Set No. 1

III B.Tech Supplimentary Examinations, Aug/Sep 2008
MANAGEMENT SCIENCE
(Common to Mechanical Engineering, Computer Science & Engineering,
Chemical Engineering, Information Technology, Metallurgy & Material
Technology, Electronics & Computer Engineering and Production
Engineering)

Time: 3 hours   Max Marks: 80
Answer any FIVE Questions
All Questions carry equal marks
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1. Explain the nature and features of management? [16]

2. (a) Explain and illustrate authority and responsibility. How do you relate and differentiate them?

   (b) Explain how do you resolve the conflicts between line managers and staff managers? [8+8]

3. A printed circuit assembly shop owner decided to use control chart to monitor the number of defectives in all the boards assembled every day. The data from the last 12 inspections, in one shift is given in the following table. Which chart do you employ? Plot the appropriate chart with the control limits and interpret the results. [16]

Pc Number	1	2	3	4	5	6	7	8	9	10	10	12
No of defectives	4	3	6	9	6	7	12	9	14	8	2	1

4. (a) Explain the functions of materials manager?

   (b) How are the activities need coordination with other functional areas?

   [8+8]

5. Discuss in detail the objectives and functions of Human Resource Management?
   [16]

6. Explain how job evaluation can be carried out in an industrial setup. [16]

7. What is environmental scaning? Why is it carried out? [16]

8. For the particulars of project shown in the table below draw a PERT network, determine the critical path and the probability of completion of the project within

72 days. [16]

Activity	Time (days)		
	Optimistic time(t_o)	Most likely time(t_m)	Pessimistic time(t_p)
10-20	6	10	14
10-30	2	4	6
20-50	12	16	24
30-40	16	24	34
40-50	0	0	0
50-80	10	14	18
40-60	12	18	24
40-70	6	12	16
60-90	2	4	6
80-90	6	12	16
70-100	16	30	50
90-100	4	8	12

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1. (a) Explain the importance of management.

   (b) What are the challenges you have to face as a manager? Discuss.   [8+8]

2. Explain any four types of organization structure, with their suitability.   [16]

3. (a) What are the objectives of plant layout?

   (b) Explain the factors influencing plant layout.   [8+8]

4. (a) Explain the concept of 'Economic Order Quantity'.

   (b) Explain the variables that go into the determination of EOQ.

   (c) Show how the formula is derived.   [5+6+5]

5. Discuss in detail the objectives and functions of Human Resource Management?
      [16]

6. What do you understand by job evaluation? Explain in detail different methods of
   job evaluation.   [16]

7. (a) What do you understand by environmental scanning?

   (b) What is its importance?   [8+8]

8. Consider a project consisting of nine jobs with the following precedence relations
   and average time estimates.

Job	predecessor	time (days)
A	-	30
B	-	20
C	A,B	20
D	A,B	20
E	B	10
F	D,E	10
G	C,F	40
H	D,E	20
I	G,H	30

   Draw the project network; identify the critical path and total duration for the
   project.   [16]

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1. (a) Bring out the contrast between Theory X and Theory Y.

   (b) Do you find people of these traits around you? Illustrate.   [8+8]

2. What is matrix organization and what is uniqueness?   [16]

3. (a) What do you understand by product layout?

   (b) Analyse the advantages and disadvantages of product layout.

   (c) For what type of works they can be followed?   [6+6+4]

4. Discuss the role of purchases manager in formulation and implementations of business decisions.   [16]

5. "Human resource management in an organization is the most challenging function" Do you agree? Justify your answer.   [16]

6. What is the purpose of training? Explain how training can be imparted?
                                                                        [16]

7. How do you differentiate mission from vision and what is their importance to organization?   [16]

8. A small project consists of the following activities with the given time estimates.

| Project event- | Estimated duration in month | | |
successor event	Optimistic time (t_o)	Most likely time (t_m)	Pessimistic time (t_p)
1-2	2	2	14
1-3	2	8	14
1-4	4	4	16
2-5	2	2	2
3-5	4	10	28
4-6	4	10	16
5-6	6	12	30

   (a) Draw the network,

   (b) calculate the average expected time for each activity,

(c) calculate the earliest expected time and latest allowable time for each event, and

(d) determine the critical path considering project completion time of 36 months.
[4×4]

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Set No. 4

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Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
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1. (a) What is the need for designing an organization?

   (b) Is there any link between 'management' and 'organization'? Explain. [6+10]

2. (a) What is organizational chart?

   (b) What is importance in Preparing organisation chart

   (c) Give any Three different examples   [6+5+6]

3. (a) What do you understand by plant layout.

   (b) What is its importance?   [8+8]

4. (a) What are the factors that determine the choice of channels of distribution?

   (b) Why do manufacturers favour intermediaries.   [8+8]

5. Discuss in detail the objectives and functions of Human Resource Management?
                                                                        [16]

6. Explain the following concepts with appropriate examples.

   (a) Job description

   (b) Job specification

   (c) Job enrichment

   (d) Job requirement.   [4×4]

7. Identify the factors that are to be diagnosed in external and internal environment
   of a business organization.   [16]

8. Define the terms slack, float, EST, EFT, LFT, LST. Explain with an example of
   your choice.   [16]

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