

UPPERYARDMAN

ANTI SUBMARINE WARFARE

YEAR 1 – TERM II

(21 Periods)

(Max. Marks 50)
Type of Exam – Written)
Duration - 2 hrs

PERIOD

TOPIC

01 - 07

General ASW.

- a. Historical background.
- b. Aim of ASW.
- c. Task of ASW.
- d. ASW organization responsibilities.
- e. ASW organization of a ship.
- f. Duties of ASWO.
- g. Introduction film/ video on ASW.

08 - 11

INTRODUCTION TO SUBMARINES.

- a. History of S/M.
- b. Advantages / Disadvantages of Conventional Vs Nuclear S/M.
- c. AIP.
- d. Concept to Buoyancy.
- e. Operating States.
- f. Construction.
- g. Diving surfacing of a S/M.
- h. Weapons and Sensors.

12 - 15

INTRODUCTIONS TO MINE WARFARE.

- a. What is les mine.
- b. Classification of Sea mine.
- c. Types of Mine Layers.
- d. Comparison on mine layers.

- e. Types of channels.

16 - 21

UNDERWATER ACCUNSTICS

- a. Types of wanes.
- b. What is sounds.
- c. Characteristics of sound.
- d. Factors attesting sound velocity U/N .
- e. Wilson's equation.
- f. Snell's Law.
- g. Basic sound velocity gradients.
- h. Introduction to SONAR.