

B.Tech. SEM -IV Production 2014 Course (CBCS) : WINTER - 2018

SUBJECT-PRODUCTION PLANNING AND CONTROL

Day: Saturday
Date: 17/11/2018

W-2018-2366

Time: 02.30 PM TO 05.30 PM
Max. Marks:60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data if necessary.

Q.1 What do you mean by preplanning, planning and control? **(10)**

OR

Q.1 What are the different stages of PPC? State merits & demerits of each. **(10)**

Q.2 List the different types of sales forecasting methods compare these with their working limitation benefits and applications. **(10)**

OR

Q.2 The sales Gurudatta Industries in months is as below **(10)**

Month	Jan	Feb	Mar	April	May	June	July	Aug.	Sept.	Oct.
Actual Sales	6031	5363	5919	5747	5920	7537	10,045	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 month of November is 8000 units. What shall be the forecast for the month of December?

Q.3 Describe the sequencing and scheduling with its working (Analytical), Normal's, limitations and applications. **(10)**

OR

Q.3 A component can be manufactured on machine or machine B for which cost and time inform is given below. **(10)**

Particulars	Machine A	Machine B
Set up time	20 minutes	60 minutes
Processing time	10 minutes	5 minutes
Tooling cost (Rs)	300	500
Labor cost/hour	Rs.2	Rs.2
Depreciation and Other cost per hours	Rs.10	Rs.20

The requirements are to be met in 4 lots. Tooling lots are to be recovered within a year. There is no repeat order.

- i) Calculate the quantity at which both the alternatives have same cost.
- ii) Give the decision regarding machine.

Q.4 Describe the use of bill of material (BOM) in materials planning with specific example of number of parts number of materials no of subassembly and no of finished product. **(10)**

OR

Q.4 What is vendor merit rating and vendors development? State its merits and demerits in manufacturing industries. **(10)**

P.T.O.

- Q.5** a) Define cost of inventory and different types of cost associated with it. (05)
b) Explain inventory- cost relationship with graph. (05)

OR

- Q.5** An item is produced at the rate of 50 items per day. The demand occurs at the rate of 25 items per day. If the set up cost is Rs.100 and holding cost is Rs. 0.01 per unit per item, find the economic lot size for the run assuming that the shortages are not permitted .Find the cycle time. (10)

- Q.6** Describe computer aided process planning applied to productivity measurements. (10)

OR

- Q.6** Explain CAPP applied to machine capacity planning and utilization. (10)

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