B.Sc (NAUTICAL SCIENCE)

00905

Term-End Examination December, 2010

BNA-041 : NAVIGATIONAL AIDS AND ENVIRONMENTAL PROTECTION

Time: 3 hours

Maximum Marks: 70

Note: (i)

- Attempt any three questions from Section A.
- (ii) And any four questions from Section B.
- (iii) All questions carry equal marks.

SECTION-A NAVIGATIONAL AIDS

- 1. (a) Enumerate five inherent limitations of A.I.S.
 - (b) How does Doppler log provide Athwartship speed over ground?
- 2. (a) List 5 main units of a Radar Set.
 - (b) Name 2 modes of display of Arpa. When would you use each mode?
- 3. What is Simplified Voyage Data Recorder?
- 4. What does "ECDIS" stand for? Can it be accepted as meeting the chart carriage requirement as per Solas chapter V?

SECTION-B ENVIRONMENTAL PROTECTION, EMERGENCIES AND SAFETY

- 5. How do anti fouling paints protect ship's hull?
- **6.** What information is contained on the CSC plate of a container?
- 7. What are the hazards associated with carriage of cars on a pure car carrier?
- 8. As per GMDSS, what is the difference between sea areas A1 and A2?
- 9. What is the advantage of VTS to ships in approaches to ports?
- 10. Piracy activities have increased off the coast of Somalia and in approaches to Gulf of Aden. What measures should be taken if your ship is to transit this area?