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Paper Id: 244202

Roll No: M. TECH.

# (SEM -II) THEORY EXAMINATION 2017-18

#### ADVANCED INDUSTRIAL ENGINEERING

Time: 3 Hours Total Marks: 70

**Note:** Attempt all Sections. If require any missing data; then choose suitably.

#### **SECTION-A**

#### 1. Attempt all the parts. Write answer of each part in short.

(7x2 = 14)

- a) What do you mean by productivity?
- **b)** Enlist the reasons for low productivity.
- c) Define work study.
- d) Define method and motion study.
- e) What is IFC?
- f) Define value engineering.
- g) Define system maintenance.

#### SECTION-B

# 2. Attempt any Three questions from this section:

(3x7 = 21)

- a) Define productivity. What are the different techniques to improve the productivity?
- b) Differentiate between Work measurement and method study.
- c) Write short notes on:
  - i. Value Engineering
  - ii. Phaseses of value engineering
- d) Discuss the objectives and design of facility layout.
- e) Discuss the prerequisites of an effective MIS.

# **SECTION-C**

#### 3. Attempt any One of the following:

(1x7 = 7)

- **a)** When can you use a quick way to assess productivity? What are the positive and negative sides?
- **b)** Write short notes on:
  - i. Gold's approach
  - ii. Quick productivity appraisal approach

# 4. Attempt any One of the following:

(1x7 = 7)

- a) Differentiate between work sampling and time study.
- b) Describe the classification of material handling equipments and explain each of them.

# 5. Attempt any One of the following:

(1x7 = 7)

- a) Explain briefly design layout technique.
- b) How system enginering is different from traditional engineering disicpline.

# 6. Attempt any One of the following:

(1x7 = 7)

- a) Explain system engineering principals.
- **b)** What is MIS? Explain its objectives and characteristics.

# 7. Attempt any One of the following:

(1x7 = 7)

- a) Discuss an organizational need for MIS in a company?
- b) What do you understand by System Life Cycle? State its different phases.