

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII(NEW) EXAMINATION – SUMMER 2019****Subject Code:2172003****Date:16/05/2019****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.

- Q.1**
- (a) Comparison between forward extrusion and reverse extrusion. **03**
 - (b) What is pattern? Classify types of pattern allowance. Explain Any two allowances. **04**
 - (c) Different between cold working and hot working. And also explain crystalline temperature with type. **07**
- Q.2**
- (a) List out casting defects. Explain any five Defects. **03**
 - (b) Explain different type of Gas Flame **04**
 - (c) Define following terms. **07**
1)marking 2)bloom 3) Notching 4) Billet 5) piercing 6) lancing 7) Blanking
- OR**
- (c) Explain properties of liquid metal. And also different type of gates. **07**
- Q.3**
- (a) Give Advantages and disadvantages of gating system. **03**
 - (b) Explain welding process parameters and its effect. **04**
 - (c) Explain centrifugal Casting process. And also give advantages and disadvantages **07**
- OR**
- Q.3**
- (a) Differentiate between arc welding process and resistance welding process. **03**
 - (b) List out moulding sand testing. Explain any one. **04**
 - (c) Explain the different types of clamps used in jigs and fixtures. **07**
- Q.4**
- (a) Classification of Non-Traditional manufacturing process. Explain Electric Discharge machining process. **03**
 - (b) Write short note on LBM. **04**
 - (c) Describe the applications of plate jigs. **07**
- OR**
- Q.4**
- (a) Explain electron polarity and type of Current. **03**
 - (b) Write short note on ECM. **04**
 - (c) Explain Sine bar and Give its application, merits and Demerits. **07**
- Q.5**
- (a) Explain Concept of direct and indirect measurement. **03**
 - (b) Explain (EBM) electron beam welding process. And also give advantages and disadvantages **04**
 - (c) Explain the function of Jig and fixture. Explain the concept with example of redundant location. **07**
- OR**
- Q.5**
- (a) Explain Taylors gauging Principle. **03**
 - (b) Write short note on SAW. **04**
 - (c) Explain Investment casting with advantages, disadvantages and also application. **07**