

Register Number:

**B.E., DEGREE EXAMINATIONS NOV/DEC 2012**

Seventh & Fifth Semester

**CIVIL ENGINEERING**

CEE220 : Repair and Rehabilitation of Structures

**Time: Three Hours**

**Maximum Marks:100**

**Answer ALL Questions:-**

**PART A (10×1=10 Marks)**

1. Preventive maintenance depends upon
  - a. specification of structures
  - b. Un Condition of structures
  - c. Non Use of structures
  - d. un specified structures
2. A maintenance done after the defect or damage is called
  - a. Remedial maintenance
  - b. Daily maintenance
  - c. All maintenance
  - d. General maintenance
3. The porosity of concrete mainly depends upon
  - a. Grading of aggregate
  - b. More Cement content
  - c. Quantity of huge water
  - d. More fineness
4. The reaction of carbondioxide with hydrated cement is known as
  - a. Corrosion
  - b. Silica-alkali reaction
  - c. Carbonic reaction
  - d. Unsoundness
5. Fibres generally reduces
  - a.Compressive creep
  - b. Shear creep
  - c. Shrinkage creep
  - d. Dynamic creep
6. The polymer latex acts in a concrete as a \_\_\_\_\_ reducer
  - a. Water
  - b. Strength
  - c. Binding
  - d. Permeability
7. SIFCON stands for
  - a. Slurry infiltrated fibre concrete
  - b. Steel infiltrated concrete
  - c. Steel in fibre concrete
  - d. Sulphur infiltrated concrete

8. Materials for jacketing purposes  
a. Ferrocement      b. SBR      c. Linseed oil      d. Olive oil
9. An economical and effective demolition technique is \_\_\_\_\_ demolition  
a. Hydro      b. Explosive      c. Blasting      d. Chemical
10. One of the method adopted for protecting corrosion is  
a. Painting      b. Distempering      c. Varnishing      d. Cleaning

**PART B (10X2=20 Marks)**

11. List the Factors Contributing to Cracks in Concrete
12. Define Maintenance and Repair?
13. What do you understand the term Efflorescence?
14. List the types of polymer concrete?
15. List the types of fibres used in fibre reinforced concrete?
16. List the types of defects in concrete?
17. List the defects due to cover thickness in concrete?
18. What are the surface treatments of concrete?
19. Define Overlays?
20. What is an effective Demolition Technique?

**PART C (5X14=70 Marks)**

21. a) Write down the assessment procedure for evaluating damaged structure?  
**(OR)**  
b) Explain briefly the Facets and Importance of Maintenance
22. a) What are the causes and effects cracking in concrete?  
**(OR)**  
b) Explain the construction errors in detail?
23. (a). Explain briefly the Sulphur infiltrated concrete?

**(OR)**

23. b) Explain briefly the following:

(i) Expansive cement

(7)

(ii) Foamed concrete

(7)

24. a) How will you repair fire, wear and leakage in structures?

**(OR)**

b) What do you understand about marine exposure structures distress?

25. a) Explain the methods of Demolition techniques for Dilapidated structures?

**(OR)**

b) Explain briefly the repair and rehabilitation of water tanks?

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