Code No: 07A6HS02 **R07** **Set No. 2**

III B.Tech II Semester Examinations,December 2010
INDUSTRIAL MANAGEMENT
Common to Mechanical Engineering, Production Engineering, Automobile Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Discuss the utility of outline process chart in method study. Differentiate between outline process chart and flow process chart. [16]

2. (a) What is meant by acceptance plan? Discuss its advantages & Disadvantages.
   (b) Explain the uses of acceptance Sampling. [8+8]

3. Define Management. Explain its nature and significance. [16]

4. How many types of basic layouts are there for a facility? Briefly explain each type of them. [16]

5. List out various methods of job evaluation. Explain any two of them in detail. [16]

6. The following represents a project that should be scheduled using PERT:

Activity	Immediate Predecessors	Times(days)		
		Optimistic time	Most likely time	Pessimistic time
A	-	10	22	28
B	A	4	4	10
C	A	4	6	14
D	B	1	2	3
E	C	1	5	9
F	C, D	7	8	9
G	E, F	2	2	2

   (a) Draw the network diagram.
   (b) What is critical path & the expected project completion time?
   (c) What is the probability of completing this project within 35days? [16]

7. Ten items kept in inventory are listed below. Which items should be classified as 'A', 'B' and 'C'. What percentage of items is in each class? What percentage of total annual value is in each class? [16]

Item No.	1	2	3	4	5	6	7	8	9	10
Annual use	200	100	2000	400	6000	1200	120	2000	1000	80
Price(Rs)	40	360	0.2	20	0.04	0.8	100	0.7	1.00	400

8. (a) What are the essential features of an organization?
   (b) Explain the main components of organization. [8+8]

Code No: 07A6HS02 **R07** **Set No. 2**

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A6HS02 **R07** **Set No. 4**

III B.Tech II Semester Examinations,December 2010
INDUSTRIAL MANAGEMENT
Common to Mechanical Engineering, Production Engineering, Automobile Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Define allowance. Explain various types of allowances briefly.
   (b) Define standard time. Write its formula in case of time study. [8+8]
2. (a) Define variable. Explain it with example.
   (b) Explain various control charts for variables. [8+8]
3. Explain various considerations in a plant location problem. [16]
4. Discuss the significance and limitations of planning. [16]
5. (a) How do you classify inventories into A class, B class and C class items?
   (b) Mention the control procedures are to be exercised on A class, B class and C class items. [8+8]
6. A network consists of following activities with indicated duration in days:

Activity	Duration in days
10-20	15
10-30	20
10-60	5
20-50	15
30-50	10
30-40	15
40-60	16
50-60	12
40-50	5

   (a) Draw the CPM network.
   (b) Calculate project duration and identify critical path. [16]
7. (a) Explain various factors consider for decentralization.
   (b) Distinguish between delegation of authority and decentralization. [8+8]
8. Explain various functions of HRM. [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A6HS02 **R07** **Set No. 1**

III B.Tech II Semester Examinations,December 2010
INDUSTRIAL MANAGEMENT
Common to Mechanical Engineering, Production Engineering, Automobile Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Compare rural & urban sites for location of plant. [16]
2. (a) What is the purpose of dummy activities in network diagram?
   (b) Explain the following terms:
      i. Event
      ii. Activity
      iii. Earliest starting time
      iv. Latest starting time
      v. Earliest finishing time
      vi. Latest finishing time. [4+12]
3. (a) List out the objectives of method study.
   (b) Draw the outline process chart for the followings:
      i. Loading a job on machine &
      ii. Repairing a fan regulator. [8+8]
4. List out various bases of departmentation. Compare any two bases of departmentation. [16]
5. What do you understand by "Recruitment Policy" of an organization? Discuss the pre-requisites of a good recruitment policy. [16]
6. Draw and explain features of the following forms:
   (a) Purchase requisition
   (b) Quotation. [16]
7. A textile manufacturer wants to set up a control chart for irregularities per 100 square yards of carpet. The following data were collected from a sample of twenty 100 square yard pieces of carpet:

Sample	1	2	3	4	5	6	7	8	9	10
Irregularities	11	8	9	12	4	16	5	8	17	10
Sample	11	12	13	14	15	16	17	18	19	20
Irregularities	11	5	7	12	13	8	19	11	9	10

   (a) Using these data, set up a c-chart with Z=3

(b) Suppose that the next five samples had 15,18,12, 22 and 21 irregularities, what do you conclude? [16]

8. Explain the McGregors theory 'X' and theory 'Y'. [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A6HS02 **R07** **Set No. 3**

III B.Tech II Semester Examinations,December 2010
INDUSTRIAL MANAGEMENT
Common to Mechanical Engineering, Production Engineering, Automobile Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Explain and write advantages and disadvantages of job classification method. [16]
2. (a) Explain the procedure involved in carrying ABC analysis.
   (b) What are short comings of ABC classification? [8+8]
3. What is meant by the term management? Explain it's importance. [16]
4. Draw the network of the project with following situation:
   - P is prerequisite of S
   - Q is prerequisite of S and T
   - R is prerequisite of T
   - S and T are prerequisites of U. [16]
5. (a) "Critical examination is a motive force to develop a new method". Justify
   (b) What is man-machine chart ? How is it used to make a method analysis. [8+8]
6. (a) Explain the features, advantages & suitability of
      i. fixed position layout &
      ii. cellular layout.
   (b) Explain the importance of a travel chart in the design of plant layout. [8+8]
7. What are the causes of conflict between line and staff? What can be done to develop line and staff members into integrated team. [16]
8. (a) Enumerate the salient features of $\bar{X}$ and R charts.
   (b) The management of West Allies Industries is concerned about the production of a special metal screw used by several of the company's largest customers. The diameter of the screw is critical to the customer. Data from the five samples appear in the accompanying table. The sample size is 4. Is the process in statistical control or not? Find out it by constructing and R charts. [16]

Observation				
Sample Number	1	2	3	4
1	0.5014	0.5022	0.5009	0.5027
2	0.5021	0.5041	0.5024	0.5020
3	0.5018	0.5026	0.5035	0.5023
4	0.5008	0.5034	0.5024	0.5015
5	0.5041	0.5056	0.5034	0.5047

⋆ ⋆ ⋆ ⋆ ⋆