

Enrolment No.....



Faculty of Engineering
End Sem Examination Dec-2023

CE3EC06 Construction Quality Control & Management
Programme: B.Tech. Branch/Specialisation: CE

Duration: 3 Hrs.**Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- Q.1 i. Quality management system _____ perception of customers towards company. **1**
(a) Improves (b) Deprove (c) Recede (d) Worsen
- ii. Good quality construction _____ the wastage of materials, smooth function of the team. **1**
(a) Increases (b) Decreases
(c) Doesn't effect (d) Gain
- iii. It opens the area of improvement for quality construction rationally based on the documents from _____ projects. **1**
(a) Previous (b) Next (c) Later (d) Future
- iv. It _____ job-site concrete handling, and testing procedures to _____ potential liability to the company. **1**
(a) Improve, increase (b) Improve, decrease
(c) Ruin, decrease (d) Ruin, increase
- v. _____ quality construction _____ the wastage of materials. **1**
(a) Good, reduce (b) Bad, reduce
(c) Good, increase (d) Bad, decrease
- vi. The technique for establishing and maintaining priorities among the various jobs of a project, is known- **1**
(a) Event flow scheduling technique
(b) Critical ratio scheduling
(c) Slotting technique for scheduling
(d) Short interval scheduling

[2]

[3]

- vii. _____ is not a process tools for TQM management. **1**
 (a) Process flow analysis (b) Histograms
 (c) Plier (d) Control Charts
- viii. Inspection, Scrap and Repair are the examples of – **1**
 (a) Internal Costs (b) External Costs
 (c) Cost of Dissatisfaction (d) Societal Costs
- ix. _____ systematic and planned actions which are necessary to **1**
 provide adequate confidence that a product or service will satisfy
 the given requirement for quality.
 (a) Quality control (b) Quality assurance
 (c) Quality enhancement (d) None of these
- x. All of the following costs are likely to decrease as a result of better **1**
 quality except –
 (a) Customer dissatisfaction cost
 (b) Inspection cost
 (c) Maintenance cost
 (d) Warranty and service cost
- Q.2 i. What do you mean by quality control? **2**
 ii. How to maintain the cost of quality? **3**
 iii. Define quality assurance and explain its significance. **5**
- OR iv. How to maintain the total quality management in construction **5**
 works?
- Q.3 i. Define the quality system in architectural design **2**
 ii. Explain different aspects of quality management. **8**
- OR iii. Explain drawing and quality audit. **8**
- Q.4 i. What is quality dimension of earthwork? **3**
 ii. What are the major determinants of quality control explain in detail? **7**
- OR iii. Explain quality audit in construction work as per ISO 9000. **7**
- Q.5 i. Define TQM in building maintenance and explain. **4**
 ii. Write down item wise check list of quality control. **6**
- OR iii. Explain the quality checking as per PWD/CPWD Specification. **6**

- Q.6 Attempt any two:
- i. Write in detail about contractor's quality assurance and quality **5**
 control plan.
- ii. Explain quality control using modern materials and construction **5**
 machinery.
- iii. Explain following terms: **5**
 (a) Quality control of service lines
 (b) Water supply
 (c) Drainage
 (d) Sewerage, sanitary installations
 (e) Quality assurance circulars issued by CPWD

Marking Scheme
CE3EC06 Construction Quality Control and Management

Q.1	i)	Answer A	1
	ii)	Answer B	1
	iii)	Answer A	1
	iv)	Answer B	1
	v)	Answer B	1
	vi)	Answer A	1
	vii)	Answer C	1
	viii)	Answer A	1
	ix)	Answer A	1
	x)	Answer C	1

Q.2	i.	Definition and explanation 2M	2
	ii.	3 points 3 M	3
	iii.	Definition 2M and explanation 3M for 3 points	5
OR	iv.	5 points 1M each	5

Q.3	i.	Definition 2M	2
	ii.	4 points 8M	8
OR	iii.	Drawing 4M and quality audit 4M	8

Q.4	i.	Definition 2M and explanation 1M	3
	ii.	7 points 1M each	7
OR	iii.	7 points 1M each	7
Q.5	i.	Definition 2M and explanation 2M	4
	ii.	6 points 1M each	6
OR	iii.	6 points 1M each	6
Q.6			
	i.	Contractor's quality assurance 2M and Quality control plan 3M	5
	ii.	5 points 1M each	5
	iii.	1 M for each point	5
