QUESTION ONE

a) Analyze how the concept of information and communication technologies has been applied in the maritime sector

b) Describe the components that must come together in order to produce an information system and discuss the characteristics of two types of maritime information systems

c) Discuss the roles played by maritime safety information and identify three navigation information communication systems **(10 Marks)**

QUESTION TWO

a) Describe the functions of the following technologies
   i.   AIS
   ii. Long-Range Identification and Tracking (LRIT)   **(10 Marks)**

b) In maritime emergency situations there are three phrases that you might hear on a VHF radio, and they all relate to safety. Describe the meaning of these phrases and their requirements **(10 Marks)**

QUESTION THREE

a) Describe the concept of the term digital shipping and analyze its methods of application **(10 Marks)**

b) Describe the features of Kenya Customs ICT system that extends to shipping and logistics operations **(10 Marks)**

QUESTION FOUR

a) Evaluate five objectives of e-maritime systems **(10 Marks)**

b) Analyze the benefits of Customs ICT applications to maritime sector **(10 Marks)**

QUESTION FIVE

a) Discuss the features of Kenya Electronic Single Window System and its objectives **(10 Marks)**

b) Analyze the objectives of Customs services management information systems **(10 Marks)**