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(May/June)

BUSINESS ADMINISTRATION

(Honours)

(Production and Operations Management)

(BBAC–402)

(For the students of 2018 batch and onwards)

Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. *(a)* What are the objectives and scope of Production and Operations Management?   7

   (b) Distinguish between product and process layout.   8

     (Turn Over)

Or

(a) Describe various factors that are important in a location of facility decision. 7

(b) How is a vendor selected out of many competing vendors? 8

2. *A* Ltd. purchases a certain component from *B* Ltd. The price schedule quoted by *B* Ltd. is as under :

No. of units bought at a time	Price per unit ₹
1 to 99	50
100 to 499	45
500 and above	40

A Ltd. estimates its annual requirement of the item at 2000 units. The ordering cost is ₹ 25 per order and the inventory carrying cost is charged at 30% of the price.

What is the optimal order quantity that *A* Ltd. should order from *B* Ltd.? 15

Or

(a) Write short notes on the following : 4+4=8

(i) Safety stock

(ii) ABC analysis

(b) Write a note on Materials Requirement Planning. 7

3. (a) What do you mean by production planning? Describe different steps to be followed in production planning. 8

(b) What is Assembly Line Balancing? State its advantages. 7

Or

(a) What is sequencing? How is it different from scheduling? What are its objectives? 2+3+3=8

(b) Write a note on Johnson's rule. Can it be used for *n* number of jobs passing through more than 3 work centres? 7

4. What is supply chain management? What are the key concepts in supply chain management? Discuss the importance of supply chain management. 4+5+6=15

Or

A company has factories at *A*, *B* and *C* which supply to warehouses at *D*, *E*, *F* and *G*.

Monthly capacities of the factories are :

A—30 units; *B*—45 units; *C*—55 units

Monthly demands at the warehouses are :

D—40 units; *E*—30 units; *F*—10 units, *G*—50 units

The shipping cost in ₹ per unit from factories to warehouses is as given below :

Warehouse → Factories ↓	D	E	F	G
A	5	8	5	10
B	7	6	5	8
C	10	12	20	5

Using Vogel's approximation method, you are required to find an optimal shipping plan for the company. **15**

5. (a) Discuss the scope and benefits of Total Quality Management (TQM) for an organization. **9**

   (b) Write a short note on Six Sigma. **6**

   Or

   (a) How is method study different from time study? **9**

   (b) Write short notes on ergonomics and work sampling. **3+3=6**

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