

Reg. No. :

--	--	--	--	--	--	--	--	--	--

**Question Paper Code: S31181**

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Elective

Civil Engineering

01UCE905 - REPAIR AND REHABILITATION OF STRUCTURES

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Write the importance of maintenance.
2. Write short notes on Deterioration due to corrosion.
3. Define the term "Strength of concrete".
4. How the cracks are classified?
5. Write short note on sulphur Infiltrated concrete.
6. Define the term Geopolymer Concrete.
7. What are the methods involved in Epoxy injection?
8. Write the types of shoring.
9. Evaluate the forms of Fire damages.
10. Write a short note on leakage.

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Analysis briefly the assessment procedure for evaluating damaged structure. (12)
- (ii) What are the types of maintenance. (4)

Or

- (b) Evaluate the quality assurance in concrete construction. (16)
12. (a) Discuss in detail about the thermal properties of concrete. (16)
- Or
- (b) Elaborately explain about the effect of temperature on concrete. (8)
13. (a) Explain in detail fibre reinforced concrete. (8)
- Or
- (b) Briefly explain about vacuum concrete. (16)
14. (a) Explain in detail about the procedure of Cathodic protection technique. (16)
- Or
- (b) Explain the various corrosion protection in detail. (16)
15. (a) Explain the following terms: (i) Disruption (ii) Weathering corrosion (iii) Leakage (iv) Marine exposure. (16)
- Or
- (b) Explain in briefly about Demolition technique with example and neat sketch. (16)
-