

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-VIII (NEW) EXAMINATION – WINTER 2020****Subject Code:2180207****Date:19/01/2021****Subject Name:Applied Industrial Engineering In Automobile****Time:02:00 PM TO 04:00 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) Define the objectives of Production Planning & Control. **03**
(b) What is Production? Write down the significance of assembly line balancing. **04**
(c) Define Productivity. How the Productivity of land, man, & material can be increased? **07**
- Q.2** (a) What are the criteria for selecting a job for work-study? **03**
(b) Explain the concept of sales forecasting. **04**
(c) List the various Therblings with their symbols. Explain application of Micro-Motion Study. **07**
- Q.3** (a) Difference between Quality assurance & Quality Control. **03**
(b) Define Continuous improvement strategies Kaizen. **04**
(c) Explain short note on i) TQM **07**
ii) Brain-Storming
- Q.4** (a) Define 5S technique regarding your workshop. **03**
(b) Explain Quality Circle & Quality Audit. **04**
(c) What is ISO ? Describe content & benefits of ISO- 14000. **07**
- Q.5** (a) Explain the concept of FMEA. **03**
(b) i) Define the terms : i) Failure Rate **04**
ii) Hazard Rate
iii) MTTR
iv) MTBF
(c) Describe Just in time concept along with advantages & disadvantages of JIT. **07**
- Q.6** (a) Explain EOQ Model. **03**
(b) What is meant by Sourcing & Which factors affect it? **04**
(c) Define Reliability .Discuss Failure rate analysis. **07**
- Q.7** (a) Explain the concept of POKAYOKE for Mistake – proofing. **03**
(b) Difference between CPM & PERT method **04**
(c) Describe in brief Kanban & Pull system & rules of it **07**
- Q.8** (a) Define Vogel approximation with suitable examples. **03**
(b) Explain the concept of bathtub curve. **04**
(c) What is Operation Research? Explain the Origin of Operation Research & application of it. **07**
