

INDIAN MARITIME UNIVERSITY
(A Central University, Government. of India)
End Semester Examinations – Jun/Jul 2019
B. Sc. (Nautical Science)
Semester - V
Bridge Equipment & Watch Keeping Paper – II
(UG21T3506)

Date: 19-07-2019

Maximum Marks: 70

Duration: 3 hrs.

Pass Marks: 35

Note: Question No. 1 and 7 are compulsory.

Answer any 6 from remaining 8 questions each 10 marks.

Scientific Calculator is permitted if required.

(Part – A, Bridge Equipment)

(Question No.1 is compulsory, Answer any 4 from remaining 5 questions, each carry 10 marks)

1. Define / State the following. (2x5=10)
 - (a) Bearing Discrimination.
 - (b) Two uses of S.A.R.T on board ship.
 - (c) Two uses of Parallel Indexing Techniques.
 - (d) Two Principal parts of Gyro Compass.
 - (e) Two errors of G.P.S.

2. Briefly explain the following with respect to Radar. (5x2=10)
 - (a) North Up Display and True Motion Display.
 - (b) What important in-formations are obtained from the radar plotting.

3. (a) Explain the principle and working of E-loran. (5x2=10)
(c) Explain the Working of Ship Security Alert System.

4. (a) Define errors associated with Gyro Compass. (5x2=10)
(b) Explain the method for obtaining a table of Deviations.

5. (a) Methods for obtaining Radar fix from shore objects. (5x2=10)
(b) Define RACON with respect to use of radar in navigation.

6. (a) Principle and Alarms of G.P.S. (5x2=10)
(b) Explain use of AIS on board ship.

(Part – B, Watch Keeping)

Question No.7 is compulsory, answer any 1 from remaining 2 questions each carry 10 marks.

7. Define / state the followings. (2x5=10)
- (a) When Officer of the Watch can be a sole lookout.
 - (b) Two uses of Routeing Charts.
 - (c) List any two Emergency Check lists as per Bridge Procedure Guide.
 - (d) Any two duties of Officer of the Watch during hours of darkness.
 - (e) Any two Bridge equipments to be control tested prior arrival to port.
8. (a) Obligations of Meteorological services as per SOLAS. (5x2=10)
(b) Duties of Officer Of the Watch in clear weather conditions.
9. (a) Principle of safe watch keeping as per Bridge Procedure Guide. (5x2=10)
(b) Preparation for departure from a port.

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