



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ENGINEERING AND TECHNOLOGY

**UNIVERSITY EXAMINATIONS FOR THE DIPLOMA IN MARINE ENGINEERING
(TVET)**

1ST YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR

CENTRE: MAIN CAMPUS

COURSE CODE: TDM 2129

COURSE TITLE: BASIC SEA SURVIVAL TECHNIQUES

EXAM VENUE: STREAM: Dip Marine Eng

DATE: ../04/2024 EXAM SESSION:

DURATION: 3 HOURS

Instructions

- 1. Answer question 1 (Compulsory) and ANY other three questions**
- 2. Candidates are advised not to write on question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

QUESTION ONE (40 MARKS)

- a) Define First Aid. **(6 Marks)**
- b) Describe the ABCs of First Aid. **(10 Marks)**
- c) Explain the CPR process. **(10 Marks)**
- d) Describe the First Aid procedures onboard ship when you encounter a casualty with the following; **(14 Marks)**
 - i) Electric shock
 - ii) Choking
 - iii) Drowning
 - iv) Burns
 - v) Bone Fracture
 - vi) Ingestion of hazardous substances
 - vii) Extreme temperatures

QUESTION TWO (20 MARKS)

- a) What is SOLAS in full? **(2 Marks)**
- b) What events led to the existence of SOLAS? **(2 Marks)**
- c) How many Chapters does the SOLAS convention contain and briefly describe each chapter? **(16 Marks)**

QUESTION THREE (20 MARKS)

- a) What is ISPS code in full? **(1 Mark)**
- b) What events led to its existence? **(1 Mark)**
- c) To which Ships does the ISPS code apply? **(2 Marks)**
- d) What are the responsibilities of the Ship Security Officer (SSO) under the ISPS code? **(5 Marks)**
- e) Who is a port facility security officer (PFSO) and what are their responsibilities? **(2 Marks)**
- f) Describe the ISPS code security levels? **(3 Marks)**

g) What are the common measures undertaken by ships transiting piracy prone routes to prevent boarding of pirates? **(6 Marks)**

QUESTION FOUR (20 MARKS)

- a) What are the various life-saving equipment that are found on-board ships? **(5 Marks)**
- b) For each equipment above; - Explain in detail their locations on-board,
- Situation that they are to be used,
- Describe their on-board checks and maintenance. **(15 Marks)**

QUESTION FIVE (20 MARKS)

- a) What are the various emergency situations that are possible to occur at sea? **(4 Marks)**
- b) How the crew alerted by the Master in case of such emergency situations answered in (a) above? **(2 marks)**
- c) Where do the crew assemble at when responding to the emergency signals and what activities are to be carried out for each emergency situation mentioned in (a) above? **(12 marks)**