

## 2.14 30214 SHIP CONSTRUCTION TECHNOLOGY

### UNIT-1

Ship structure General arrangement of structure of Bulk Carriers and Tankers. Midship sections of Bulk Carriers and Tankers. Double hull structure.

### UNIT-2

Bottom Structure Bottom structure – Single bottom construction and double bottom construction– keels, types of floor, girders, bottom frames – transverse and longitudinal framing. Bilge keel

### UNIT-3

Side Shell and Deck structure Side shell and decks – transverse and longitudinal framing, side transverses, deck transverse/ beams, longitudinal, stringers, deck girders. Cargo hatches

### UNIT-4

Structure of Bulkheads – Transverse and longitudinal, Corrugated and Ordinary Stiffened Bulkheads.

### UNIT-5

5.1 Fore end, aft end and Engine room structure

5.2 Fore end-stem-Normal raked bow, bulbous bow, stembar, panting stringers, breast hooks, deep floors, hawse pipe, bow thruster tunnel, chain locker.

5.3 Aft end- cruiser stern, transom stern, shape of propeller aperture, stern frames for different types of rudders, types of rudders, steering gear flat, rudder trunk, stern tube, A-bracket and Bossing.

5.4 Engine room structure- engine girders, platform decks

### UNIT-6

Deckhouse and superstructure construction Deckhouse and superstructure construction including engine casing.

### UNIT-7

Closing Appliances Closing appliances-doors, windows, scuttles, hatches, skylights, ventilator covers.

### UNIT-8

Deck machinery arrangement & layout Mooring and rigging arrangement, masts, life saving appliance, access ladders, gangways.

### Reference books:

1. Merchant Ship Construction BY D. A. Taylor
2. Ship Design & Construction BY R. Taggart
3. Ship Construction BY D.J.Eyres.