TECHNICAL UNIVERSITY OF MOMBASA

School of Business

Department of Business Administration

ORDINARY UNIVERSITY EXAMINATION FOR:

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

BACHELOR OF TECHNOLOGY IN MARINE ENGINEERING

BMS 4204: INSURANCE FOR ENGINEERS

END OF SEMESTER EXAMINATION

SERIES: APRIL 2025

TIME:2HOURS

DATE: Pick DateAPRIL 2025

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attemptquestion ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE (Read the case study and answer the questions below)

Bombea Contractors Limited is a private engineering company registered in Kenya since 2000. The company deals in a range of diversified engineering works including mechanical, building and civil projects in Kenya and some neighboring countries: Somalia, South Sudan, Uganda, Burundi, Rwanda, Tanzania. The company has in the past carried out projects for World Bank, UNDP and DANIDA and also for some locals. The company has an excellent reputation among its clients and other local companies owing to its ability to deliver completed projects in time.

The size and complexity of the company coupled with competitive pressures has forced the management to acquire modern equipment in all its business lines. The equipment used by the company has been sourced from China, Japan, Korea, Germany, the UK and Italy. Some foreign technical experts have also been engaged on contracts of service including Nigerians, Chinese and Japanese. The bulk of the staff in the company are technical with a skeleton administrative staff. All staff except the management are members of a local trade union. The company has experienced some challenges in procurement of materials from foreign countries. There have also been challenges with getting of work permits for the expatriates.

The company has adopted modern management and operational systems in a bid to remain competitive in the market. As a result, the company has a robust Management Information system and is ISO

9001:2015 certified. The management of the company has recently begun to take seriously risk management. This came about after the board recommended that a project risk management system be put in place as soon as possible. This was after an industrial accident in one of the sites where the company was running a project which led to stalled operations for a month plus some huge compensation to staff and members of the public injured on site.

During a recent board meeting, the board recommended the following actions for implementation by the management:

i. That the company should establishing a project risk management system
ii. Developing and maintaining risk registers in all areas of operation
iii. That the company should employ risk assessment matrices to profile the risk exposures
iv. Procurement of appropriate insurance covers
v. Putting in place adequate measures to ensure safe working conditions and safe working procedures in all work places, stations and sites
vi. The company to recruit a Project Risk Management Officer

Question ONE

a) Identify and describe the perils and associated risk exposures the company is faced with. (5 marks)
b) Explain any five benefits that would accrue to the company by implementing action (i) above. (10 marks)
c) Propose suitable insurance covers for the insurable risks the company is exposed to. (5 marks)
d) Illustrate how action (iii) would be used to evaluate risks. (5 marks)
e) Explain how implementation of action (vi) would benefit the company. (5 marks)

Question TWO

a) Explain the measures an organization would take to reduce the incidence of risk without necessarily resorting to the use of finance. (10 marks)

b) Although it is the responsibility of every individual and entity to decide whether or not to transfer risks it faces through insurance, there are instances where such a freedom is withdrawn and substituted with compulsory insurance. Explain the justifications that would be advanced for such compulsory measures. (10 marks)

Question THREE

a) Explain the essentials of insurable interest as applicable in infrastructure projects. (10 marks)

b) Maji Safi Limited had an insurance cover for one of its projects in Mariakani. However, the manager does not seem to understand why the insurer objects to indemnify the company in full after a loss of the insured property occurred. Highlight the factors which may justify the position of the insurer. (10 marks)

Question FOUR

a) Self-insurance is an approach used by some organizations to deal with some risks. Briefly highlight the limitations of such an approach. (8 marks)

b) Explain the major components of insurance policy cover. (12 marks)

Question FIVE

a. The Government in the Republic of Kenya is keen to protect the rights of the players in the insurance sector. Explain the ways in which the Government endeavors to achieve this goal. (10 marks)

b. Explain the effects of fraudulent tendencies by insureds and agents of the insurer on the performance of the insurance sector in Kenya (10 marks)