

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-V (NEW) EXAMINATION – WINTER 2020

Subject Code:3152311

Date:22/01/2021

Subject Name:Instrumentation, Safety And Maintenance In Plastic Industry

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.

		MARKS
Q.1	(a) Define Plant. Describe concept of Plant Maintenance.	03
	(b) List types and function of maintenance Department.	04
	(c) List the types of Maintenance. Explain about Corrective and Predictive Maintenance.	07
Q.2	(a) Define Safety. What will be happened due to lack of safety ? What we have to do to improve safety?	03
	(b) List the types of safety and causes of fire.	04
	(c) Explain about Preventive Maintenance in detail.	07
Q.3	(a) Explain in brief about basic purpose of Instrumentation.	03
	(b) Define: Calibration, Accuracy, Precision and Drift	04
	(c) List types of Errors. Explain about it in detail.	07
Q.4	(a) Explain about Different Types of Pressure.	03
	(b) List about safety hazards in Plastic Industry.	04
	(c) List the different methods of Pressure measurement. Explain about U-tube Manometers in detail.	07
Q.5	(a) List the advantages and disadvantages of Manometer.	03
	(b) List advantages and disadvantages of strain gauge pressure transducers.	04
	(c) Explain about LVDT in detail.	07
Q.6	(a) Explain about safety in Injection Molding Process.	03
	(b) List about potential losses from accidents.	04
	(c) Explain construction and working of Thermocouple.	07
Q.7	(a) Define Wear. Explain about wear between screws and barrel.	03
	(b) List types of wear. Explain about it in detail.	04
	(c) Define corrosion .List and Explain the types of Corrosion	07
Q.8	(a) Define Lubricants and Lubrication. List types of Lubricants according to service.	03
	(b) List various function of Lubricants.	04
	(c) Explain about various properties of Lubricants.	07
