

## 2.12 30278 CONCRETE TECHNOLOGY

### UNIT-1 CONCRETE TECHNOLOGY

- 1.1. Introduction
- 1.2. Concrete making and its ingredients
- 1.3. Types of concrete
- 1.4. Advantages and disadvantages of concrete construction and uses

### UNIT-2 INGREDIENTS OF CONCRETE

- 2.1. Cement
  - 2.1.1. Introduction
  - 2.1.2. Types of cement
    - 2.1.2.1. Ordinary Portland cement
    - 2.1.2.2. Rapid hardening cement
    - 2.1.2.3. Sulphate resisting cement
    - 2.1.2.4. High alumina cement
    - 2.1.2.5. Quick setting cement
    - 2.1.2.6. Low heat cement
    - 2.1.2.7. Portland pozzolana cement
    - 2.1.2.8. White cement
    - 2.1.2.9. Colored cement
- 2.2. Aggregate
  - 2.2.1. Introduction
  - 2.2.2. Classification

### UNIT-3 PROPERTY OF CONCRETE

- 3.1. Fresh concrete
- 3.2. Hydrated concrete

### UNIT-4 WATER CEMENT RATIO & WORK ABILITY OF CONCRETE

- 4.1. Introduction of water cement ratio
- 4.2. Hydration of cement
- 4.3. Definition of work ability and phenomenon
- 4.4. Compaction factor test
- 4.5. Factors affecting workability

### 5. ADMIXTURES

- 5.1. Types & Uses of admixture
- 5.3. Fly ash & Silica fumes
- 5.4. Rice husk ash
- 5.5. Met kaolin

#### Reference Book:

1. Concrete Technology by Rajan Kumar

