Code: 9A21605

B.Tech III Year II Semester (R09) Supplementary Examinations May/June 2017

OPERATIONS MANAGEMENT

(Aeronautical Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

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1 (a) Enumerate the assumptions of McGregor's theory of 'X' and 'Y'.

 (b) Explain the social responsibility of management.

2 Compare and contrast the different types of organizational structures.

3 Explain the important factors influencing the planning of effective layout. The specifications for a product characteristic are 0.3027+0.008. The values given below are the last two figures of the dimensions reading that, 23 means 0.0323. Sample size is 5. A_2 = 0.577, D_3 = 0, D_4 = 2.114.

Sample No.	1	2	3	4	5	6	7	8	9	10
X	24	19	28	26	26	21	25	29	31	30
R	7	5	3	2	9	2	4	6	2	3
Sample No.	11	12	13	14	15	16	17	18	19	20
X	22	24	19	27	26	29	22	28	21	18
R	6	14	3	3	5	7	5	4	5	7

Compute the X and R – chart control limits and comment on the process.

4 (a) Explain the objectives of purchase department and different purchase systems.

 (b) Define marketing mix. Why is marketing mix an important determinant of the firm's success?

5 (a) Explain the importance of training and development of personnel.

 (b) What is meant by industrial disputes? What are its causes?

6 (a) What are the three time estimates in PERT?

 (b) The following table gives the activities in a construction project and other relevant information:

Activity i j	Normal time (days)	Crash time (days)	Normal Cost (Rs.)	Crash cost (Rs.)
1 2	20	17	600	720
1 3	25	25	200	200
2 3	10	8	300	440
2 4	12	6	400	700
3 4	5	2	300	420
4 5	10	5	300	600
4 6	5	3	600	900
5 7	10	5	500	800
6 7	8	3	400	700

 (i) Draw the activity network of the project.

 (ii) Find the total float and free float for each activity.

 (iii) Using the above information crash the activity step by step until all paths critical.

7 (a) Explain the necessity and objectives of SWOT analysis.

 (b) What is environmental scanning? Explain the role of management in environmental scanning.

8 (a) What are the different types of bench marking process?

 (b) Explain the factors that affect the value chain of a process.

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