Code No: 127EG

R15

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, November/December - 2018
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 the following in about 5 sentences each.
   a) Span of Control. [2]
   b) Patterns used in Departments. [3]
   c) Purchase Procedure. [2]
   d) Deming Principles to Quality. [3]
   e) VRS and VSS. [2]
   f) Job Enlargement vs Job Enrichment. [3]
   g) Gantt Chart. [2]
   h) Cost Slope. [3]
   i) Supporting activities in Value Chain. [2]
   j) Requisition for a good plan. [3]

PART-B

(50 Marks)

2.a) "Organizations are complex human strategies designed to achieve certain objectives". Discuss in detail.
   b) Explain matrix and functional organization structures with pros and cons. [5+5]

OR

3.a) Give brief explanation on CSR activities with 5 existing companies.
   b) Illustrate modern management principles. [5+5]

4.a) Define production and Production function. Explain methods of production.
   b) "Customer is centric of all marketing activities". Justify it with examples. [5+5]

OR

5.a) What is work study. Explain the concept of time study with techniques.
   b) Define channels of distribution. Give brief note on vertical, horizontal and hybrid channels of distribution. [5+5]

6.a) Define HRM and HRD. Explain the managerial functions of Human Resource Management.
   b) What do you understand by 'manpower planning'? Explain procedure for conducting manpower planning. [5+5]

OR

7.a) Define performance appraisal. Explain modern methods of performance appraisal in IT industry.
   b) What is Employee Grievance? Explain its procedure with a structural diagram. [5+5]

8.a) What do you mean by crashing the network? Explain the procedure of crashing?

b) A small engineering project consists of six activities. The three time estimates in number days for each activity are given below.

Activity	T_o	T_m	T_p
1-2	2	5	8
2-3	1	1	1
3-5	0	6	18
5-6	7	7	7
1-4	3	3	3
4-5	2	8	14

Find the following:

i) Calculate the values of expected time (t_e), and S.D variance (σ_t (v_i)) of each activity.

ii) Draw the network diagram and mark t_e on each activity.

iii) Calculate EST and LFT and mark them on the network diagram.

iv) Calculate total slack for each activity.

v) Identify the critical path and mark on the network diagram.

vi) Probability of completing project in 25 days.   [5+5]

OR

9.a) Explain different types of floats in Network analysis. How it is useful?

b) For the project given below crash activities by spending extra resources and then calculate optimum duration and optimum cost. Indirect cost is 70 per day.   [5+5]

Activity	Normal		Crash	
---	Time	Cost	Time	Cost
1-2	8	100	6	200
1-3	4	150	2	350
2-4	2	50	1	90
2-5	10	100	5	400
3-4	5	100	1	200
4-5	3	80	1	100

10.a) What is a strategy? How to formulate strategy and explain the procedure to implement the strategy?

b) What is environmental scanning? Explain how to do environmental scanning.   [5+5]

OR

11.a) What is bench marking? Explain that how it is useful. Give examples

b) What is corporate planning? Explain steps required to formulate a corporate plan. [5+5]

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