

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) - EXAMINATION – SUMMER 2017****Subject Code: 2150206****Date: 03/05/2017****Subject Name: Automotive manufacturing****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.

		MARKS
Q.1	Short Questions	14
	1 Define grinding.	
	2 Define application of forging.	
	3 What is cupola?	
	4 Explain any one application of Gas tungsten arc welding.	
	5 Define lapping.	
	6 What is swaging?	
	7 Why Die-casting is used in manufacturing?	
	8 Give full name of PAM.	
	9 Define powder coating.	
	10 Define the term milling.	
	11 What is use of jig and fixture?	
	12 Is burnishing a joining process?	
	13 What is the meaning of brazing?	
	14 Define buffing.	
Q.2	(a) Explain stretch forming.	03
	(b) Enlist drawing processes and describe any one.	04
	(c) Describe sheet metal cutting operations.	07
	OR	
	(c) Explain the chassis frame components with sketch.	07
Q.3	(a) Write a note on green sand moulding.	03
	(b) Enlist hot working processes and describe any one.	04
	(c) Describe about carbon dioxide moulding.	07
	OR	
Q.3	(a) Write any four casting design considerations.	03
	(b) Enlist types of jig post and brief any one of it.	04
	(c) Explain Difference between hot rolling and cold rolling.	07
Q.4	(a) Explain materials are used in manufacturing.	03
	(b) Explain TIG welding.	04
	(c) Explain about grinding fixtures.	07
	OR	
Q.4	(a) Write a note on electro-beam welding.	03
	(b) Explain shell moulding.	04
	(c) Explain plasma arc cutting process.	07
Q.5	(a) Write a note on core making.	03
	(b) Enlist casting defects and describe any one.	04
	(c) Explain centrifugal casting process.	07
	OR	

- Q.5** (a) Discuss elastic deformation of metal. **03**
(b) Which are the super finishing processes? Explain any one in brief. **04**
(c) Discuss about the use of ECG and USM. **07**
