

Total No. of Questions : 12]

SEAT No. :

**P2649**

**[5154]-20**

[Total No. of Pages : 3

**B.E.(Civil Engineering)**  
**CONSTRUCTION MANAGEMENT**  
**(2008 Pattern) (Semester - II) (Elective - III)**

*Time : 3 Hours]*

*[Max. Marks : 100*

*Instructions to the candidates:*

- 1) Answer 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.*
- 2) Answer any 3 questions from each section.*
- 3) Answer 3 questions from section I and questions from section II.*
- 4) Answers to the two sections should be written in separate books.*
- 5) Neat diagrams must be drawn wherever necessary.*
- 6) Figures to the right indicate full marks.*
- 7) Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.*
- 8) Assume suitable data, if necessary.*

**SECTION - I**

- Q1)** a) Explain role of Project Management Consultants on any infrastructure project with an example. **[8]**
- b) With a diagram explain the communication needed by a project manager with various internal and external stake holders associated with a major construction project. Explain the necessity of such a communication with examples. **[10]**

OR

- Q2)** a) Enlist the various types of infrastructure projects and explain how these projects contribute to national development. **[10]**
- b) Discuss various reasons for project time and cost over runs and suggest a few remedies to overcome them. **[8]**
- Q3)** a) With an example, explain work breakdown structure upto 3 levels, in detail. **[8]**
- b) Apply time - motion studies to an earthmoving operation and discuss the advantages of conducting these studies for the earthwork activity. **[8]**

OR

**P.T.O.**

- Q4)** a) Explain LOB technique with an example and discuss its advantages. [8]  
b) Explain in brief. [4 + 4]  
i) Objectives of work study  
ii) String Diagrams

- Q5)** a) Explain the basic objectives and basic provisions of the building and other construction workers Act (1996). [8]  
b) Explain utility of the project balance sheet with an example of construction organisation / project. [8]

OR

- Q6)** a) Explain the basic objectives and basic provisions of the workers Compensation Act (1923). [8]  
b) An infrastructure project of Rs 1000/- crores estimated cost is to be executed. Discuss the various ways in which the funds required for the same may be raised make suitable relevant assumptions. [8]

### **SECTION - II**

- Q7)** Explain any 9 types of risks with proper examples from construction sector and how to mitigate them. [18]

OR

- Q8)** Define “Value”. Explain importance of value Analysis. Discuss any three methods used in value engineering in detail. [1 + 2 + 15]

- Q9)** Graphically explain EOQ. Discuss modifications to EOQ. With an example of any construction material, explain the procedure adopted to economise on material by balancing between discounts offered by Suppliers and the other material costs. [2 + 2 + 13]

OR

- Q10)** Explain the HRD and HRM associated with a site Engineer who is selected through Campus interviews by a major construction company, in order to make him competent for strategic functional and generic roles which he has to effectively perform. [16]

***Q11)*** Explain any 4 applications in civil Engineering where in ‘Fuzzy Logic’ is certainly very useful. **[16]**

OR

***Q12)*** Explain any 4 applications in Civil Engineering wherein “Artificial Neural Networks” are certainly very useful. **[16]**

