

B.TECH SEM – VI (2007 COURSE) (PRODUCTION ENGG.) :
WINTER - 2017

SUBJECT : PRODUCTION PLANNING & CONTROL

Day : **Friday**
Date : **24/11/2017**

Time : **10.00 AM TO 01.00 PM**
Max. Marks : **80**

W-2017-2532

N.B.:

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of the remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.
- 4) Use of non programmable **CALCULATOR** is allowed.
- 5) Assume suitable data if necessary.

SECTION – I

Q.1 a) Explain the product life cycle with importance of each stage. **[05]**

b) What is sales forecasting? State its importance in Production Planning and Control. **[05]**

c) What is the use of process sheet in production planning and control? **[04]**

Q.2 a) Describe production planning and control is an integrated function. **[07]**

b) Compare Job Production, Batch Production and Mass Production. **[06]**

Q.3 a) Explain the moving average sales forecasting method in detail. **[06]**

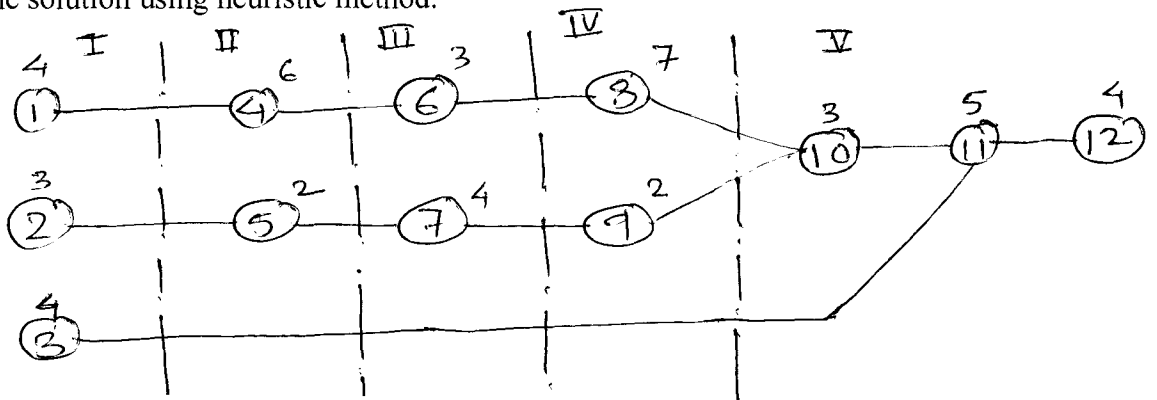
b) The sales of ABC company in months is as below: **[07]**

Month	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct
Actual sales No.)	6031	5363	5919	5747	5920	7537	10,045	8227	7500	9000

- i) Assuming smoothing factor 0.5 calculate exponentially weighted moving forecast for the month of November.
- ii) If the actual sales during month of November is 8000 units. What shall be the forecast for the month of December?

Q.4 a) Describe the method of sequencing and scheduling with its merits and applications. **[06]**

b) For the following precedence diagram, carry out the line balancing and improve the solution using heuristic method. **[07]**



P.T.O.

SECTION – II

- Q.5** a) What are the objectives of MRP and MRP – II? [05]
- b) Describe vendor development with its merits and demerits. [05]
- c) What are the advantages and limitations of computer aided production planning and control? [04]
- Q.6** a) Describe capacity requirement planning with its importance in production planning and control. [07]
- b) What is the use of Bill of Materials? [06]
- Q.7** a) Explain the concept of JIT with its merits and applications. [06]
- b) An item is produced at the rate of 128 units per day. The annual demand is 6400 units. The set up cost for production run is Rs. 24 and inventory carrying cost is Rs. 3 per unit year. There are 250 working days for production each year. Develop on Inventory Policy for this item. [07]
- Q.8** a) Describe Computer Aided Production Planning for machine capacity. [07]
- b) Explain the use Computer Aided Production Planning for scheduling technique. [06]

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