List the main advantages of casting process. **03**
(b) Give the brief write up on the following casting terms: **04**
Sprue, gate, runner, riser
(c) Name the pattern allowances which can be quantitatively specified. Write a brief note on each of them. **07**

OR

- (c) What metals are generally used for making patterns? Explain the reasons in brief for their selection. **07**
- Q.3** (a) Briefly explain the application of chaplets. **03**
(b) Explain the disadvantages of carbon dioxide moulding. **04**
(c) Briefly enumerate the steps in sequence for producing casting from shell moulding. **07**

OR

- Q.3** (a) Give the typical applications for adhesive bonding. **03**
(b) What is meant by 'penetration'? Explain its relevance to welding. **04**
(c) Describe the types of flames obtained in oxy-acetylene gas welding process giving its applications. **07**
- Q.4** (a) How is an arc obtained in arc welding? **03**
(b) What are the advantages of AC equipment over DC equipment in arc welding? **04**
(c) What are differences between TIG and MIG welding processes? **07**

OR

- Q.4** (a) State the advantages of projection welding. **03**
(b) Write a brief note on flash welding. **04**
(c) What are the defects that are generally found in welding? Describe their causes and remedies. **07**
- Q.5** (a) What is the significance of recrystallisation temperature in metal working? **03**
(b) What are the advantages of hot working over cold working of metals? **04**
(c) Discuss the defects, causes and remedies of forging defects. **07**

OR

- Q.5** (a) Explain various properties of plastic. **03**
(b) Give the advantages and disadvantages of composite. **04**
(c) Draw the various glass structure explain properties and application of glass manufacturing **07**
