

TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT SCIENCE

EXAMINATION ONE FOR:

BSC MARITIME MANAGEMENT

BMM 4103: INTRODUCTION TO PORTS AND HARBORS

TIME: 2HOURS

DATE: Apr2022

Instructions to Candidates

This paper consists of **FIVE** questions. Attemptquestion ONE (Compulsory) and any other TWO questions You should have the following for this examination:

Answer Booklet, examination pass and student ID

Ouestion ONE

A port consulting firm has invited you to deliberate on development of small ports. You have been tasked with the responsibility of researching on port development issues and requirements. The deliberations of the forum will contribute to the development of coastal ports that will serve as feeder ports to maritime transport operations. As part of your report, answer the following questions:

- a) Discuss the operations carried out at the key functional areas of a port (10 Marks)
- b) Describe the facilities that would be required in a commercial cargo port (10 Marks)
- c) Discuss the nature of laws that regulate ports and harbors in Kenya (10 Marks)

Question TWO

- a) A harbor is designed to ensure safe navigation of ships in and out of the berth and the port. Describe five key components that allow safe maneuvering of ships in the harbors (10 Marks)
- b) Evaluate various ways in terminals in a port can be identified (10 Marks)

Ouestion THREE

- a) Discuss the characteristics of the five layout areas of a container terminal critical to port connectivity (10 Marks)
- b) Describe the nature of seven common classification of cargoes in most Port Tariffs (10 Marks)

Question FOUR

- a) Describe the role of a rail yard and identify five types of wagons ideal for transferring cargo from port terminals to the hinterland (10 Marks)
- b) Describe the activities of the three key areas of operation in a terminal yard (10 Marks)

Question FIVE

Describe the following components of rail transportation:

- a) Types of rail gauges (5 Marks)
- b) Rail fixed stock (5 Marks)
- c) Rail Rolling stock (5 Marks)
- d) Yardmaster (5 Marks)