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**Third Semester B.E. Degree Examination, Dec.2014/Jan.2015**  
**Elementary Navigation Seamanship and Survival at Sea**

Time: 3 hrs.

Max. Marks:100

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

**PART - A**

- 1 a. What precautions are to be taken on the approach of bad weather? (10 Marks)
- b. Write down flag etiquette followed in ships: (05 Marks)
  - i) When a ship is entering a port during daylight hours? (05 Marks)
  - ii) When a ship is leaving a port during daylight hours?
- 2 a. How many types of knots are used on ships? Draw and describe a reef knot. (08 Marks)
- b. Describe characteristics and care of vegetable fibre ropes. (06 Marks)
- c. Describe the procedure of weighing an anchor. (06 Marks)
- 3 a. What is a sextant? Draw and describe the principle of sextant. (08 Marks)
- b. Draw and describe the principle of echo-sounder. Mention three errors of echo-sounder. (12 Marks)
- 4 a. What are the equipments to be carried by a life-boat and their uses? (12 Marks)
- b. Describe the procedure for launching an inflatable type life-raft. (08 Marks)

**PART - B**

- 5 a. Explain an abandon ship operation. (08 Marks)
- b. What is a muster list? What should muster-list contain and which all places it is required to be displayed? (12 Marks)
- 6 a. What are the general requirements and specification of life buoys and life jackets? (10 Marks)
- b. Explain about food ratio provided in life raft and life boat. (10 Marks)
- 7 Explain shortly about: (04 Marks)
  - a. ISM (04 Marks)
  - b. SOLAS (04 Marks)
  - c. STCW (04 Marks)
  - d. IMO (04 Marks)
  - e. MARPOL (04 Marks)
- 8 a. How many types of bends are used on ships? Describe double Carrick bend. (08 Marks)
- b. Explain on load and off-load release of life boats. (08 Marks)
- c. How it join two ropes using a long splice method? (04 Marks)

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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.