

MANAGEMENT PROGRAMME

Term-End Examination

June, 2013

**MS-5 : MANAGEMENT OF MACHINES
AND MATERIALS**

Time : 3 hours

Maximum Marks : 100

(Weightage 70%)

Note : Answer any four questions. All questions carry equal marks.

1. (a) Elaborate your understanding regarding the classification of decision in the area of Production and Operation management.
(b) Discuss the process of systematic layout planning.
2. (a) Define Job Design. Explain the various issues need to be considered while designing the job.
(b) The task of a worker has been broken into three elements A, B and C. Four cycles of the work are timed and observations are given below. The organisation has a policy to permit 15% time allowances for all contingencies. Determine the standard time for the task. Also determine the standard output everyday if that department is working in two shifts of 8 hours each.

Observed Cycle Time in Minutes					
Job Elements	1	2	3	4	Rating
A	3	4	5	4	105
B	0.5	0.4	0.3	0.5	95
C	2	2	1	2	95

3. (a) What are the various types of maintenance systems ? How you measure the performance of maintenance department ?
- (b) Discuss aggregate production planning in details.
4. (a) What do you mean by Value Engineering and Analysis ? Discuss Job Plan method of VE and VA.
- (b) The suitings for men are manufactured in big rolls. OMC cloth mill wants to monitor the quality of its rolls. Twenty rolls were inspected of random and the results are as follows :

Roll No :	1	2	3	4	5	6	7	8	9	10
No. of defects :	12	8	5	7	14	9	10	11	8	6
Roll No :	11	12	13	14	15	16	17	18	19	20
No. of defects :	15	10	12	13	9	8	7	12	12	12

Draw a suitable control chart for this process and indicate whether the process is under control or not.

5. (a) Define Wastivity and Productivity. Explain taxonomy of wastes.
- (b) Explain in details about codification, standardisation and variety reduction.
6. Write short notes on *any three* of the following :
- (a) Assembly Line Balancing
- (b) Material Requirement Planning
- (c) Acceptance Sampling
- (d) Capacity Planning
- (e) Tero - technology
-