

Total No. of Questions : 8]

SEAT No. :

P2133

[Total No. of Pages : 2

**[5254]-526**  
**B. E. (Civil Engineering)**  
**FERROCEMENT TECHNOLOGY**  
**(2012 Pattern) (End Semester) (Open Elective)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*

- Q1)** a) Compare Ferrocement construction with **[6]**  
i) Fiber Reinforced concrete  
ii) Polymer concrete  
b) Discuss properties of ferrocement under dynamic loading. **[6]**  
c) Discuss following with respect to **[6]**  
i) Raw materials  
ii) Skilled Labour

OR

- Q2)** a) Discuss method of construction for ferrocement. **[6]**  
b) Discuss 'three stage behavior of ferrocement in flexure'. **[6]**  
c) Discuss various methods for design of ferrocement members. **[6]**
- Q3)** a) Discuss effects of seismic forces on ferrocement structures. **[6]**  
b) Discuss in detail the factors affecting cost analysis of ferrocement structures. **[6]**  
c) Write a note on ferrocement pipes. **[6]**

OR

*P.T.O.*

- Q4)** a) Explain how to write specifications for ferrocete. Discuss specifications for ferrocement water tank, and ferrocement double wall. [10]  
b) Discuss in detail various building components using ferrocement. [8]

- Q5)** a) Write a note on water retaining structures using ferrocement. [6]  
b) Discuss 'Ferrocement water proofing'. [5]  
c) Explain components of ferrocement retaining wall. [6]

OR

- Q6)** a) Discuss structural behavior of ferrocement retaining wall. [6]  
b) Explain advantages of ferrocement technique for water retaining structures.[5]  
c) Enlist various types of tanks, those can be cast using ferrocement technique, explain any two in detail. [6]

- Q7)** a) Discuss advantages of precast ferrocement construction technique. [6]  
b) Discuss ferrocement space structures. [5]  
c) Write note on ferrocement shells. [6]

OR

- Q8)** a) Compare ferrocement poles and precast prestressed concrete poles.[6]  
b) Discuss various factors which influence the choice of casting between precast and cast-in-situ. [6]  
c) Write a note on Ferrocement Domes. [6]

❧❧❧