BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)
B.Tech.Sem - VII MECHANICAL : WINTER- 2022
SUBJECT : PRODUCTION PLANNING & CONTROL

Day : Thursday | Time : 02:30 PM-05:30 PM

Date : 15-12-2022 | **W-17934-2022** | Max. Marks : 60

N. B. :

1) All questions are **COMPULSORY.**
2) Figures to the right indicate **FULL** marks.
3) Draw neat and labelled diagrams **WHEREVER** necessary.
4) Assume suitable data, if necessary.

Q. 1 What are the functions of PPC? State importance of each. **(10)**

OR

What do you mean by preplanning, planning and control? State its benefits. **(10)**

Q. 2 What are the types of forecasting methods? State its use in PPC. **(10)**

OR

The Sales of XYZ industry in months is as below: **(10)**

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Actual Sales	6031	5363	5919	5747	5920	7537	10045	8227	7500	9000

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

Q. 3 Explain the process of sequencing and scheduling with its benefits in mass production. **(10)**

OR

Draw the precedence diagram. Assign the work elements to work stations and calculate line efficiency and balance delay **(10)**

Work element	Number of Precedence	Tj
1	–	4
2	–	3
3	1	3
4	1	5
5	4	3
6	5	4

Q. 4 **a)** What is the scope and requirement of MRP? **(05)**

b) What do you mean by make or Buy decision? **(05)**

OR

Explain Master production schedule with its benefits and limitations. **(10)**

P. T. O.

Q. 5 a) What are the different types of inventories? **(05)**

b) What is the importance of store layout in PPC? **(05)**

OR

A manufacturing company requires 9000 units per year, ordering cost is Rs. 120 per order and carrying cost is 20 %. Purchase price per unit is Rs. 50, determine: **(10)**

i) EOQ

ii) Optimum number of orders

iii) Total cost including acquisition of material

Q. 6 Describe the computer aided production planning and control applied to machine capacity planning and utilization. **(10)**

OR

Describe the CAPP and control applied to productivity measurement. **(10)**

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