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**PRESIDENCY UNIVERSITY  
BENGALURU**

**SCHOOL OF ENGINEERING  
MID TERM EXAMINATION - NOV 2023**

**Semester :** Semester V - 2021

**Course Code :** CIV2039

**Course Name :** Sem V - CIV2039 - Construction Quality and Safety

**Program :** B. TECH

**Date :** 6-NOV-2023

**Time :** 9:30AM - 11:00AM

**Max Marks :** 50

**Weightage :** 25%

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**Instructions:**

- (i) Read all questions carefully and answer accordingly.
  - (ii) Question paper consists of 3 parts.
  - (iii) Scientific and non-programmable calculator are permitted.
  - (iv) Do not write any information on the question paper other than Roll Number.
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**PART A**

**ANSWER ALL THE QUESTIONS**

**(5 X 2 = 10M)**

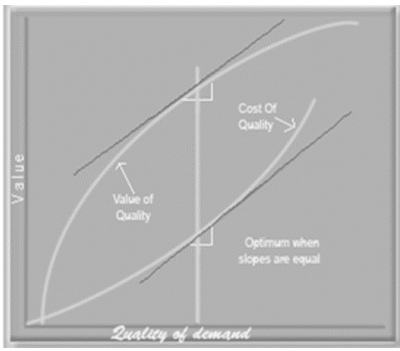
1. List the sub-phases in the Project Phase of a Construction Project  
(CO1) [Knowledge]
2. List the advantages of Functional Organization  
(CO1) [Knowledge]
3. What is a Public Limited Company. Describe briefly.  
(CO1) [Knowledge]
4. List any 04 typical elements in the application of Total Quality Management.  
(CO2) [Knowledge]
5. Bring out two major differences between QA and QC.  
(CO2) [Knowledge]

**PART B**

**ANSWER ALL THE QUESTIONS**

**(4 X 5 = 20M)**

6. Successful organizations harness the enormous economic potential of quality management to attain leadership of their respective markets. They use Quality economics analysis which combines the disciplines of economics and quality management to analyse the quality problems from the perspective of economics. The graph below presents an analysis of quality economics by comparing value against the Quality of Design. Elaborate on Quality of Design and interpret what the graph communicates about the economics of quality based on the trends observed.



(CO2) [Comprehension]

7. The collaborative relationship between functional managers (FMs) and project managers (PMs) is critical to effective project performance and to the success of any organization. Based on your understanding from the course, clearly bring out the salient differences between Functional Managers and Project Managers.

(CO1) [Comprehension]

8. A Quality Engineer plays a pivotal role in the successful execution and completion of any Construction Project. Substantiate this statement by bringing out 05 major roles/responsibilities of a Quality Engineer in a Construction Project.

(CO2) [Comprehension]

9. A 50 year old major construction company based in Mumbai is starting a new township project in Bangalore. What type of organization structure would you propose for the company to setup in Bangalore to manage the Township Project. Bring out the advantages of the selected organization structure.

(CO1) [Comprehension]

### PART C

#### ANSWER THE FOLLOWING QUESTION

(1 X 20 = 20M)

10. a) Total Quality Management mainly demands a process of continued improvement aimed at reducing variability. An organization wishing to support and develop such a process needs to use quality management tools and techniques. Suggest and explain any five techniques used in TQM for analysis [10 Marks]
- b) Benchmarking serves as a competitive advantage that enables organizations to adapt, grow, and succeed in the face of change. It involves the systematic measurement of essential business metrics and practices, followed by a comparison within specific business areas or against competitors, industry peers, or global companies. This comparison helps organizations identify areas for improvement and gain insights into the necessary changes required to enhance performance. Describe the four main types of benchmarking discussed in the topic? [10 Marks]

(CO2) [Application]