

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**FACULTY OF COMMERCE**

**GRADUATE SCHOOL OF BUSINESS**

**MASTER OF BUSINESS LEADERSHIP**

**EXECUTIVE MASTER OF BUSINESS LEADERSHIP**

**MASTER OF SCIENCE IN ENTREPRENEURSHIP AND INNOVATION**

**MANAGEMENT INFORMATION SYSTEMS & E-BUSINESS (EMB509)**

**EXAMINATION QUESTION PAPER**

**DURATION: 3 HOURS 30 MINUTES**

**MAR 2024**

**Instructions and Information to Candidates**

1. Section A is compulsory and carries 40 marks.
2. Answer 'Question 1' from Section A and any three (3) questions from Section B.
3. The paper carries six questions.
4. All Questions in Section B carry equal marks of 20 each.
5. The use of cell phones is not allowed in the examination.

## **SECTION A: [COMPULSORY]**

### **QUESTION 1**

- a) Individuals and organizations in Zimbabwe are increasingly vulnerable to cyber security attacks that endanger their integrity, privacy, and security, causing irreversible harm to their reputation and financial position.

Examine any **FIVE** cybercrimes and highlight the possible cyber security countermeasures that can be used by individuals and companies. **(20 marks)**

- b) **Read the Case study below:**

An HR Executive went to present their HR report to the Board. Their focus was on getting the board to approve a 13% salary adjustment on USD salaries across the board. The HR Executive argued employees were leaving and the business was losing critical staff. The Board did not approve the adjustment arguing it will hurt the business long term as it was not sustainable. Dejected the executive left the room and went to give feedback to their HR team. Team was disappointed as they pondered on how they would manage staff issues. One officer volunteered to prepare another paper for the board. The boss said it's up to you. They had given up. They agreed to meet tomorrow morning to hear the new paper. The officer's paper was as follows. This business seems to do well during times when employees worry less about salaries. Looking at data for the past 8 years, it shows that in 5 of the years we gave a nominal salary increase especially when given in the first quarter of the year the company has exceeded set targets by an average of 36% in each of those years. In all the years we have not given an increase we have missed the target by an average of 17% in each of these years. The key indicators impacted by this trend are (1) sales dollars in USD (2) sales volume and lastly (3) production volumes. It cannot be a coincidence that every year we give an increase we get more than 3 times increase in the indicators above. Our staff turnover of good employees is 5% and is within the normal range. The board must approve an increase of 13% and its likely this year we will achieve a 39% increase in the business indicators above. From this analysis, it shows our employees drive the performance of this business. We seek board approval for a 13% salary adjustment across the board. After this presentation to the HR team, they agreed to call for

an urgent HR Committee meeting. The HR Executive decided to invite the HR Officer to do the presentation to the HR Committee and if they pass the HR Committee then to the board later the same day. The HR Committee approved the proposal and invited the HR team to present the same to the main board. The HR officer did not waste time when they got to the board. The Board approved a 22% salary adjustment across the board.

Give a detailed Analysis of the key MIS technologies that were used by the HR officer to improve the initial presentation and convince the main board to award the salary adjustment.

(20 marks)

[Total: 40 marks]

**SECTION B: Answer any three (3) questions from this Section.**

**QUESTION 2**

Your organisation, a retail company specialising in fashion items, wishes to replace the existing information system it uses as the environment supporting online sales. The aim is to grow the business by providing customers with a seamless service over a variety of web clients and platforms – using a ‘mobile first’ philosophy.

- a) Discuss **THREE** design considerations which will be critical to the success of this ambition. (12 marks)
- b) Describe the contents of a presentation to senior management aimed at explaining the nature of the proposal and how its design can achieve success. Give examples to illustrate your points. (8 marks)

[Total: 20 marks]

### QUESTION 3

Managers perform one or more activities as part of their managerial duties. For **each** of the following management activities, describe and justify **ONE** suitable Management Information System (MIS) that could effectively support the activity, giving suitable examples and diagrams wherever possible.

- a) Monitoring the external environment for information that could be useful to the manager and their team. **(8 marks)**
- b) Identifying issues within the work undertaken by the manager's team so that they can identify and take action. **(6 marks)**
- c) Allocating resources to work tasks that are assigned to the manager's team to achieve planned outcomes. **(6 marks)**

**[Total: 20 marks]**

### QUESTION 4

- a) For each of the following emerging technologies, provide a suitable definition and discuss how it impacts the provision of corporate MIS:
  - i. Data Science;
  - ii. 5g Network;
  - iii. Machine Learning.
  - iv. Internet of Things (IoT)

Illustrate your answer with supporting real-life examples wherever possible. **[20 marks]**

### QUESTION 5

- a) With the aid of suitable examples and diagrams, outline the key features of EACH of the following strategic planning techniques and how the technique can be used to identify key MIS development projects.

- i. SWOT analysis
- ii. Balanced Score Card (BSC). (12 marks)

- b) Outline the key differences between a Work Breakdown Structure (WBS) diagram and a Gantt Chart, and evaluate their usefulness to the management of contemporary MIS development projects. (8 marks)

[Total: 20 marks]

### Question 6

- a) Discuss any **FOUR** E-Business models clearly highlighting how enterprises can use the models to gain competitive advantage. (12 marks)
- b) Though there are few truly digital firms extant today, there is an emerging sense of what is required to create one. Discuss any **FOUR** of the ways in which a digital firm is different from a traditional one, using an existing company you consider close to being a fully-digital firm as an example. (8 marks)

[Total: 20 marks]

**END OF EXAMINATION PAPER**