Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. 2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42-8= 50, will be treated as malpractice.

Eighth Semester B.E. Degree Examination, June/July 2023 Engine Room Management

CBCS SCHEME

Time: 3 hrs.

USN

1

3

4

6

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- a. During operation of a Lanker Engine Room gets 2 hours notice, St by and Finished with Engine, on arrival. Similar notices get for the departure too. Explain the significance and action taken on those notices. (14 Marks)
 - b. List out the Standing orders of a Chief Engineer to the Engine room on a seagoing ship.

(06 Marks)

OR

- 2 Write short notes on :
 - a. Rest Hours per STCW

b. Alcohol limit

- c. Watch Keeping Principle
- d. Duties of 3E and 4E during Sea watch

Module-2

With the aid of simple sketch explain how the following problems are handled in refrigerating system for cold chambers:

- i) Oil carried over to evaporator coil
- ii) AIR in the system
- iii) Small leakage at sue per gauge
- iv) Discharge pipe cracked
- v) Low oil level in the crank case.

OR

- a. During Cargo discharge on a tanker it was noticed that boiler feed pump in continuously running. Write down the reasons and measures taken. (10 Marks)
 - b. Explain dry docking inspection and works carried out in the dry dock. (10 Marks)

Module-3

- 5 a. Write down with respect to main engine the reasons for scavenge fire and action taken. What preventive measures are these to avoid M.E. scavenge fire? (12 Marks)
 - b. Write down the procedure for inspecting liner and piston rings, etc without dismantling main engine. (08 Marks)

OR

a. Observed Black Smoke in the funnel. Write down the reasons. (08 Marks)b. What is the procedure to fight uptake fire? Explain the reasons for the Hydrogen fire.

(12 Marks)

Max. Marks: 100

(20 Marks)

(20 Marks)

18MR81

Module-4

- How crank case inspection done for the main engine? What are all clearance taken during 7 a. (10 Marks) crank case inspection? (10 Marks)
 - Write down the procedure for calibration of piston rings and liner. b.

OR

Write down the procedure for removal of main bearing. (10 Marks) a. On what occasions crank shaft defectives are taken. Write down the procedure for taking b. (10 Marks) deflection.

Module-5

Write short notes on :

8

9

- i) Battery Room Precautions
- ii) Maintenance to be carried out on lead acid battery
- iii) Improving moto insulation when found zero.

(20 Marks)

OR

Enumerate the guidelines for the planned alternator maintenance. (14 Marks) 10 a. (06 Marks) List out main switch board circuit breaker protection. b.