

**W1-2-60-1-6**

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

# **UNIVERSITY EXAMINATIONS 2016/2017**

FOURTH YEAR FIRST/FOURTH YEAR FIRST SEMESTER/THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

**BIT 2119: M.I.S.**

**DATE: APRIL 2017 TIME: 2 HOURS**

**INSTRUCTIONS:**

**ANSWER QUESTION ONE [COMPULSORY] AND ANY OTHER TWO QUESTIONS**

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**QUESTION ONE**

**CASE STUDY ON MIS. INFORMATION SYSTEM IN RESTAURANT**

A waiter takes an order at a table and then enters it online in one of the six terminal located in the restaurants dining room. The order is routed to a printer in the appropriate preparation area.

The cold item printer if it is a salad, the hot item printer if it is a hot sandwich or the bar printer if it is a drink. A customer’s meal check listing (bill) the items ordered and the respective price are automatically generated . This ordering system eliminates the old three carbon copy guest check system as well as any problem caused by a waiter’s handwriting. When the kitchen was out of the food item, the cooks send out an ‘out of stock’ message, which will be displayed on the dining room terminals when waiters try to order that item. This gives the waiters faster feedback enabling them to give better services to the customers other system features and management in the planning and control of their restaurant business. The system provides up to the minute information on the food items ordered and breaks out percentages showing sales of each item versus total sales. This helps management plan menus according to customer’s tastes.

The system also compares the weekly sales totals versus food costs, allowing planning for higher cost controls. In addition, whenever an order is voided, the reasons for the void are keyed in. This may help later in management decisions especially if the voids constantly related to food or service. Acceptance of the system by the users is exceptionally high since the waiters and waitresses are involved in the selection and design process. All potential users were asked to give their impressions and ideas about the various systems available before one was chosen .

1. In the light of the system, describe the decisions to be made in the following areas as you explain state the type of information you would require in making such decisions
2. Strategic planning [6 marks]
3. Managerial control [6 marks]
4. Operational control [6 marks]
5. What would make the system a more complete MIS rather than first doing transaction processing [6 marks]
6. Explain the probable effects that would make the system more formal on the customers and the management [6 marks]

**QUESTION TWO**

1. Although some companies find difficult in justifying their information systems investment other companies report significant benefits from their IS projects. Discuss any four techniques that an organization can use to justify an investment in information systems. [8 marks]
2. Managing IT infrastructure poses both opportunities and challenges. Explain any four challenges of managing IT infrastructure [8 marks]
3. A company’s ability to prepare knowledge that is embedded in the minds of the experienced employees can be seen as the most important criteria of successful knowledge management systems . As you agree with this statement, explain how this is done. [4 marks]

**QUESTION THREE**

**Too Many Information Systems**

ABC University has of late expanded very rapidly introducing a number of programmes and increasing student intake capacity . It has recently computerized its examination process based on some of the shelf software. The library has already been computerized a couple of years back using a freely distributed library automatic system. Daily cash transactions are also handled by computers in the Finance and Accounting Division, using an accounting software. For further improvement of efficiency, the new governing body of the university have entrusted the task of developing an MIS for the University to a software company..

All these developments were welcomed by a cross-section of the university community except a few. One of them is a faculty member at the management science department who commented that the university is burdening itself with too many independent information systems the strongly founded an integrated information system on the lines of an ERP for a business organization .

1. Do you agree with the faculty member? Give reasons. [4 marks]
2. What do you understand by integrated information system the faculty member is talking about? Elucidate in the context of the ABC university. [4 marks]
3. Visualize that the university governing body decides to drop the MIS plan and agree to the idea of developing an integrated IS what problems are likely to creep? [4 marks]
4. Assess the role of information system specialists and consultants in situations as described in the case. [4 marks]
5. Distinguish between formal and informal information systems giving a valid example of each [4 marks]

**QUESTION FOUR**

1. The Paris Convention and Trade Centr (PCTC) is a large meeting complex that includes four hotels, five restaurants , five large ball rooms, a number of large meeting rooms and office space for 1 000 employees. The information system that supports PCTC has the following features.
2. Recommends meeting room configurations for the large boardrooms based on 1 000 rules for allocating rooms of various sizes.
3. Provides an interactive spreadsheet model for “what if” analysis of power and lighting costs for PCTC.
4. Diagnoses problems and recommends solutions to the physical plant manager at PCTC
5. Creates on-demand response to inquiries into availability and rates for affice and meeting space at PCTC
6. Produces food ordering information for the restaurants based on an interactive food ordering model that management can change as ordered.
7. Produces forecast information that will help plan office space requirements for PCTC tenants over the next five years.

**REQUIRED:**

1. Indicate which of the above features characterizes this system as a management information system [MIS]. Explain why for each feature. [4 marks]
2. Indicate which of the above features characterizes this system as a decision support system [DSS) Explain why for each feature. [4 marks]
3. Indicate which of the above features characterizes the system as an expert system [ES] Explain why for each feature [4 marks]
4. Identify and explain four principle goals of IS disaster recovery planning in an organization [5 marks]
5. Evaluate any three major courses of information failure [3 marks]
6. Explain the term BPR [1 mark]

**QUESTION FIVE**

Organizations are not always able to perform their own business information n systems functions and some businesses prefer not to do so for various reasons. the solution for some is outsourcing.

1. Briefly explain the concept of information systems outsourcing [5 marks]
2. Critically discuss the main factors in making information systems outsourcing successful [10 marks]
3. Identify and briefly explain five activities that can foster IT business alignment within an organization [5 marks]