USN ☐☐☐☐☐☐☐☐☐☐

Sixth Semester B.E. Degree Examination, Dec.2019/Jan.2020
Marine Internal Combustion Engines - II

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions, selecting at least TWO questions from each part.*

PART – A

1   a. Explain about the Balancing of the Engines.   (10 Marks)
    b. How to check the fuel injection pump timing.   (10 Marks)

2   a. What is local or emergency manoeuring on ship?   (10 Marks)
    b. Explain the safety points for Remote manoeuring system of marine engine.   (10 Marks)

3   What is indicator Diagram and its types? What is the purpose of Taking Indicator Diagram, and how to take Indicate Diagram?   (20 Marks)

4   a. Explain the action taken when the Lub oil temperature is abnormally high.   (10 Marks)
    b. Why exhaust valve burn? What are the cause of Exhaust valve burning?   (10 Marks)

PART – B

5   a. What are the design features for marine gas turbine plants?   (10 Marks)
    b. Explain :
        i) Shell and tube type heat exchanger.
        ii) Plate type heat exchanger.   (10 Marks)

6   a. What is Governor and its types? Explain the function of Governor.   (10 Marks)
    b. Define the following :
        i)   Governor Droop
        ii)   Compensation
        iii) Hunting
        iv)   Isochronous Governor
        v)   Governor maintenance.   (10 Marks)

7   a. Difference between oil cooled piston and water cooled piston   (10 Marks)
    b. What is the function of piston rings and what are the causes of piston ring failure. (10 Marks)

8   a. What is the function of crosshead and explain why crosshead bearing is prone to failure?   (10 Marks)
    b. Explain about the Fuel oil Treatment.   (10 Marks)

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