UNIVERSITY OF SWAZILAND

FACULTY OF COMMERCE
DEPARTMENT OF BUSINESS ADMINISTRATION

SUPPLEMENTARY EXAMINATION – JULY 2018

COURSE TITLE   : MANAGEMENT INFORMATION SYSTEMS II

COURSE CODE   : BUS212

PROGRAMME   : B.COM– N.P. (FULLTIME); B.ED (FULLTIME)

TIME ALLOWED   : THREE (3) HOURS

INSTRUCTIONS:

1. THIS PAPER CONSISTS OF SECTION (A) AND (B)

2. SECTION (A) IS COMPULSORY.   TOTAL MARKS **50**

3. ANSWER ANY TWO (**2**) QUESTIONS FROM SECTION B.

                                                TOTAL MARKS **50**

4. THE TOTAL NUMBER OF QUESTIONS IN THIS PAPER IS FIVE (5)

5. THE TOTAL NUMBER OF PAGES IS THREE (3).

NOTE: MARKS AWARDED WILL ALSO BE INFLUENCED BY GOOD COMMUNICATION IN ENGLISH AS WELL AS ORDERLY PRESENTATION, ESPECIALLY WHERE STATED.

THIS EXAMINATION PAPER SHOULD NOT BE OPENED UNTIL INVIGILATOR HAS GRANTED PERMISSION

SECTION A. - COMPULSORY

Multi-Purpose is an FMCG (fast moving consumer goods) company situated in Matsapha. It produces and sells milk and milk-based products such as yoghurts, ice-cream etc. It currently has three important departments namely Marketing, Accounting, and Operations.

Marketing

This department deals mainly with the outside stakeholders of the company, mainly customers and media. Customers normally place orders with the department and in return they get delivery notes while the company normally creates and sends adverts to the media.

Accounting

Deals mainly with internal stakeholder needs e.g. wages/salaries, and external stakeholder needs such as payments for services rendered to Multi-Purpose.

Operations

This department is the most conglomerated of departments. It handles HR issues, manufacturing, distribution, vehicle management etc.

Multi-Purpose wants to develop an internal information system that will foremost automate the work done by the departments. The primary goal is not yet to integrate the systems. It just wants systems that can be relevant to each department. It is envisaged that once employees get comfortable with working with departmental systems they will then be ready to embrace an integrated organizational system. The marketing department needs a system that will link with customers. However, they would like the system to be up and running in the next two weeks. The Accounting department already has a system in place, however they do want to change certain aspects of the software they are using. They have, afterall, invested a lot of money in acquiring their hardware. Operations department requires an integrated system to handle the different aspects of the department.

To this end, Multi-Purpose hires Stevie, as a systems analyst. In his first meeting, Stevie makes the following statements, amongst many:

"What I think is best is to use the SDLC methodology to develop the systems. It is a good methodology because it allows us to do a detailed feasibility assessment at the problem

definition stage so we can understand what the problem is and whether feasible options exist. We can actually look at options of building the system itself while we closely investigate the key user requirements. What we can do is then compare the proposed system to user information on how the current system works. What I also like about the SDLC is the system design phase allows us to interview users and clearly understand what exactly they want us to design, as well as allows us to use pilot conversion technique – where we can run the current department systems and the new system at the same time, to see if the new system is compartible"

1. Suggest the best systems development methodology for each department. Also highlight possible challenges that each department may face given the suggested methodology. Use the following tabular layout to present your answer. **(12 marks total)**

Department	Development Methodology (1 mark	Rationale – 2 points (2marks)	Challenge – 1 point (1 mark)
1.Marketing			
2.Accounting			
3.Operations			

2. Stevie has highlighted a number of issues in his address. However, some of the statements made are not correct, as far as the SDLC is concerned. Pick out four (4) of such statements and explain why you think they are incorrect and what is the correct position, with regards to the SDLC as a development methodology. Use the following tabular layout. **(16 marks total)**

Statement (1 mark) – note that this mark is dependent on the correct position being correct.	What is the correct position (3 marks)
e.g. "What I think is best is to use the SDLC methodology"	The SDLC is not the best methodology in this instance because...............
1.	

3. Draw the context diagram for the Marketing Department system. Call the system SHOWMARK. **(13 marks)**

4. Explain three (3) purposes of a data flow diagram. **(9 marks)**

SECTION B. – ANSWER ANY 2

Question 2

Stevie, from Section A, has also decided to use interviewing as his preferred requirements analysis method. Explain to him five (5) key things that he will need to do to make this method successful. **[25 marks]**

Question 3

Generate a use case diagram given the following information. Show all relevant relationships **[25 marks]**

Hotel Magalis is situated in the northern part of Swaziland. It is a tourist haven as it settled deep in the bushes but has state-of-the-art facilities, including a five-star golf course. As their IT expert you have been assigned to create a use case diagram to explain to the staff what each stakeholder does in the hotel system.

Reception staff check the availability of a room, book the room, receive payment, cancel booking, and receive order. The customer can book a room, make payment, check-in, check-out, as well as cancel a booking and order food. The porter takes luggage to the rooms as well as delivers the orders while the accountant maintains accounts and generates reports.

Question 4

"Unified Modelling Language (UML) consists of things, relationships, and diagrams". Using examples to explain, discuss things, relationships, and diagrams as they relate to UML.

[25 marks]