

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER- V EXAMINATION-SUMMER 2023****Subject Code: 3152510****Date: 26/06/2023****Subject Name: Manufacturing Technology - 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.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) Define manufacturing. **03**
(b) Write a short note on selection of manufacturing process. **04**
(c) Enlist types of pattern and explain any two with simple sketch. **07**
- Q.2** (a) Enlist different materials used for patterns. **03**
(b) Enlist different pattern allowances and explain any one in detail. **04**
(c) Briefly explain components of gating system. **07**
- OR**
- (c) Briefly explain properties of moulding sand. **07**
- Q.3** (a) What is core? **03**
(b) Explain carbon dioxide moulding. **04**
(c) Briefly explain steps of investment casting. **07**
- OR**
- Q.3** (a) Explain principle of arc welding. **03**
(b) Classify welding processes. **04**
(c) Write a note on gas welding. **07**
- Q.4** (a) What is brazing? **03**
(b) Enlist types of resistant welding and explain any one in detail. **04**
(c) Write a note on ultrasonic welding. **07**
- OR**
- Q.4** (a) Explain elastic deformation. **03**
(b) Explain hot and cold working of metals. **04**
(c) Write a note on principle and operations in rolling. **07**
- Q.5** (a) What is wire drawing? **03**
(b) Differentiate between blanking and piercing with simple sketch. **04**
(c) Write a note on injection moulding. **07**
- OR**
- Q.5** (a) What are general properties of plastics? **03**
(b) Write a short note on lapping. **04**
(c) Write a note on barrel tumbling. **07**
