



**PRESIDENCY UNIVERSITY
BENGALURU**

SCHOOL OF ENGINEERING

MAKE-UP EXMINATION – JAN 2023

Course Code: PET 2029

Course Name: Quality Management Practices in Oil & Gas Industry

Program : B. Tech

Date: 27-01-2023

Time: 09.30 AM – 12.30 PM

Max Marks: 100

Weightage: 50 %

Instructions:

- (i) Read the all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and Non-programmable calculators are permitted.

Part A [Memory Recall Questions]

Answer all the Questions. Each question carries FIVE marks.

(4Qx 5M= 20M)

1. Find out the **TRUE** or **FALSE** statement. (C.O.No.4) [Knowledge]
 - i. The probability of delay is high and also has a direct impact on the project completion time
 - ii. The risk assessment defines the expected risks during the project execution and then analyze this risk.
 - iii. The first step of risk assessment is to define the expected risks during the project execution
 - iv. Root cause identification is based on root cause analysis.
 - v. Risk management is an ongoing process during the implementation of a project until the end of that project
2. Fill in the blanks (C.O.No.1) [Knowledge]
 - i. _____ is different from the daily activity in operation management.
 - ii. The _____ is the key to the success of the project.
 - iii. It is preferred to apply the Japanese proverb, “think slowly and execute quickly,” especially in the _____ study stage
 - iv. SOR stand for _____
 - v. The _____ is considered the backbone of any project.
3. Project management is characterized by multiple areas or topics that must be managed at the same time. Identify those areas (C.O.No.1) [Knowledge]
 - i. The purpose of _____ is to ensure that all elements of the project that are interdependent have a good correlation between them
 - ii. The purpose of _____ is to ensure that all work required has been known with specific planning
 - iii. The purpose of _____ is to ensure that the project will be finished according to the scheduled time
 - iv. The Purpose of _____ is to make sure that the time required at each of the activities of the project, the resources should be allocated to the execution of the activity by the individuals, materials, and equipment
 - v. The purpose of _____ is to use ordered steps and reasonable tools that allow making good use of manpower

4. Define the following (C.O.No.1,2, & 3) [Knowledge]
- What is DSP?
 - What is bidding?
 - What is tendering?
 - What is TQM?
 - What is FIDIC contract?

Part B [Thought Provoking Questions]

Answer all the Questions. Each question carries TEN marks. (4Qx10M=40M)

5. "We are a day late and four hundred million dollars short". Interpret the statement which is given in the **figure. 1** and describe your solution for the problem. (C.O.No.2) [Comprehension]



"We're a day late and four hundred million dollars short."

Figure:1

6. Due to a population increase a new school is being built, called Happy Kids High School. They need someone to maintain the classrooms and bathrooms. They have to do something for getting someone for the maintenance. What might they have done for publishing the request for inviting other parties to submit a proposal? Describe and differentiate the various types of it. (C.O.No.2) [Comprehension]
7. The oil and gas business' concentration on low cost only is not good, but we usually focus on the project time to achieve the quality of the work and the materials that will not affect operations in future. All companies and organizations that have a target to grow their business in the open market now and a need to share in a suitable part of their market locally and internationally. Explain how the quality system help then grow locally and internationally in terms of ISO? (C.O.No.3) [Comprehension]
8. The quality control is responsible from any level from the manager to lower levels in the organization. And it should be done in a definite way to achieve the required quality for the final products. Explain why quality is important with the help of **figure (2)** provided below. (C.O.No.3) [Comprehension]



"With the money we'll save by shutting down quality control, we can issue some truly spectacular apologies."

Figure: 2
Part C [Problem Solving Questions]

Answer all the Question. The question carries TWENTY marks.

(2Qx20M=40M)

9. (a) Contracts are the one of the most important aspects in the construction industry where the relationships between the three parties are intertwined. From the figure (Figure 3) given below, prepare a brief note on how a contract can cause impact on whole project and a contract with the supplier of materials for the contractor.
(C.O.No.3) [Application]

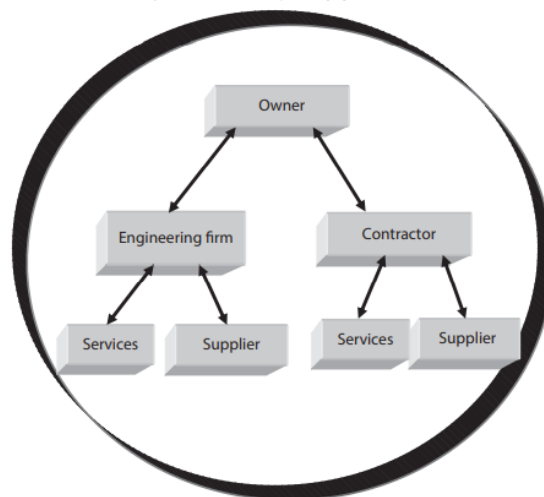


Figure: 3

(b)The uncertainty is like the black box, in which no one can know what will happen. In the statement given, Uncertainty indicates what? Apply the knowledge of Risk management process and prepare an explanation on controlling the uncertainties and to predict what could happen and avoid it in reasonable time.
(C.O.No.4) [Application]

10. "The structural characteristics of an organization are instrumental in shaping strategic management decisions in the business. You've probably heard about Philips, the Dutch multinational electronics enterprise. Despite the large network, it successfully managed conflicts by setting up a coordination committee. Philips realized that it was too confusing for everyone because of a lack of accountability. It was in the 1990s that the organization upgraded its structure to solve the recurring challenges. This reorganization separated a few powerful product divisions who had worldwide responsibilities of managing the profits and losses".

Identify the type of organization followed by Philips and discuss how this type of organization used for special projects working in field of advanced technology.

(C.O.No.2) [Application]