Roll No. | | | | | | | | | | |

ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)

B.E. / B. Tech / B. Arch (Full Time) - END SEMESTER EXAMINATIONS, MAY / JUNE 2024

Department of Industrial Engineering

VIII Semester

IE5012 - PROJECT MANAGEMENT

(Regulation 2019)

Time: 3hrs Max.Marks: 100

CO 1	Evaluate and select the most desirable projects.
CO 2	Apply appropriate approaches to plan a new project.
CO 3	Apply appropriate methodologies to develop a project schedule.
CO 4	Identify important risks facing a new project.
CO 5	Understanding the project management skills in IT industries.

BL – Bloom's Taxonomy Levels

(L1 - Remembering, L2 - Understanding, L3 - Applying, L4 - Analysing, L5 - Evaluating, L6 - Creating)

PART- A (10 x 2 = 20 Marks)

(Answer all Questions)

Q. No	Questions	Marks	CO	BL
1	Describe Project Management Lifecycle.	2	CO1	L2
2	Define feasibility study in the context of project management.	2	CO1	L2
3	What are the key benefits of WBS?	2	CO2	L2
4	What is meant by Project Schedule?	2	CO2	L1
5	List the types of resources in project management.	2	CO3	L2
6	What are the resources of a project?	2	CO3	L1
7	What is meant by premature project closure?	2	CO4	L2
8	Explain Auditing and Termination.	2	CO4	L2
9	Specify two challenges to project management for modern information systems.	2	CO5	L3
10	What is meant by Key Performance Indicators in IT projects.	2	CO5	L5

PART- B (5 x 13 = 65 Marks)

(Restrict to a maximum of 2 subdivisions)

Q. No		Questions	Marks	CO	BL
11 (a)	i)	Describe the steps involved in conducting a feasibility study for a project.	8	CO1	L2
	ii)	Discuss the main types of feasibility study.	5		
		OR			
11 (b)	i)	Discuss the need and objectives of Project Management.	8	CO1	L2
	ii)	Explain the Strategic Projects, Operational, Compliance projects briefly.	5		
12 (a)		What are the different types of WBS? Explain an compare them with example.	13	CO2	L3
		OR			
12 (b)		Explain the methods of estimating project times and costs briefly.	13	CO2	L3
13 (a)		Evaluate the process of resource aggregation, leveling and smoothing for the following data and draw necessary chats. You have a total of 5 developers available for the project.	13	CO3	L5

		Task	Duration (days)	Developers Required	Precedin g task			
		Task A	5	2	-			
		Task B	7	3	A			
		Task C	4	1	A			
		Task D	6	2	B,C			
		Task E	3	1	D			
		OR						
13 (b)	A Project consists of seven activities whose details are shown in Table. The details of each activity include optimistic estimate, most likely estimate, pessimistic estimate and manpower requirement. Activity | Optimistic time | Most likely time | Pessimistic time | Man power Requirement 1-2 | 2 | 3 | 4 | 7 1-3 | 3 | 3 | 3 | 8 2-6 | 3 | 5 | 7 | 5 3-4 | 1 | 4 | 7 | 15 4-5 | 3 | 6 | 9 | 11 4-6 | 4 | 7 | 10 | 5 5-6 | 5 | 6 | 7 | 10 i. Find the critical path and expected project completion time of the project ii. Perform resource leveling and obtain the schedule of activities and the corresponding manpower requirement diagram such that the peak manpower requirement is minimized.					13	CO3	L5
14 (a)	How does risk management play a role in the project closure process? Discuss the layout of project risks management process.					13	CO4	L3
	OR							
14 (b)	Explain project Audits and the various methods of Audits in industries.					13	CO4	L3
15 (a)	i) Identify and explain the critical success factors for IT projects. ii) How do these factors contribute to project success, and what steps can project managers take to ensure they are effectively addressed?					3 10	CO5	L4
	OR							
15 (b)	i) What is project selection, and why is it an essential aspect of project management? ii) Discuss the criteria used to evaluate and prioritize projects for execution.					3 10	CO5	L4

PART- C (1 x 15 = 15 Marks)

(Q.No.16 is compulsory)

Q. No	Questions	Marks	CO	BL
16.	Draw the structure of the body of knowledge in Project Management	15	CO2	L2