

Code No: 117EG

R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, November/December - 2017

MANAGEMENT SCIENCE
(Common to ECE, ETM, MMT)

Time: 3 Hours

Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(25 Marks)

1. Answer briefly in about 5 sentences each:
 - a) Hygiene factors theory. [2]
 - b) Cellular Organization Structure. [3]
 - c) Bin Card and Invoice. [2]
 - d) Product Mix Decision. [3]
 - e) Types of Internal Recruitment. [2]
 - f) CMM. [3]
 - g) Features of Network Analysis. [2]
 - h) PERT vs CPM. [3]
 - i) Strategic Deviation. [2]
 - j) Generic Strategies. [3]

PART-B

(50 Marks)

- 2.a) Give explanation on outcome of Elton Mayo Experiments
 - b) Explain line & Staff Organization structure and Functional Organization Structure. [5+5]
- OR**
- 3.a) What is formal and informal organization? Explain principles of Organization.
 - b) Explain roles and skills of a manager based on the levels of management. [5+5]
- 4.a) Explain marketing strategies for saturation and decline stages of PLC with examples.
 - b) Explain about BPR, JIT and Six Sigma. [5+5]
- OR**
- 5.a) Illustrate 14 Principles of Deming for Quality.
 - b) Describe product and process layout with examples. [5+5]
- 6.a) What is recruitment and selection? Explain various types of interviews with examples
 - b) Define training. Explain the types of the job training methods. [5+5]
- OR**
- 7.a) What is job evaluation? Explain various methods in Job evaluation.
 - b) Define compensation management. Explain various methods of wage payment. [5+5]

- 8.a) What is PERT? Explain its history and importance in Network Analysis.
 b) Find the duration of the project, Variance of Critical Path, Probability of completing the project in 30 days. [5+5]

| Activity | 1-2 | 1-3 | 2-4 | 2-5 | 3-4 | 3-6 | 4-7 | 5-7 | 6-7 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| $T_O(T_1)$ | 3 | 5 | 2 | 1 | 8 | 6 | 3 | 4 | 6 |
| $T_M(T_2)$ | 7 | 9 | 5 | 3 | 12 | 9 | 6 | 7 | 9 |
| $T_P(T_3)$ | 9 | 13 | 7 | 6 | 14 | 8 | 11 | 9 | 11 |

OR

- 9.a) Explain the procedure for measuring floats.
 b) The following table gives the activities of a construction project. Indirect cost is Rs.1300. Find the minimum duration of the project and the project cost associated. [5+5]

| Activity | Normal | | Crash | |
|----------|--------|------|-------|--------|
| | Time | Cost | Time | Cost |
| 1-2 | 9 | 8000 | 7 | 10000 |
| 1-3 | 5 | 5000 | 3 | 8000 |
| 2-3 | 7 | 7000 | 5 | 8600 |
| 2-4 | 8 | 6000 | 6 | 7000 |
| 3-4 | 6 | 9000 | 4 | 11,400 |

- 10.a) Define Corporate planning. Explain various types of plans in the corporate world.
 b) What is SWOT analysis? What is the significance of SWOT analysis for strengthening an organization? [5+5]
- OR
- 11.a) What is balanced score card? How it is useful for a company?
 b) Explain the concept of value chain analysis. [5+5]

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