

01002

**MANAGEMENT PROGRAMME**

**Term-End Examination**

**June, 2016**

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

*Time : 3 hours*

*Maximum Marks : 100*

*(Weightage 70%)*

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- Note :** (i) *Answer any four questions.*  
(ii) *All questions carry equal marks.*
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1. (a) Define production and operations management. Draw a conceptual model of production and operations management and explain the various terms used in the model.  
(b) Why it is more difficult to increase productivity of a service system as compared to a production system ?
2. (a) What do you understand by Production, Planning and Control (PPC) ? Describe the various objectives of PPC briefly.  
(b) Discuss with suitable examples the process of launching a new product in the market.
3. (a) Critically examine the following statement : "Value Engineering is more of a human relation, team building and motivation program than anything else."

- (b) Identify a product in your day to day life and discuss reasons for poor value in it.
4. (a) What is the fundamental difference between the use of acceptance sampling plans and process charts ? Explain briefly.
- (b) Processing time (in minutes) of six jobs on two machines are given below. All six jobs must go through A and B in that sequence, A first, then B. Determine the optimal order in which the job should be sequenced through, by using these times. Also find out the minimum time to complete all the jobs on two machines and the idle time on each machine.
- |         |                |                |                |                |                |                |
|---------|----------------|----------------|----------------|----------------|----------------|----------------|
| Job :   | J <sub>1</sub> | J <sub>2</sub> | J <sub>3</sub> | J <sub>4</sub> | J <sub>5</sub> | J <sub>6</sub> |
| M/c A : | 4              | 6              | 7              | 8              | 9              | 1              |
| M/c B : | 5              | 8              | 1              | 3              | 6              | 10             |
5. (a) Poor maintenance of plant and machinery leads to various losses in industry. What are these losses ? Explain each of these losses in short.
- (b) "Prevention is better than cure." How you will support the statement in preventive maintenance ? Discuss with suitable examples.
6. (a) What are the reasons for classification, codification and standardization of materials ?
- (b) Differentiate between wastivity and productivity. Explain whether reducing wastivity and increasing productivity imply one and the same thing.