USN | | | | | | | | | | | 18MAR322

Third Semester M.Tech. Degree Examination, Jan./Feb. 2021
Production Planning and Control

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a. Explain the objectives of PPC.   **(10 Marks)**
   b. Explain the types of Production system.   **(10 Marks)**

OR

2   a. Explain the functions of PPC.   **(10 Marks)**
   b. Explain the different stages of product design.   **(10 Marks)**

Module-2

3   a. Explain the objectives of work study.   **(08 Marks)**
   b. Explain important aspects to be considered for selection of job in method study.   **(06 Marks)**
   c. Mention the needs of flow charts.   **(06 Marks)**

OR

4   a. Explain method of study symbols.   **(10 Marks)**
   b. Explain the objectives of Time study.   **(10 Marks)**

Module-3

5   a. Explain the methods of Forecasting.   **(10 Marks)**
   b. Using the data given in table below, and by linear regression analysis forecast for month of Jan and Feb. Next year.

Month	J	F	M	A	Ma	Ju	Jul	Aug	S	O	N	D
Sales in 1000's	250	210	223	270	245	261	212	212	246	252	261	224

     (10 Marks)

OR

6   a. Explain Seasonal Indices.   **(10 Marks)**
   b. Mention the advantages and disadvantages of Simple moving average.   **(06 Marks)**
   c. A food processing company uses a moving average to forecast next month's demand past actual demand (in units) is shown in table.

Month	43	44	45	46	47	48	49	50	51
Actual demand	105	106	110	110	114	121	130	128	137

   i) Compute a simple 5 month moving average to forecast demand for month 52.
   ii) Compute a weighted 3 month moving where the weights are highest for the latest months and descend in order 3.2.1.   **(06 Marks)**

Module-4

7 a. Explain the following terminology :
    i) MRP   ii) Dependent demand   iii) Bill of materials
    iv) Lot size   v) Scheduled receipt. **(10 Marks)**
    b. Explain the objectives of JIT. **(10 Marks)**

OR

8 a. With structure and benefits, explain MRP II. **(10 Marks)**
    b. Explain Supply Chain Management. **(10 Marks)**

Module-5

9 a. Explain the objectives of Inventory control. **(06 Marks)**
    b. Explain the need of Inventory control. **(06 Marks)**
    c. Explain ABC analysis. **(08 Marks)**

OR

10 a. Explain EOQ. **(08 Marks)**
    b. Explain two bin systems. **(08 Marks)**
    c. List the benefits of ERP. **(04 Marks)**

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