

KIBABII UNIVERSITY



UNIVERSITY EXAMINATIONS 2021/2022 ACADEMIC YEAR THIRD YEAR FIRST SEMESTER

SPECIAL/SUPPLEMENTARY EXAMINATION

FOR THE DEGREE OF BACHELOR OF COMMERCE

COURSE CODE: BCP 311

COURSE TITLE: RISK MANAGEMENT IN SUPPLY CHAIN

DATE: 18/11/2022

TIME: 8.00 – 10.00AM

INSTRUCTION TO CANDIDATES

- 1) The paper contains **FIVE** questions
- 2) Attempt **THREE** questions
- 3) Question **ONE** is Compulsory

KIBU observes **ZERO** tolerance to examination cheating

QUESTION ONE:

CASE STUDY

DMG Manufacturing (DMGM) owns a high-rise office building with glass cladding (a protective covering) and adjacent factory premises, and it operates from these factory premises. DMGM refurbishes and sells electric motors. Its processes include stripping down old motors, sandblasting motor casings, armature winding, varnishing, spray-painting and assembly.

In order to write a risk management statement, the risk manager will carry out a physical inspection to familiarize himself or herself with the factory layout and processes. The risk management process of *identification* will consist of listing all manufacturing processes using a checklist to ensure that he or she asks all the relevant questions. The checklist will also include questions such as what flammable liquids are used, in what quantities, and where are they stored?

During the *identification* step of the risk management process for DMGM, the risk manager identifies the following insurable risks:

Risk	Office building	Factory premises
Fire	Low probability	High probability
Explosions	Low probability	High probability
Storm	High probability of hail damage to glass cladding	Medium probability
Riot and strike	Low to medium probability related to possible labour disputes	Low to medium probability related to possible labour disputes
Theft	Medium probability	Low probability
Personal liability	Low probability	High probability

The next step in the risk management process is to *measure* the potential risks, or place a value on the impact of the risk. The measurement process for DMGM reveals the following information:

Fire damage to the office building: The low potential for fire in the office building is further improved by the construction specification that includes fire resistant doors on stairways and the installation of a sprinkler system. In the event of fire, estimates suggest that the damage would be limited to 60% of the building. However, this exercise identified the possibility of damage through accidental activation of the sprinkler system. This risk must be added to the list.

Sprinkler leakage: In the case of leakage, estimates suggest that the damage would be 15% of the insured contents value of the office building.

Fire damage to factory premises: The factory premises contain potential sources of ignition and inflammable material that could feed a fire. Open flames are used to strip old motors.

Therefore, the potential for fire damage is high and likely to be 80% of the total value of the contents and building. Fire would also damage the combustible components of the stock of refurbished and new motors.

Storm damage: The potential loss from storm damage is estimated at 25% of the value of the factory premises, and 20% of the value of the office building. The potential damage to the glass cladding must be separately evaluated. The impact of hail damage could be 25% of the total cost of glass replacement, representing one total side of the building. Statistics also show that, on average, five panes of glass break accidentally every year. This equates to R4 000 in total, at a cost of R800 per pane.

Riot and strike damage: The potential loss from riot and strike damage is estimated at 10% of the total value of the factory premises.

Theft: In the case of theft the estimate loss, per event, is R50 000 for the factory and R10 000 for the office.

Product liability: The refurbished products could attract product liability claims against DMGM if DMGM's negligence caused damage to property where the motors are installed. The estimated loss is R2 million, inclusive of legal fees.

Business interruption: A fire could seriously impact on the ability of the business to continue. In this event, competitors would move into DMGM's market if the company could not provide its services for an extended period. It is estimated that DMG could be affected for at least six months after a serious fire.

Required:

Draft a risk management plan to deal with the risks that have been identified:

(20 marks)

- a) The government of Kenya has of late been in the forefront in the fight against terrorism, accidents on the roads and many other disasters. A big budget for instance is usually allocated in boosting security manpower and food security by way of improved methods of farming. Most organizations have also either established risk management departments with elaborate continuity plans or are using the services of risk management consultants. Explain why risk management is becoming increasingly important in organizations.

(10 marks)

(30 marks)

QUESTION TWO

- a) Supply Chain Risks may arise from sources both within the organization and external to it. The sources of risk can be generally categorized into main areas. Describe at least five of those areas.

(10 marks)

- b) You are employed in a telecommunication company as a risk control manager of the company. Explain to the employees of the company how to assess risk

(10 marks)

(20 marks)

QUESTION THREE

- a) Describe FIVE sources of information used in the Supply Chain Risk identification process

(10 marks)

- b) You were invited to give a lecture on "Risk quantification in the supply chain". Describe what you would compile and present in your write up.

(10 marks)

(20 marks)

QUESTION FOUR

- a) ABC Limited is a big agro-chemical company which specializes in the processing and supply of pesticides and other farm inputs to agricultural farmers. Management is proud of posting good results of its performance. However, going through the books of account, a lot is revealed. Their balance sheets for the year 2014, 2015 and 2016, reveal a steady growth of accounts receivables, growth of non-current assets especially land and buildings compared with stocks. The chairman of the board advises the finance manager that, they can double investments on real estate as the value of these properties keep on increasing. The finance manager agrees to this idea and promises to focus on this line of investment immediately the suppliers are sorted out. Currently ABC's suppliers are being paid after 60 days. Explain the type of risk(s) ABC agro-chemical Company Limited is experiencing.

(10 marks)

- b) Supply Chain Risk management should involve all stakeholders. Discuss

(10 marks)

(20 marks)

QUESTION FIVE

- a) Several options are available to any organization for the treatment of risk in the supply chain. Discuss these options

(10 marks)

b) An N.T.E service is an organized fourteen Seater public Public transport operating between Nairobi and Nakuru town and has a fleet of over hundred vehicles. For the last one year they have registered interrupted services due to mechanical and logistical problems. They do not have a risk management department and you are approached to advise them on how to select the best risk control techniques and give examples

(10 marks)

(20 marks)