

Code No: RT22015

**R13****SET - 1**

**II B. Tech II Semester Supplementary Examinations, November-2017**  
**CONCRETE TECHNOLOGY**  
(Civil Engineering)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **THREE** Questions from **Part-B**

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**PART -A**

1. a) Explain the Fineness of cement?  
b) What is the Effect of time and temperature on workability?  
c) Write briefly on Flexure tests?  
d) Explain about Shrinkage?  
e) What are the Factors in the choice of mix proportions  
f) Write the Properties of polymer concrete

**PART -B**

2. a) Explain process of Hydration of cement?  
b) Explain in detail the heat of hydration of Bougue's compounds
3. a) Explain workability of concrete?  
b) Explain procedure for determination of workability of concrete using Flow table with neat diagram.
4. Explain various steps involved in evaluation of compressive strength of concrete from preparation of sample to testing
5. a) Describe the laboratory test for measurement of drying shrinkage of concrete.  
b) Explain time dependent deformation in concrete subjected to sustained load
6. a) Explain what is mix design and its practical necessity.  
b) Explain statistical quality control of concrete. Explain common terminology used in statistical evaluation of concrete
7. a) Explain salient features of light weight concretes  
b) Explain factors to be considered in the fibre reinforced concrete