

MANAGEMENT PROGRAMME

Term-End Examination

June, 2011

**MS-53 : PRODUCTION/OPERATIONS
MANAGEMENT**

Time : 3 hours

Maximum Marks : 100

(Weightage 70%)

Note : *Attempt any five questions. All questions carry equal marks. Assume any missing data suitably.*

1. (a) Draw a systems view diagram of any service organization of your choice. Identify its various components. Explain its interdisciplinary nature. **10**
- (b) What are the major characteristics of a Production systems ? Discuss some of its upcoming issues that provide economies in production and efficiency in the performance of the system. **10**
2. (a) Explain with examples, how the TQM concept can integrate design engineering, manufacturing and service. **10**
- (b) What are process capability studies ? Explain the process capability index with applications to a real life example. **10**

3. (a) Compare traditional process planning with Computer Aided Process Planning (CAPP). Also explain a generative CAPP system. **10**
- (b) Explain the objectives of Total Productive maintenance. Give its importance. Also comment on the concept of TPM promotion. **10**
4. (a) Why is forecasting required in operations management ? Discuss the concept of forecast error as applied to different conditions. **10**
- (b) How are quantitative models of forecasting different from qualitative models ? Discuss in detail time-series model as used for forecasting. **10**
5. (a) What is facility planning ? Explain with examples different types of layouts as used in manufacturing organisations. **10**
- (b) Discuss work measurement as a process to establish task time. Explain the various techniques for developing time standards. **10**
6. (a) Explain just in time manufacturing with the help of examples. Discuss its advantages and disadvantages. **10**

(b) For an independent demand inventory model, derive the equation for Economic Order Quantity. List all assumptions. **10**

7. Write short notes on *any four* of the following : **4x5=20**

- (a) OPT
 - (b) Break even analysis
 - (c) Lean manufacturing
 - (d) Kanban system
 - (e) Line of Balance for Production Control
 - (f) Purpose of aggregate plans.
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