

Roll No.

24359

**B. Tech. (ME) 6th Semester
Examination – May, 2015**

INDUSTRIAL ENGINEERING

Paper : ME-312-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions in total, at least *one* question from each Section. Question No. 1 is *compulsory*. Each question carries equal marks.

1. Explain the following : **20**

- (a) Productivity
- (b) Standard Costing
- (c) Fixed and Variable cost

- (d) Marginal Costing
- (e) Stock out risk
- (f) Introduction to JIT
- (g) Concept of Quality
- (h) Objectives of PPC
- (i) Value Engineering
- (j) Gantt Chart

SECTION – A

2. (a) Define method study. Explain the various techniques of method study. 10
- (b) Discuss the various methods of work measurement in detail. 10
3. (a) What do you mean by the term "Financial incentives" and explain the various incentives payment schemes ? 10
- (b) Describe the various strategies for improving productivity in detail. 10

SECTION – B

4. (a) Discuss concept of material management function. What are the activities involved in material management ? 10
- (b) Explain the following : 10
- (i) ABC Analysis.
- (ii) SDE Analysis.
5. (a) Explain the direct, indirect and overhead costs in detail. 10
- (b) Explain the following : 10
- (i) Break even analysis.
- (ii) Recovery of overheads.

SECTION – C

6. (a) Explain the various approaches of quality and concept of quality assurance systems in detail. 10
- (b) What are X, R and C charts ? Explain the process control charts for variables. Also explain the theory of runs. 10
7. (a) Explain the objectives and variables of PPC and also describe the various means of measuring effectiveness of PPC. 10

- (b) Explain the objectives of forecasting and methods of forecasting in detail. 10

SECTION – D

8. (a) Explain the importance of MIS and role of MIS in decision making. 10
- (b) Explain the following : 10
- (i) Data flow diagram.
 - (ii) Organizational and information system structure.
9. (a) Explain the concept of 3Ss - Standardization, Simplification and Specialization. 10
- (b) Discuss the concept of value engineering and role of ergonomics in product design. 10
-