

**II B. Tech II Semester Supplementary Examinations, November - 2019**  
**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 **FOUR** Questions from **Part-B**
- ~~~~~

**PART -A**

1. a) Write about accelerators and retarders. (3M)
- b) Write about setting time of concrete. (2M)
- c) Mention the different types of NDT tests. (2M)
- d) List out the factors in the choice of mix proportions. (2M)
- e) What is Poisson's ratio? (2M)
- f) What is self consolidating concrete? (3M)

**PART -B**

2. a) Write about specific gravity test and bulk density test of Coarse aggregate. (7M)
- b) Write about plasticizers and super plasticizers. (7M)
3. What is workability and how measurement of workability can be done by various tests? (14M)
4. a) Mention the different curing methods. (7M)
- b) What are the different Non-destructive methods? Explain any one. (7M)
5. a) Describe the relation between creep and shrinkage with a neat sketch. (7M)
- b) Discuss the relation between creep and time. (7M)
6. Design a concrete mix for characteristic strength of 35MPa at 28 days. The specific gravity of FA and CA are 2.65 and 2.70 respectively. A slump of 70mm is necessary. The specific gravity of cement is 3.15. Assuming the necessary data design the mix as per IS code method. (14M)
7. a) Write about high density concrete. (7M)
- b) Explain about light weight concrete? (7M)

