

**R15**

Code No: 128CR

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year II Semester Examinations, May - 2019****MANAGEMENT SCIENCE****(Common to CSE, IT)****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.a) What are the two factors referred to in Herzberg theory? [2]
- b) What are the five levels of need hierarchy? [3]
- c) What are the control charts for inspection by variable? [2]
- d) What are the elements of marketing mix? [3]
- e) Differentiate between transfer and separation. [2]
- f) How do you calculate labor turnover? [3]
- g) What is float? [2]
- h) What are dummy activities? [3]
- i) How would you conduct internal bench marking? [2]
- j) How would you define mission? [3]

**PART - B****(50 Marks)**

- 2.a) What is decentralization? What are its advantages?
- b) What is matrix organization structure? Under what conditions do you need that type of structure? What are its advantages? [5+5]

**OR**

3. Outline and explain briefly Fayol's principle of organization. [10]

- 4.a) Determine the EOQ and number of orders to be placed in year for an item given the following;  
Annual consumption of the item : 14400 units  
Inventory carrying cost : 3 percent of the average value of inventory per month.  
Price of the item : Rs 64 per unit.  
Ordering cost : Rs. 4900 per order.
- b) Bring out the differences between product lay out and process layout. [5+5]

**OR**

- 5.a) List out some of the store documents and explain them briefly.
- b) What are the stages in purchasing activity in the case of organizational buyers? [5+5]

- 6.a) What is promotion? What purpose does it serve to the organization?  
 b) What do you understand by factor comparison method of job evaluation? [5+5]

**OR**

- 7.a) What are the various functions of welfare management?  
 b) Is performance management system same as performance evaluation system? Explain. [5+5]

8. The following data pertains to a project network.

activity	Normal duration in weeks	Normal cost in Rs.	Crash duration in weeks	Crash cost in Rs.
1-2	4	10,000	3	18,500
1-3	8	6000	5	9500
2-3	6	10,000	4	14,000
2-4	9	15,000	7	22,000
3-4	5	8000	3	15,000

The indirect cost of the project is Rs. 4000 per week. Determine the optimum cost and the optimum duration of the project. Also draw the least cost network. [10]

**OR**

9. Draw a network diagram for the activities given below and determine the critical path.

activity	Description of the activity	Duration of the activity in months	Immediate predecessor activity
A	Design plant	12	--
B	Select size	8	A
C	Select vendor	4	A
D	Select personnel	3	A
E	Prepare site	12	B
F	Manufacture generator	18	C
G	Prepare operations manual	5	C
H	Install generator	4	E,F
I	Train operators	9	D,G
J	Obtain license	6	H,I

[10]

- 10.a) What is the importance of environmental scanning in strategic planning?  
 b) Write a brief note on Balanced Score Card. [5+5]

**OR**

- 11.a) What are generic strategies?  
 b) What is SWOT analysis? Explain its significance. [5+5]