

**B.TECH SEM - III (2007 COURSE) (CIVIL ENGG.) : SUMMER -
2018**

SUBJECT: CONCRETE TECHNOLOGY

Day: **Thursday**
Date: **24/05/2018**

S-2018-2565

Time: **02.30 PM TO 05.30 PM**
Max. Marks: 80

N.B:

- 1) **Q. No.1 and Q. No.5 are COMPULSORY.** Out of remaining questions attempt **ANY TWO** questions from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer books.
- 4) Draw neat and labeled diagram **WHEREVER** necessary.
- 5) Assume suitable data if necessary.

SECTION-I

- Q.1** a) What are the IS requirements for Ordinary Portland Cement? (07)
b) What are the different methods of manufacturing of cement? Explain wet process of manufacturing? (07)
- Q.2** a) State and explain any one test conducted on aggregate. (07)
b) How Portland cement is manufactured by Dry process? (06)
- Q.3** a) Which are the factors affecting workability of concrete? Explain any two? (07)
b) What are different methods of curing of concrete and explain one curing method. (06)
- Q.4** a) What is the effect of Temperature on curing? Explain stress- strain curves for different mixes? (07)
b) Explain the factors affecting Creep in concrete. (06)

SECTION-II

- Q.5** a) Define the shrinkage and explain plastic shrinkage. (07)
b) Write note on "Plasticizers" and "Redarders". (07)
- Q.6** a) Write a note on "Under Water Concreting". (07)
b) Explain the use of fly ash concrete. (06)
- Q.7** a) Which are the variables in mix design concrete? (07)
b) What are the factors that affect the choice of mix proportion of concrete? (06)
- Q.8** a) Write a note on "Chloride Attack" and "Sulphate Attack". (07)
b) Comment on various factors affecting durability of concrete. (06)