

Code No: RT22015

R13**SET - 1**

II B. Tech II Semester Supplementary Examinations, November - 2018
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) | What are the different physical tests of cement?       | 4M |
| b)    | What is effect of time and temperature on workability? | 4M |
| c)    | What are the codal provisions of NDT?                  | 4M |
| d)    | Define modulus of elasticity of concrete.              | 3M |
| e)    | What is the quality of water used for concrete?        | 3M |
| f)    | Write about no-fines concrete.                         | 4M |

**PART -B**

- |       |                                                               |     |
|-------|---------------------------------------------------------------|-----|
| 2. a) | Write about alkali aggregate reaction.                        | 8M  |
| b)    | Write about mineral admixture and chemical admixtures.        | 8M  |
| 3. a) | Write the steps in the manufacture of concrete.               | 10M |
| b)    | Write about ready mixed concrete.                             | 6M  |
| 4. a) | Write the relation between compression and tensile strength.  | 10M |
| b)    | What is gel-space ratio?                                      | 6M  |
| 5. a) | What are the different steps in the BIS method of mix design? | 12M |
| b)    | What is water cement ratio?                                   | 4M  |
| 6. a) | Define shrinkage                                              | 4M  |
| b)    | What are the different types of shrinkage?                    | 12M |
| 7. a) | Write about fibre reinforced concrete.                        | 8M  |
| b)    | What are the factors affecting the properties of FRC?         | 8M  |