

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VIII (NEW) - EXAMINATION – SUMMER 2018**

**Subject Code: 2180207**

**Date: 30/04/2018**

**Subject Name: Applied Industrial Engineering in Automobile(Department Elective II)**

**Time: 10:30 AM to 01:00 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) Define : **03**
1. Production planning and Control.
  2. Sales Forecasting
  3. Scheduling.
- (b) Explain Batch production with suitable example **04**
- (c) Describe Work study for “Car manufacturing unit.” **07**
- Q.2** (a) Define work measurement techniques with advantages. **03**
- (b) Describe about therbligs along with their symbols **04**
- (c) Prepare small report regarding operation process chart and flow process chart. **07**
- OR**
- (c) Implement ‘Ishikawa diagram’ for any automobile problem. **07**
- Q.3** (a) Define: 1. Quality, 2. TQM and 3. Poka Yoke. **03**
- (b) Describe Scatter Diagram with suitable example. **04**
- (c) Classify Quality problem solving tools and describe Pareto Analysis with a neat sketch. **07**
- OR**
- Q.3** (a) Define 5’s Techniques regarding your workshop. **03**
- (b) Prepare report about ISO 9000 in Automobile. **04**
- (c) Describe six sigma concepts in your word. **07**
- Q.4** (a) Define: 1. Reliability 2. FMEA 3. MTTF **03**
- (b) Explain Quality circle along with objectives and functions. **04**
- (c) Describe about Taguchi Technique. **07**
- OR**
- Q.4** (a) Define: Economic Order Quantity (EOQ) with suitable example. **03**
- (b) Explain Supply Chain Management and Logistics. **04**
- (c) Describe Just in Time concept along with advantages and disadvantages of JIT. **07**
- Q.5** (a) Explain about Kaizen in brief. **03**
- (b) Write short note on Operation Research. **04**
- (c) Explain Critical Path Method (CPM) with suitable example. **07**
- OR**
- Q.5** (a) Define North west corner method in Transportation. **03**
- (b) Explain Micro motion and Macro motion Study. **04**
- (c) Prepare report on Cost of Quality. **07**

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