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Code : 20PM01T

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II Semester Diploma Examination, February/March-2023

PROJECT MANAGEMENT SKILLS

Time : 3 Hours]

[Max. Marks : 100

Instruction : (i) Answer any **one** full questions from each Section – I, II, III, IV and V.

(ii) Each full question carries **20** marks.

SECTION – I

1. (a) Define a Project. Mention any three examples for projects you seen.   5

    (b) List any five characteristics of a project.   5

    (c) Explain the different types of projects.   5

    (d) Give an outline about different sectors where project opportunities are available as a Project Manager / Project Consultant.   5

2. (a) List the benefits of project design stage in execution of projects.   5

    (b) Explain generalized Work Breakdown Structure (WBS) with a neat sketch.   6

    (c) Mention any four advantages of effective project team.   4

    (d) Prepare a list of project resources needed for construction of residential building.   5

SECTION – II

3. (a) Collect the prerequisites for any successful project implementation.   5

    (b) Explain Project Execution Plan (PEP).   5

    (c) Prepare a detailed Work Breakdown Structure for conducting college annual day program of your institution.   10

4.   (a)   Explain with neat sketch product life cycle curve.   4

(b)   List the various stages in project management life cycle.   4

(c)   Explain different types of project risks associated with any project.   6

(d)   A state highway project was planned to implement with an estimated budget of 50 crores. However, after the completion of project, it was found that the total project cost was 55 crores. Analyze the possible reasons for the cost overrun (i.e. increase in cost of project).   6

SECTION – III

5.   (a)   State the need of project planning in project management.   5

(b)   Why project evaluation needed in project management cycle ?   5

(c)   Draw a typical time overrun analysis sheet.   4

(d)   A shopping mall construction project was planned with an estimated time duration of 18 months. However, the project took 24 months for its completion. Evaluate the possible reasons for the delay in the project.   6

6.   (a)   Write the steps required in any project control.   6

(b)   Explain Gantt chart & Bar chart with suitable example.   8

(c)   Mention the various steps involved in any project review.   6

SECTION – IV

7.   (a)   List the various tools available for project planning.   4

(b)   Explain network techniques with an illustration.   5

(c)   What is project audit program in Project Management ?   3

(d)   Explain the following time estimates :   8

(i)   Optimistic Time

(ii)   Pessimistic Time

(iii) Most likely Time

(iv)   Expected Time

8. (a) List the various tools available for project control, review and audit. 4

(b) Write differences between PERT and CPM (Project Evaluation and Review Technique) & Critical Path (method).

(c) The three time estimates (t_o), (t_m), (t_p) for each activity in a project are given below. Determine the expected time for each activity and also calculate the Standard Deviation of the project. 10
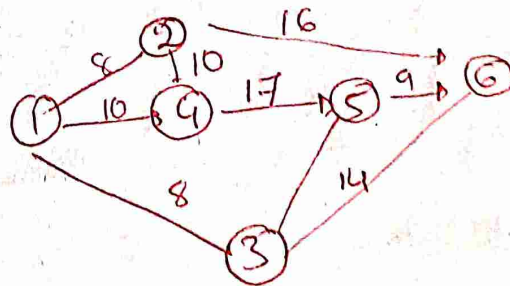
Activity	Time Estimates		
	t_o	t_m	t_p
1 – 2	9	12	21
1 – 3	6	12	18
2 – 4	1	1.5	5
3 – 4	4	8.5	10
2 – 5	10	14	24

Note : t_o – Optimistic Time

t_m – Most likely Time

t_p – Pessimistic Time

t_e – Expected Time

SECTION – V

9. (a) Define critical path, total float and free float. 6

(b) Explain crashing project duration through network technique. 4

(c) The following activities constitute a project (i) construct the network to represent the project and also identify the critical path (ii) write all project paths possible. 10

Activity	Duration (Days)
1 – 2	8
1 – 3	8
1 – 4	10
2 – 4	10
2 – 6	16
3 – 5	18
3 – 6	14
4 – 5	17
5 – 6	9

[Turn over

10. (a) What are Digital Projects ? Give any three examples of Digital Projects.   5

    (b) Identify the Digital Trends in Project Management.   5

    (c) Discuss the use of IoT Application in Digital Project Management.   5

    (d) Discuss cloud computing technology application in digital project management.   5

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