II B. Tech II Semester Supplementary Examinations, Dec – 2015 CONCRETE TECHNNOLOGY

(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**

PART -A

- 1. a) Explain the Setting time of cement?
 - b) What is Workability
 - c) Write about Tension tests?
 - d) Explain about Creep of concrete?
 - e) Write briefly about Quality Control of concrete
 - f) What are the Factors affecting properties of F.R.C?

PART-B

- 2. Explain dry process of manufacturing the cement with neat diagram. Explain advantages over the wet process
- 3. a) List out various tests to measure workability of concrete.
 - b) Explain the significance of the tests on concrete at fresh state while we are interested only in concrete at hardened state?
- 4. a) Explain Maturity concept of concrete?
 - b) Discuss the Abrams water/cement ration law and its significance. How strength of concrete is estimated by w/c ratio law.
- 5. a) Explain phenomenon of creep in concrete.
 - b) Explain measurement of creep in creep with loading diagram.
- 6. Explain in detail the various steps involved in designing concrete mixes using I.S.I method.
- 7. a) Explain salient features of Sulphur infiltrated concretes.
 - b) Explain applications of various sulphur-infiltrated concrete

