BTS 165 (C)

B.TECH. DEGREE III SEMESTER (SUPPLEMENTARY) EXAMINATION IN CIVIL ENGINEERING
JUNE 2002

CE 304 CONCRETE TECHNOLOGY

(1995 & 1998 Admissions)

Time: 3 Hours Maximum Marks: 100

(All questions carry ***EQUAL*** marks)

I. (a) With a neat sketch of the apparatus explain the standard consistency of ordinary Portland cement.

(b) Differentiate between high alumina cement and ordinary Portland cement.

OR

II. (a) Explain the importance of setting time tests.

(b) Differentiate between sulphate resisting cement and super sulphate cement.

III. What are the usual impurities associated with coarse aggregate? How are they eliminated?

OR

IV. Define elongation index of coarse aggregate. Explain the I:S method to determine elongation index of coarse aggregate.

V. Explain in detail different types of workability agents available in market.

OR

VI. Describe miscellaneous admixtures used in concreting.

VII. (a) What is meant by workability of concrete?

(b) Explain different factors affecting workability of concrete.

OR

VIII. Write short notes on:

(i) Shrinkage and creep
(ii) Elasticity of concrete
(iii) Compaction of concrete

IX. Write step by step procedure for concrete mix design by ACI method.

OR

X. Distinguish between sulphur infilterated concrete and fibre reinforced concrete.

***