

Dr. Babasaheb Ambedkar Open University
Term End Examination July-2026

Course : Diploma Course
Subject Code : DOR-03
Subject Name : PERT & CPM

Date : 08/07/2026
Time : 11:30am to 01:45pm
Duration : 02.15 Hours
Max. Marks : 70

Q-1 Explain the meaning and objectives of PERT and CPM. **14**

OR

Discuss the differences between PERT and CPM in detail.

Q-2 The following table gives data on normal time, and expense and crash time and expense for a project of Kupa Ltd. **14**

Activity	Normal Time(weeks)	Normal Expense (Rs.)	Crash Time(weeks)	Crash Expense(Rs.)
1-2	3	300	2	400
2-3	3	30	3	30
2-4	7	420	5	580
2-5	9	720	7	810
3-5	5	250	4	300
4-5	0	0	0	0
5-6	6	320	4	410
6-7	4	400	3	470
6-8	13	780	10	900
7-8	10	1000	9	1200

Indirect expense is Rs. 50 per week.

- Draw the network and identify the critical path with a double line.
- What are the normal project duration and associated expense?
- Find out the total float associated with each activity.
- Crash the relevant activities systematically and determine the optimal project completion time and expense.

OR

What is Critical Path? Explain the method of finding the Critical Path.

Q-3 Discuss advantages and limitations of PERT and CPM techniques. **14**

OR

Explain project scheduling and project control under CPM.

Q-4 Describe event, activity and dummy activity with examples. **14**

OR

Explain time estimation in PERT with suitable formula and examples.

Q-5 (A) Short notes (Any three) **09**

- Earliest Event Time
- Backward Pass Method
- Slack of an Activity and Event
- Resource Smoothing
- Project Crashing

(B) Choose the correct option for the questions given below and write the answer. **05**

- PERT stands for:
 - Project Evaluation and Review Technique
 - Program Evaluation and Review Technique
 - Project Estimation and Review Technique
 - Program Execution and Reporting Technique

2. PERT is mainly used for:
(A) Repetitive projects (B) Research and development projects
(C) Production only (D) Marketing activities
3. The longest path in a network diagram is called:
(A) Dummy Path (B) Short Path (C) Critical Path (D) Event Path
4. A dummy activity is represented by:
(A) Solid line (B) Circle (C) Dotted line (D) Triangle
5. In network diagrams, circles generally represent:
(A) Activity (B) Event (C) Cost (D) Profit
