



**STRATHMORE UNIVERSITY BUSINESS SCHOOL
BACHELOR OF COMMERCE
END OF SEMESTER EXAMINATION
SCM 3201: BUILDING, MINING, CONSTRUCTION METALS AND AUTOMOTIVE SUPPLY
CHAINS**

DATE: 7th December 2023

TIME: 13:00-15:00

INSTRUCTIONS

- 1) Answer QUESTION ONE and any other TWO QUESTIONS
- 2) Question one is compulsory and carries 30 marks
- 3) All other questions carry 15 marks each

QUESTION ONE (TOTAL 30 MARKS)

- a) Risks in many organisations can have far reaching impacts on the very survival of these organisations. The mining sector has risks that are considered larger than in other sectors whose risks are much lower, different mining methods may also present different risks.

Required:

Basing your discussion on the mining sector explain the main risks that could be prevalent specifying the type of mining operation involved. Your answer needs to address at least:

- i). A brief description of the types of mining operations **(4 marks)**
 - ii). A description of four risks prevalent in ONE type of mining operation **(4 marks)**
 - iii). Explain two mitigation measures to address the potential negative effects of the risks identified in (b) above. **(4 marks)**
- b) Automotive supply chains can be complex given the sheer number of parts leading to suppliers of the components being quite many. Some auto makers have responded to this by using sub assembled components as opposed to having individual parts and developing them within. This is further complicated by the global nature of suppliers for the industry.
- Required:**
- Prepare a diagram of the supply chain structure of a typical auto assembler. **(4 marks)**
- c) What differences if any do you anticipate when dealing with the complete auto as opposed to the supply chain of spare parts? Explain your answer. **(4 marks)**

- d) It has been argued that the construction supply chain is the most fragmented and tends to have very many professionals involved which could pose a challenge to effective delivery of projects.

Required:

Assume you are involved in a project to construct stadia in your country so that it can bid to host the continental cup in a few years' time.

- i). Explain the roles of four of the most important stakeholders involved. **(4 marks)**
ii). Explain three measures you would put in place to ensure that the construction is completed in time should your country win the bid. **(6 marks)**

QUESTION TWO

(TOTAL 15 MARKS)

We are said to be living in Industry 4.0 which encompasses many technologies. The mining sector has not been left behind and has adopted many of the technologies at various stages of the supply chain.

Required:

Take at least five stages of the supply chain and explain how the Industry 4.0 technologies have been incorporated and their respective contributions to the mining industry. **(15 marks)**

QUESTION THREE

(TOTAL 15 MARKS)

The Automotive sector includes the manufacture of Cars, trucks, moving equipment, airplanes and so on. Competition has been stiff and as a result some companies have merged while others have found ways of collaborating to stay competitive.

Required:

- a) One of the ways of collaboration is in supplier portals. Explain the meaning operation and benefits of supplier portals in the automotive sector. **(7 marks)**
b) The aviation sector is said to be among the most regulated and segmented. Explain some of the regulations and why and using a specific airplane producer, explain the segmentation and possible reasons for the same. **(8 marks)**

QUESTION FOUR

(TOTAL 15 MARKS)

Mason (n.d.) argues that the construction sector can benefit from adopting certain practices in the value chain to enhance its success. The following are some of the areas that some new practices can be adopted and current ones enhanced.

- Technology materials and tools
- Processes and operations
- Industry collaboration
- Public procurement

Required:

Explain in the context of construction supply chains what practices you envision can be adopted to enhance the construction industry for any three of the areas mentioned above.

(8 marks)

- a) Odeh (n.d) contends that there are four mega trends that are shaping the future of the construction industry.

Required:

Explain any two of these megatrends bringing out potential changes because of these trends.

(7 marks)

QUESTION FIVE

(TOTAL 30 MARKS)

Automotive, Building and Construction, and Mining industries are critically dependent on each other for survival and growth. Discuss.

(15 marks)