Total No. of Questions : 12]

SEAT No. :

P3618

[Total No. of Pages : 3

[5154]-11

B.E. (Civil)

TQM & MIS IN CIVIL ENGINEERING

(2008 Pattern) (Elective - II)

Time : 3 Hours] *[Max. Marks : 100*

Instructions to the candidates:

1) ***Answer any 3 questions from Section I and 3 questions from Section II.***
2) ***Solve Q1 or Q2, Q3 or Q4, Q5 or Q6 from Section I and Q7 or Q8, Q9 or Q10, Q11 or Q12 from Section II.***
3) ***Answers to the two sections should be written in separate answer-books.***
4) ***Neat diagrams must be drawn wherever necessary.***
5) ***Figures to the right indicate full marks.***
6) ***Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.***
7) ***Assume suitable data, if necessary.***

SECTION - I

Q1) In the era of fierce global competition in the construction industry, TQM approach is the only solution for successful business growth. Explain the validity of this statement with practical examples. **[18]**

OR

Q2) Explain ten reasons for poor quality of construction in India. As quality Manager, suggest remedial measures for the same. **[18]**

Q3) Classify the various defects in construction with examples.
What preventive measures would you suggest to avoid above defects at your site? **[8 + 8]**

OR

Q4) Explain the eight principles of ISO: 9001 and explain how each principle is useful in achieving TQM. **[16]**

P.T.O.

Q5) Explain concepts of internal customers, external customers, quality function deployment and non conformities with appropriate examples from any construction project involving various stake holders. **[16]**

OR

Q6) Explain in brief (any 4) : **[16]**

a) Significance of SCM in TQM.

b) Customers satisfaction.

c) Application of six sigma in construction.

d) Quality Circles.

e) DMAIC & DMADV.

SECTION - II

Q7) With a flow chart explain the various components of any MIS, their interrelationships and their functions. **[18]**

OR

Q8) a) Differentiate between DATA & INFORMATION with suitable examples from construction industry. **[8]**

b) What are Decision Support System? Explain its advantages with an example from a construction firm. **[4 + 6]**

Q9) Project Managers have to take strategic decisions, tactical decisions and operational decisions. Enlist examples of each type of decision with respect to construction industry. **[16]**

OR

Q10)Explain in detail : **[8 + 8]**

a) ERP software applications in construction.

b) Manual control and MIS based control of construction operations.

Q11) Explain with a flow diagram, the acquisition, storing, processing and validation of the information necessary to develop an MIS for a construction organisation executing Road Project. **[16]**

OR

Q12) Explain integration of Hardware, Software data communication & processing, information gathering & processing with examples from construction field. **[16]**