

Exam. Code : 105404
Subject Code : 1381

Bachelor in Business Administration 4th Semester
PRODUCTION AND OPERATIONS
MANAGEMENT
Paper : BBA-404

Time Allowed—Two Hours] [Maximum Marks—50

Note :—There are **EIGHT** questions of equal marks.
Candidates are required to attempt any **FOUR** questions.

1. A project manager is required to implement the following project :

Activity	Optimistic time (in days)	Most Likely time (in days)	Pessimistic time (in days)
1–2	4	8	12
2–3	1	4	7
2–4	8	12	16
3–5	3	5	7
4–5	0	0	0
4–6	3	6	9
5–7	3	6	9
5–8	4	6	8
7–9	4	8	12
8–9	2	5	8
9–10	4	10	16
6–10	4	6	8

- (i) Determine the critical path.
 - (ii) If a 42 days deadline is imposed, what is the probability of completing the project within that time ?
 - (iii) If a project manager wants to be 99% sure to complete the project on the scheduled date, how many days before that date should he begin the project work ?
2. Write short notes on the following :
- (a) Various factors affecting make or buy decision.
 - (b) Difference between PERT and CPM.
3. Outline various factors which can affect productivity in your business.
4. What is work measurement ? What are its objectives ? Briefly explain various techniques of work measurement.
5. A company uses annually 42000 units of an item. Cost per unit is Rs. 2. Each order costs Rs. 42 and inventory carrying cost is 15% p.a. of inventory value.
- (a) Find E.O.Q.
 - (b) If the procurement time is 10 days and safety stock is 400 units, find reorder level, maximum, minimum and average inventory.

6. Write short notes on the following :—
- (a) ABC classification of inventory.
 - (b) Carrying and ordering costs of inventory with examples.
7. What are the various components of supply chain management ?
8. 'TQM is combination of various principles which are aimed to establish and deliver higher customer value'. Explain the statement while outlining these variables.