

CBCS SCHEME

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21MR72

Seventh Semester B.E./B.Tech Degree Examination, Dec.2024/Jan.2025 Engine Room Maintenance

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. What is permit to work and what are the different types of permits to work on board ship. (10 Marks)
b. What is PMS? Explain what are the components of PMS on board ship. (10 Marks)

OR

- 2 a. What is code of safe working practices? What are the safe working practices to be followed in the ER. (10 Marks)
b. What are non-conformities? What are the different non-conformities that are to be avoided by engine room staff? (10 Marks)

Module-2

- 3 a. The main engine is not starting even if fuel is injected. Explain the causes and potential remedies. (10 Marks)
b. Explain knocking and explain the causes and remedies. (10 Marks)

OR

- 4 a. Explain the sequence of events that lead to a crank case explosion. (10 Marks)
b. Explain the sequence of events that can lead to a starting air line explosion. (10 Marks)

Module-3

- 5 a. Explain the problems and trouble shooting for running and starting a centrifugal pump. (10 Marks)
b. Explain the trouble shooting for boiler not firing. (10 Marks)

OR

- 6 a. Explain the causes and trouble shooting of refrigeration unit tripping on high pressure. (10 Marks)
b. Explain the problems and trouble shooting for a hydrophone in the EC in operation. (10 Marks)

Module-4

- 7 a. Explain the procedure for clucking and Tightening the tie rods. Explain why it's important to check the tightness. (10 Marks)
b. Explain the procedure to do a crank case inspection. (10 Marks)

OR

- 8 a. Explain the types of clearances that have to be taken for main engine bearings. (10 Marks)
b. Explain the procedure for taking crank shaft deflection. (10 Marks)

Module-5

- 9 a. Explain the different types of dry docks. (10 Marks)
b. What are the planning a 2nd engineer has to make before the vessel goes to dry dock. (10 Marks)

OR

- 10 a. Explain the procedure for removal and mounting of a propeller. (10 Marks)
b. What are the items on a dry dock checklist for the engine room. (10 Marks)

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