

Indian Maritime University
(A Central University, Government of India)

End Semester Examination December 2017
B.Sc. (Nautical Science) – Third semester

Computer Science – I (UG21T2301)

Date : 23.12.2017
Time : 3 Hours

Maximum Marks: 70

Answer any FIVE of the following questions (5x14=70 Marks)

1. a) Convert the following octal numbers to hexadecimal $(345)_8$ and $(1002)_8$ (8 Marks)
b) Convert $(11010111.110)_2$ to decimal, octal and hexadecimal. (6 Marks)
2. a) Explain the BCD and Grey code with example. (7 Marks)
b) Perform subtraction for the following binary numbers with 2's complement method:
 - i. $100111011 - 10001$
 - ii. $10100.01 - 11011.10$ (7 Marks)
3. a) Perform addition of $(367)_8$ and $(715)_8$ without converting it to decimal and divide 1011.11 by 11 up to two decimal digits. (7 Marks)
b) Explain cache memory and primary memory. (7 Marks)
4. a) Write short notes on low level language and high level language in detail. (7 Marks)
b) Explain ecommerce with its features. (7 Marks)
5. a) Explain EDI with respect to ecommerce (7 Marks)
b) Explain the technical and security issues related to ecommerce. (7 Marks)
6. a) Write short notes on cryptography. (7 Marks)
b) Explain digital signature. (7 Marks)
7. a) Explain with diagram SET (Secure Electronic Transaction). (7 Marks)
b) Explain Cyber cash with the help of neat diagram. (7 Marks)
