B. Tech.

(SEM. VI) EXAMINATION, 2006-07

PRODUCTION PLANNING & CONTROL

Time : 3 Hours]  [Total Marks : 100

Note : Attempt all the questions. Answers should be brief and scientific. Assume any missing data, if required.

1. Answer any four of the following : 20

i. Classify and briefly explain the production system.

ii. Define the term ‘production planning and control’. State its objectives.

iii. State the objective of :

a) short term forecasting

b) long-term forecasting

iv. Describe the factors which are responsible for replacing the equipment although it may be running.

v. Explain the following methods of equipment replacement :

a) Total life average method.

b) Rate of return method.

vi. Explain the important factors to be considered while locating factory site.
2 Answer any **three** of the following:
   i. Write short notes on MRP.
   ii. What is scheduling? How does it differ from loading? State the objectives of scheduling.
   iii. State the various activities of dispatching in brief. Differentiate between centralized dispatching and dis-centralised dispatching.
   iv. Discuss various methods of material selection for a product.

3 Answer any **three** of the following:
   i. With the help of a neat diagram explain the following term:
      a) Order quantity
      b) Lead time
      c) Safety stock
      c) Re-order point.
   ii. What is economic lot size? Derive the formulae for determining economic lot size. Also derive optimum lot size to be manufactured.
   iii. Describe briefly ABC analysis with suitable example of inventory control.
   iv. Write short notes on JIT.

4 Answer any **three** of the following:
   i. Define the meaning of quality. Describe various types of control charts.
   ii. Explain how TQM can be ensured. Also explain TQM operation in brief.
   iii. Describe briefly:-
      a. Control charts for variables
      b. Control charts for attributes
iv. Write short notes on:
   a. Value engineering
   b. Acceptance quality level.

5 Answer any three of the following: 20
i. Differentiate between PERT and CPM
ii. Importance of concurrent engineering
iii. Difference between MRP and MRP2.
iv. Concept of Re-engineering.