

Roll No. :

Total No. of Questions : 7]

[Total No. of Printed Pages : 3

E-294

B.B.A. (Part-II) Examination, 2023 PRODUCTION AND OPERATIONS MANAGEMENT

Paper - BBA-205

Time : 3 Hours]

[Maximum Marks : 70

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five. Each question has internal choice (Answer limit **500** words). Each question carries **10** marks.

Section-C

(Marks : 20 × 1 = 20)

Note :- One question based on case study is compulsory and carries **20** marks.

Section-A

1. (i) What is fixed position layout ?
- (ii) What is hybrid layout ?
- (iii) Explain Master Production Schedule.
- (iv) Explain aggregate planning.

BRI-435

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E-294 P.T.O.

- (v) What is caritical path in CPM ?
- (vi) What is crashing in project management ?
- (vii) Explain breakdown maintenance.
- (viii) Explain preventive maintenance.
- (ix) Explain concept of work sampling.
- (x) Explain Therbligs.

Section–B

2. What are qualitative techniques of forecasting? Explain Delphi and Nominal Group Technique in detail, taking suitable examples where needed.
3. Consider the following assembly network relationships of a product. Company aims to produce 40 units of the product in an 8-hour day. Group the task into workstations using Rank Positional Weight Method and compute Line Balancing efficiency.

Task	1	2	3	4	5	6	7	8	9	10	11
Predecessor	–	1	1	1	2, 3	3, 4	5	5, 6	4, 6	7, 8, 9	10
Duration in Minutes	7	2	2	5	8	2	4	7	9	8	1

4. Construct a network and determine critical path, floats and slacks for the following :

Activity	A	B	C	D	E	F	G
Immediate Predecessor	–	–	A	A	B	C	D, E
Duration (in days)	4	8	9	3	7	2	6

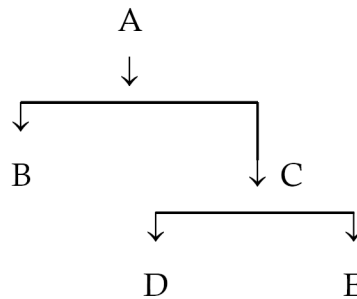
5. Discuss shortage, carrying and ordering cost related to inventory management. Explain their relevance with the help of examples of each.

6. A job consists of four work elements. An analyst conducted work sampling to determine the standard time for this job. Each shift has 420 minutes of effective time. The details of observations are summarized in the following table. Total number of acceptable units produced during the study period is 210 units. Determine the standard time for one unit by assuming allowance of 12% on standard time.

Work number element	Frequency of Performance	Performance Rating
1	30	90%
2	70	150%
3	60	100%
4	80	115%

Section-C

7. Prepare an MRP for the following product structure :



Item	No. of Units Required	Stock on hand	Lead Time	Order Size
A	1	200	2	350
B	2	800	1	900
C	1	375	1	400
D	2	500	1	750
E	1	425	2	400

Week	1	2	3	4	5	6	7	8
Demand	200	–	100	175	300	200	–	250