

B.Sc. (NAUTICAL SCIENCE)

Term-End Examination

December, 2013

BNA-041 : NAVIGATIONAL AIDS AND ENVIRONMENTAL PROTECTION

Time : 3 hours

Maximum Marks : 70

Note : Attempt any three questions from Section - A and any four questions from section - B. All questions carry equal marks.

SECTION -A

Navigational Aids

1. (a) Enumerate the dynamic information that is automatically transmitted by A.I.S. 8
- (b) State the period for which data recorded by VDR is available. 2
2. State the correct procedure for switching on a radar set. 10
3. Explain the difference between "relative motion display" and "true motion display". When is each mode used ? 10
4. As per solas chapter V ; when is the master of a ship required to transmit a danger message ? What information is contained in a danger message when the ship Encounters tropical storm ? 10

SECTION - B
Environmental Protection,
Emergencies and Safety

5. What are the main causes of paint failure ? Write 10
briefly about any two of them.
 6. What are the main problems associated with the 10
design of the Ro - Ro ships ?
 7. Describe the method of container Identification 10
on board a ship with respect to markings on it.
 8. What is cargo securing manual ? What are the 10
various types of lashing equipment ?
 9. What is the purpose of VTS ? Enumerate the 10
services provided by VTS.
 10. What are IMO guidelines related to prevention of 10
a piracy attack on vessel ?
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