

**OPERATIONS MANAGEMENT**

(For students admitted in 2014 only)

Time: 3 hours

Max. Marks: 60

All questions carry equal marks

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**SECTION – A**

Answer the following: (05 X 10 = 50 Marks)

- 1 Explain the historical development of PDM.  
OR
- 2 What is CAD/CAM analysis?  
OR
- 3 What are the factors to be considered in location of facilities?  
OR
- 4 Explain different types of layouts of facilities.  
OR
- 5 Explain the methods of production control.  
OR
- 6 Find the optimal sequence, total elapsed time for processing the following seven jobs.

Job	A	B	C	D	E	F	G
Machine - 1	9	5	8	3	4	1	7
Machine - 2	2	4	10	5	6	11	6

- 7 Explain any two recording techniques in method study.  
OR
- 8 Discuss the control charts for variables and attributes.  
OR
- 9 What are the types of productivity? How is it important for production management?  
OR
- 10 Discuss the total productivity model.

**SECTION – B**

(Compulsory Question)

01 X 10 = 10 Marks

**11 Case study:**

The following data were collected from a process manufacturing power supplies. The variable of interest is weight (grams) of a pack, and  $n = 5$ . Draw the appropriate control chart for the following. (for  $n = 5$ ,  $A_2 = 0.577$ ,  $D_3 = 0$ ,  $D_4 = 2.114$ )

Sampling No.	$\bar{x}$	R	Sample No.	$\bar{x}$	R
1	1003	14	11	1005	14
2	1002	15	12	1003	12
3	1004	12	13	1002	13
4	1005	21	14	1005	14
5	1004	14	15	1004	15
6	1006	13	16	1005	13
7	1002	17	17	1006	15
8	1005	12	18	1002	12
9	1006	14	19	1005	14
10	1004	13	20	1003	12

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