

Hall Ticket Number :

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**R-11 / R-13**

**Code: 1G674**

IV B.Tech. I Semester Supplementary Examinations May 2018

**Concrete Technology**

( Civil Engineering )

**Max. Marks: 70**

**Time: 03 Hours**

Answer *any five* questions

All Questions carry equal marks (14 Marks each)

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1. Write short notes on the following cements:
  - a) Portland slag cement.
  - b) White Portland cement.
  - c) Low heat cement.
  - d) Portland Pozzolana cement. 14M
  
2. Classify the aggregates on the basis of their source. Distinguish between well graded and gap graded aggregates. 14M
  
3. Describe the following tests for measurement of workability of fresh concrete:
  - (a) Flow table test.
  - (b) Vee-bee consistometer test.
  - (c) Kelly-ball test. 14M
  
4. What precautions are necessary in the field in choosing a right quality of mixing water in preparation of concrete? 14M
  
5. Explain in detail about the various non destructive testing methods used for concrete to find out its strength. 14M
  
6. Explain in detail about:
  - (a) Drying shrinkage of concrete explaining how it is determined in the lab.
  - (b) Various factors affecting the shrinkage. 14M
  
7. Write the step wise procedures for proportioning a concrete mix using ACI method and IS 10262 method. 14M
  
8. Write short notes on:
  - (a) Polymer impregnated concrete
  - (b) Polymer cement concrete.
  - (c) Self compacting concrete. 14M

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