

INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)

June 2016 End Semester Examinations
B.Sc. (Nautical Science) - 2013 batch onwards
Semester III

BRIDGE EQUIPMENT, WATCH KEEPING & COLLISION PREVENTION – III
(UG21T2307)

Date : 12.07.2016/F.N

Time: 3 Hrs

Maximum Marks: 70

Pass Marks : 28

NOTE: Attempt any SEVEN questions. All questions carry equal marks

7x10=70

Use of Non-programmable scientific calculator is allowed.

- 1** (a) Explain the principle of Doppler log ?
(b) Describe Janus Configuration

- 2** (a) Describe the controls and alarms of an Auto Pilot.
(b) Explain the procedure for changing over: From Hand Steering to Auto Pilot & From Auto Pilot to Hand Steering

- 3** Explain working principle and Errors of Echo Sounder with suitable sketches and block Diagram.

- 4** (a) Explain Care & record keeping of course recorder.
(b) Explain Bearing Discrimination & Range Discrimination on Marine Radar

- 5** Explain the taking over and handing over procedures of a navigational watch at sea.

- 6** (a) Describe the duties of the Officer in charge of Navigational Watch

(b) What is the sole lookout. State the conditions for Sole lookout

- 7** Describe the IMO Performance Standards for Automatic Radar Plotting

- 8** Explain in your own words ROR Rule No. 19, conduct of vessels in restricted visibility

- 9** Write short notes on the following:
(a) Safe Speed (b) Lookout