

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-V (NEW) EXAMINATION – WINTER 2020****Subject Code:2150206****Date:20/01/2021****Subject Name:Automotive manufacturing****Time:10:30 AM TO 12:30 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What are the difference between TIG and MIG? **03**
(b) Explain different types of flame obtained in oxy-acetylene gas welding process. **04**
(c) List out different types of Pattern in Casting. Explain any two Patterns with neat sketch. **07**
- Q.2** (a) What are the differences between jigs and fixtures? **03**
(b) Explain Lapping process in detail. **04**
(c) Explain CUPOLA furnace with neat sketch. **07**
- Q.3** (a) Write down difference between Hot Rolling & Cold Rolling. **03**
(b) List out different Locating methods and explain any one. **04**
(c) Explain Ultrasonic Machining process with neat sketch. **07**
- Q.4** (a) Explain Welding techniques. **03**
(b) Explain Forward & Backward Extrusion in brief. **04**
(c) Explain Laser Beam Machining process with neat sketch. **07**
- Q.5** (a) Write down uses of Flux in Welding. **03**
(b) Explain Punching & Blanking process. **04**
(c) Explain Submerged Arc Welding with its advantages, disadvantages and applications. **07**
- Q.6** (a) Classify Forging methods. **03**
(b) Explain principle of Location. **04**
(c) Explain different types of Drawing operations. **07**
- Q.7** (a) List out various types of tools used in Casting process. **03**
(b) Explain Spinning process. **04**
(c) Explain different types of Rolling mills used in Rolling process. **07**
- Q.8** (a) Differentiate between Die Electric fluid and Electrolyte fluid used in Advanced Manufacturing processes. **03**
(b) Write functions of Runner & Riser used in Casting **04**
(c) Explain various defects in Casting. **07**
