Total No. of Questions : 12]

SEAT No. :

P1682

[Total No. of Pages : 2

[4859]-11
B.E. (Civil)
c-TQM AND MIS IN CIVIL ENGINEERING
(2008 Course) (Semester-I) (Elective-II)

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

Instructions to the candidates:

1) ***Answer to the 2 sections separately.***
2) ***Attempt Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6 for Section-I and Q. 7 or Q. 8, Q. 9 or Q. 10, Q. 11 or Q. 12 for Section-II.***
3) ***Figures to the right indicate full marks.***
4) ***Use of calculator is allowed.***
5) ***Assume suitable data, if necessary.***

SECTION-I

Q1) Discuss the various barriers which exist in the Indian construction sector which result in a poor quality of construction projects. Suggest measures to improve them. **[10 + 8]**

OR

Q2) Discuss the various barriers which exist in the implementation of TQM programs in construction industry. Suggest measures to overcome them. **[10 + 8]**

Q3) Elaborate the 8 principles of the ISO 9001 standards with their applications in the construction organisations of the Government sector. **[16]**

OR

Q4) Differentiate between ISO 9001 and ISO 9004 Quality management system standards and elaborate on how ISO 9004 standards are helpful to the private sector organisations who wish to implement TQM in the construction sector. **[16]**

Q5) Discuss with examples, the various principles that are the strengths of any TQM program. **[16]**

OR

P.T.O.

Q6) Differentiate with examples between:

a) Zero defects and Kaizen. **[4]**

b) QA and QC. **[4]**

c) TQC and TQM. **[4]**

d) Quality Circles and Quality Process. **[4]**

SECTION-II

Q7) Discuss advantages of using MIS in the construction projects executed through contracting in the Government Sector. **[16]**

OR

Q8) Discuss the pre-requisites necessary for the successful implementation of MIS in any construction organisation. **[16]**

Q9) Discuss the interfaces necessary between the company policies, strategic objectives, operational constraints and database management systems for the successful implementation of MIS systems in an organisation which is an MNC working on multistoreyed constructions. **[18]**

OR

Q10) Elaborate the various modules available in the ERP or SAP systems and explain with examples, how these modules can manage construction projects performance in the real time. **[18]**

Q11) Discuss applications of:

a) Decision Support Systems. **[4]**

b) Data acquisition systems. **[4]**

c) Data handling and converting systems. **[4]**

d) Reporting systems. **[4]**

OR

Q12) Elaborate on:

a) Cloud computing techniques. **[4]**

b) Mobile based MIS applications. **[4]**

c) Data encoding and decoding techniques. **[4]**

d) Network security. **[4]**

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