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Sixth Semester B.E. Degree Examination, Dec.2017/Jan.2018
Ship Fire Prevention and Control

Max. Marks:100

Time: 3 hrs.

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART - A

- 1 a. Explain the following :
i) Auto - ignition ii) Spontaneous combustion iii) Fire damper iv) Chain reactions. (08 Marks)
b. Explain the classification of FIRE in detail and its control measures. (12 Marks)
- 2 a. Explain in detail 'Standard Fire Test' procedure for each class of fire division. Also give the standard size of the specimen for testing. (12 Marks)
b. Explain the requirements of materials used to enhance fire integrity of bulkheads and decks. (08 Marks)
- 3 a. Explain the procedure for annual testing and inspections of following :
i) Fixed CO₂ extinguishing system ii) Water mist or sprinkler system (16 Marks)
b. Write a note on Fire door requirements. (04 Marks)
- 4 Explain the construction and working principle of following detectors with a neat labeled sketch
a. Ionisation Detector.
b. Light - Scattering Detector.
c. Bi - metallic Detector. (20 Marks)
d. Ultra - Violet Detector.

PART - B

- 5 a. Draw a sectional view of a mechanical foam type portable extinguisher wi. (06 Marks)
b. Explain the construction and operation of Fixed CO₂ Fire Fighting system, with a neat labeled sketch. (14 Marks)
- 6 a. Brief Foreman's outfit, its use and care. (08 Marks)
b. Explain Inert gas systems, with neat sketch for tankers. (12 Marks)
- 7 a. Explain the methods use to prevention of fire in engine room. (06 Marks)
b. Explain in detail fire organization on ship. (10 Marks)
c. Explain the term hot permit. (04 Marks)
- 8 a. Explain International share coupling. (06 Marks)
b. Write the steps to be taken before entering tanks oil tankers pump room. (08 Marks)
c. What is Static Electricity and what are possibilities of generation in ships? (06 Marks)

1. Candidates must not write on the remaining blank pages. Any writing on the remaining blank pages will be treated as malpractice.
2. Any revealing of identification appears on the remaining blank pages will be treated as malpractice.