

AMSE11 SAFETY IN CONSTRUCTION

UNIT-1 INTRODUCTION TO CONSTRUCTION

- 1.1 Industry and safety issues in construction
- 1.2 Human factors in construction safety management
- 1.3 Roles of various groups and stake-
- 1.4 Holders in ensuring safety in construction industry
- 1.5 Framing of contract conditions on safety and related matters
- 1.6 Relevance of ergonomics in construction safety.

UNIT-2 SAFETY IN VARIOUS CONSTRUCTION OPERATIONS

- 2.1 Excavation and filling
- 2.2 Under-water works- Underpinning & Shoring
- 2.3 Ladders & Scaffolds- Tunneling- Blasting- Demolition- Pneumatic caissons
- 2.4 Confined space- Temporary Structures.
- 2.5 Familiarization with relevant Indian Standards and the National Building Code provisions on construction safety.

UNIT-3 SAFETY IN MATERIAL HANDLING AND EQUIPMENTS

- 3.1 Safety in storage & stacking of construction materials.
- 3.2 Safety in the use of construction equipment's
- 3.3 Excavators, graders and dozers- cranes- hoists & lifts- other lifting gears wire ropes- chain - pulley blocks-mixer
- 3.4 Conveyors pneumatic and hydraulic tools in construction.
- 3.5 Temporary power supply.

UNIT-4 CONTRACT LABOUR (R&A) ACT AND CENTRAL RULES

- 4.1 Definitions, Registration of Establishments,
- 4.2 Licensing of Contractors,
- 4.3 Welfare and Health provisions in the Act and the Rules,
- 4.4 Penalties, Rules regarding wages.
- 4.5 Building & Other Construction Workers (RE & CS) Act, 1996 and Central Rules, 1998:
- 4.6 Applicability, Administration, Registration,
- 4.7 Welfare Board & Welfare Fund,
- 4.8 Training of Building workers, General Safety,
- 4.9 Health & Welfare provisions, Penalties.

References Books:

1. K.N.Vaid(Ed.), Construction Safety Management, National Institute of Construction Management and Research, Bombay.
2. V.J. Davies & K. Tomasin, Construction Safety Handbook, Thomas Telford Publishing, London.
3. James B. Fullman, Construction Safety, Security & Loss Prevention, John Wiley & Sons