UNIT - I:


Admixtures: Types of admixtures- mineral and chemical admixtures- properites- dosages- effects- usage.

Aggregates: Classification of aggregate- Particle shape & texture- Bond, Strength & other mechanical properites of aggregate- Specific gravity, Bulk density, Porosity, adsorption & moisture content of aggregate- Blkening of sand- Deleterious Substance of aggregate- Soundness of aggregate- Alkali Aggregate reaction- Thermal properites- Sieve analysis- Fineness modulus- Grading curves- Grading of fine & coarse Aggregates- Gap graded aggregate- Maximum aggregate size.

UNIT - II:


UNIT - III:


Testing of Hardened Concrete: Compression tests- Tension tests- Factors affecting strength- Flexure tests- Splitting tests- Pull-out tests, Non-destructive testing methods- codal provisions for NDT.


UNIT - IV:


UNIT - V:
**Special Concretes:** Light weight concrete- Light weight aggregate concrete- Cellular concrete- No-fines concrete- Fibre reinforced concrete- Polymer concrete- Types of Polymer concrete- Self compacting concrete.

**TEXT BOOKS:**

2. Concrete Technology by M.S.Shetty. - S.Chand & Co.

**REFERENCES BOOKS:**

1. Concrete Technology by Job Thomas, Cengage Learning.