MANAGEMENT PROGRAMME

Term-End Examination

December, 2013

MS-5 : MANAGEMENT OF MACHINES AND MATERIALS

04472

Time : 3 hours   Maximum Marks : 100

(Weightage 70%)

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

1. (a)   Explain the concept of systems life cycle for
          production and operations management.

    (b)   What are the objectives and advantages of
          good plant layout? Also explain the basic
          types of flow pattern preffered in any plant.

2. (a)   Define capacity. How do you measure the
          capacity in manufacturing and service
          systems. Explain briefly the process for
          capacity planning.

    (b)   Define work study. Explain the various
          techniques of work measurement.

3. (a)   Distinguish between mass and batch
          production. Discuss the problems and
          prospects of batch production.

(b) The data relavant to a construction work is given below :
(i) Draw the project network.
(ii) Identify the critical path.

Activity :	A	B	C	D	E	F	G	H	I	J	K	L
Preceding Activity :	-	A	B	C	B	E	B	G	B	I	J, H, F	K
Duration in Weeks :	1	6	3	1	6	2	5	1	2	10	4	1

(iii) Calculate the minimum construction time.

(iv) Calculate the total float in the network.

4. (a) What is the fundamental difference between the acceptance sampling and process control ? Discuss the Operating characteristics curve.

(b) What are the objectives of purchasing function ? Discuss the basic characteristics of computerized purchasing system.

5. (a) Explain the role of codification and standardization in inventory control and variety reduction.

(b) A Contractor has to supply 20000units per day. He can produce 30000units per day. The cost of holding a unit in stock is Rs. 3/- per year. The set up cost is Rs. 50/-. How frequently and what size of production must be planned ?

6. Write short notes on **any three** of the following :
(a) Waste Management
(b) Maintenance Management
(c) Value Engineering and Analysis
(d) Computerized Layout Planning
(e) Aggregate Production Planning