

**TECHNICAL UNIVERSITY OF MOMBASA**  
**SCHOOL OF BUSINESS**  
**BMM 4201 - MARITIME INFORMATION TECHNOLOGY**  
**EXAM ONE**  
**YEAR II – 1ST SEMESTER 2016/2017 ACADEMIC YEAR**

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**QUESTION ONE**

- a) Define the term ICT and describe the various fields of onshore and offshore maritime and their areas of application **(10 Marks)**
- b) Describe the concept of maritime communication and analyze the main types of terrestrial and non-terrestrial communication in the maritime transportation **(10 Marks)**
- c) Discuss five reasons why various maritime ICT applications are regulated through maritime conventions. Support your answers with two examples of regulated applications. **(10 Marks)**

**QUESTION TWO**

- a) Describe the features of maritime safety communication and identify two navigation information communication systems **(10 Marks)**
- b) Discuss the characteristics of ship identification number and its role in maritime information management **(10 Marks)**

**QUESTION THREE**

- a) Analyze the various forms of ICT application in commercial shipping **(10 Marks)**
- b) History has been harsh on electronic bills of lading. Evaluate the challenges of an electronic bill of lading **(10 Marks)**

**QUESTION FOUR**

- a) Describe the role of various Customs based ICT technologies **(10 Marks)**
- b) Analyze key factors e-Maritime ICT systems address **(10 Marks)**

**QUESTION FIVE**

- a) Describe various models of Port ICT systems and their functions **(10 Marks)**
- b) Analyze the concept of single window systems and describe five benefits of Kenya Electronic Single Window System **(10 Marks)**