

**M.Sc. FOOTWEAR TECHNOLOGY
(MSCFWT)**

Term-End Examination

00450

December, 2017

**MFW-033 : PRODUCTIVITY AND PRODUCTION AND
OPERATION MANAGEMENT**

Time : 3 hours

Maximum Marks : 70

Note : Answer any seven questions. All questions carry equal marks. Use of scientific calculator is permitted.

1. Define the term Productivity. What are the different forms of productivity ? Explain the concept of each type of productivity and factors which influence productivity. 10
2. Define Forecasting. Discuss any two forecasting methods of your choice. 10
3. Discuss the functions of production planning and control in a manufacturing organisation. 10

4. Explain the procedure for time study and method study for calculation of standard time for a machine operator. 10
5. Can a plant layout principle be applied for forming a layout of an office ? What criteria would you use in designing such a layout ? Discuss. 10
6. What do you understand by plant location decisions ? What are the factors that influence the selection of location for any plant ? 10
7. The activity details and their predecessors are given below along with their activity times. Construct the network diagram and find the critical path. 10

Activity	Predecessor	Activity time (weeks)
A	—	4
B	A	3
C	A	2
D	B	5
E	B	3
F	C, D	4
G	E, F	3

8. "Production is a value addition process." Explain with an example. Distinguish between 'Make to Stock' and 'Make to Order' production systems. 10

9. What is Work Sampling ? Explain briefly the steps in work sampling study. What are its merits and limitations ? 10
10. Write short notes on any *five* of the following : 5×2=10
- (a) Flexible Manufacturing Systems (FMS)
 - (b) Industrial Robot
 - (c) Job Design
 - (d) Delphi Method
 - (e) PERT
 - (f) Batch Production
 - (g) Critical Path Method (CPM)
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