

Total No. of Questions : 10]

SEAT No. :

**P2959**

**[5154]-511**

[Total No. of Pages : 2

**B.E. (Civil)**

**TQM & MIS IN CIVIL ENGINEERING**

**(2012 Course) (401005 C) (Semester - I) (Elective - II) (End Semester)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right side indicate full marks.*
- 4) Assume Suitable data if necessary.*

- Q1)** a) What are the factors affecting the poor quality of construction? [4]  
b) What is PDCA cycle? Explain the application of PDCA cycle for quality achievement of structural designing of a building. [6]

OR

- Q2)** a) Define data and information. What are the major differences between them? Explain with the help of suitable example. [6]  
b) Give measures to overcome the causes responsible for poor quality of construction. [4]

- Q3)** a) What are the benefits of applying TQM on construction site? [4]  
b) State the definition of Six Sigma. Explain DMAIC and DMADV. What are the differences between the two? [6]

OR

- Q4)** a) What are the obstacles in implementing TQM on construction sites? [4]  
b) What are the types of defects? Give two practical examples for each type of defect. [6]

- Q5)** a) What are the contents of Quality Manual? Describe its structure. [6]  
b) Prepare checklist of reinforcement activity at design and concreting stage. [6]  
c) What are the advantages and limitations of implementation of ISO on construction sites? [6]

OR

**P.T.O.**

- Q6)** a) Differentiate between Quality Assurance and Quality Control. [5]  
b) What are the eight Quality Management Principles adopted by ISO 9001? [8]  
c) Write short notes on any two of the following: [5]  
i) Management Responsibility.  
ii) Quality Management System.  
iii) Product Realization.

- Q7)** a) Write a detailed note on 'Strategic Planning'. [8]  
b) What is the 'Cost of Quality'? How can it be calculated? Explain with the help of suitable example. [8]

OR

- Q8)** a) What do you mean by Supply Chain Management? What are the objectives of SCM? [8]  
b) Explain in detail 'Kaizen' system in TQM. [8]

- Q9)** a) What data and information is required for planning of new road corridor between two megacities? [8]  
b) What is meant by Enterprise Resource Planning system? What are its application areas in construction field? [8]

OR

- Q10)** a) What is database management system? What are the advantages of DBMS? [8]  
b) Write a detailed note on application of mobile technology in construction industry. [8]

