Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations – December 2025

Date: 11 – 12- 2025 **Time:** 01:00pm – 04:00pm

School: SOE	**Program:** B.Tech. (PET)	
Course Code: PET2029	**Course Name:** Quality Management Practices in Oil and Gas Industry	
Semester: VII	**Max Marks**: 100	**Weightage**: 50%

CO - Levels	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**	**CO6**
Marks	**6**	**6**	**22**	**24**	**22**	**20**

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks. **10Q x 2M=20M**

1.	Describe what risk management means within a project environment.	**2 Marks**	**L2**	**CO1**
2.	Explain the significance of communication as a key principle in project management.	**2 Marks**	**L2**	**CO1**
3.	Briefly describe the stages of a project life cycle and highlight their importance.	**2 Marks**	**L2**	**CO1**
4.	Summarize how economic analysis of a project aids investment-related decision.	**2 Marks**	**L2**	**CO2**
5.	Explain one typical scheduling mistake and describe how it can delay a project.	**2 Marks**	**L2**	**CO2**
6.	Differentiate between an activity and a task in project planning.	**2 Marks**	**L2**	**CO2**
7.	Describe one major difficulty encountered when selecting a project organization structure.	**2 Marks**	**L2**	**CO3**
8.	Explain why allocating resources accurately is essential for project planning.	**2 Marks**	**L2**	**CO4**
9.	Explain two reasons why reviewing previous contracts helps project managers.	**2 Marks**	**L2**	**CO4**

10.	Describe any two advantages of maintaining proper quality control in projects.	**2 Marks**	**L2**	**CO5**

Part B

Answer the Questions. **Total Marks 80M**

11.	**a.**	Imagine you are structuring the organization for a large refinery project. Select the most appropriate structure and explain why the other available organizational types are not ideal choices.	**10 Marks**	**L2**	**CO3**
		Or			
12.	**a.**	Differentiate the Administrative Organization for TQM followed at construction sites from the one practiced at the corporate/head office level.	**10 Marks**	**L2**	**CO3**
13.	**a.**	Using a typical construction site setup, describe how communication links operate among different levels of personnel.	**10 Marks**	**L2**	**CO3**
		Or			
14.	**a.**	Discuss the key factors to consider while forming a project team and outline the main difficulties commonly faced in team management.	**10 Marks**	**L2**	**CO3**
15.	**a.**	Determine the interactions between the owner, engineering team, and contractor within a project contract. Support your explanation with a clear diagram.	**10 Marks**	**L3**	**CO4**
		Or			
16.	**a.**	Evaluate why transparency and clarity in contract formation are crucial and how they play a role in reducing contractual disputes.	**10 Marks**	**L3**	**CO4**
17.	**a.**	Show, with practical examples, how improper allocation of resources contributes to schedule setbacks and budget overruns.	**10 Marks**	**L3**	**CO4**
		Or			
18.	**a.**	Explain how aligning resource allocation with the critical path can improve project scheduling. Support your answer with actual examples.	**10 Marks**	**L3**	**CO4**
19.	**a.**	Compare the concepts of Quality Assurance (QA) and Quality control (QC) in construction, giving suitable examples for each.	**10 Marks**	**L2**	**CO5**
	b.	Discuss the essential elements of a Quality Control Plan and highlight their significance in construction projects.	**10 Marks**	**L2**	**CO5**
		Or			

20.	**a.**	Describe the procedures involved in preparing and managing documentation such as site logs, pre-installation checks, and punch lists.	**10 Marks**	**L2**	**CO5**
	b.	Explain common reasons behind construction quality failures and evaluate any two relevant real-life case studies.	**10 Marks**	**L2**	**CO5**

21.	**a.**	Using two short case studies, analyze how the Cause–Event–Effect method helps define risks. For each: identify the cause, explain the event, and analyze the effect on time, cost, safety, and quality.	**20 Marks**	**L4**	**CO6**
		Or			
22.	**a.**	Using two or more examples from engineering or oil & gas projects, identify risk avoidance techniques and analyze how they effectively prevented failures.	**20 Marks**	**L4**	**CO6**