



TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATIONS FOR DEGREE IN:
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
(BSIT 12J J-FT)

BIT 2119: MANAGEMENT INFORMATION SYSTEMS

END OF SEMESTER EXAMINATION

SERIES: APRIL 2015

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions.

Attempt question **ONE (Compulsory)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

Question One (Compulsory)

A waiter takes an order at a table and then enters it online via one of the 6 terminals located in the restaurant 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 process are automatically generated. This ordering system eliminate the old-three-carbon copy guest check system as well as any problems caused by a waiter's handwriting. When the kitchen runs out of a food item, the cooks send out an "out of stock" message which will be displayed on the dining room terminal. When waiters try to order that item. This gives the waiters fast feedback, enabling them to give better services to the customers. Other system features aid management in the planning and control of their restaurant business. The system provides up-to the minute information on the foods items ordered and breaks out percentages showing sales of each item versus total sales. This helps management plan menus according to customer's taste. The system also compares the weekly sales total versus food costs, allowing planning for tighter cost control. In addition, whenever an order is voided, the reasons for the void is keyed in. This may help later in management decision, especially if the voids consistently related to food or service. Acceptance of system by the users is exceptionally high since the waiters and waitress were 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.

- a) In the light of the system, describe the decisions to be made in the area of strategic planning management control and operational control. What information would you require to make such decisions **(18 marks)**

- b) What would make the system a more complete MIS rather than just doing transaction processing?
(6 marks)
- c) Explain the probable effects that making the system more formal would have on the customer and management.
(6 marks)

Question Two

- a) Although some companies find difficulties in justifying their information systems investment, other company reported a significant benefit from there is projects. Discuss any THREE techniques that an organization use to justify an investment in information system (6 marks)
- b) Explain the organizational management and technology dimensions of information systems
(6 marks)
- c) Explain why information systems are essential to businesses today. Describe FOUR trends in the global business environment that have mad information system so important
(8 marks)

Question Three

- a) The Paris Convention and Trade Centre (PCTC) is a large meeting complex that includes four hotels, five restaurants, five large ballrooms, a number of large meeting rooms and office space for 1000 employees. The information system that support PCTC has the following features:
- Recommends meeting room configurations for the large ballrooms based on 1000 rules for allocating rooms of various sizes.
 - Produces a data report for the restaurant showing expenses and revenue
 - Provides an interactive spreadsheet model for “what if” analysis of power and lighting costs for PCTC
 - Diagnosis problems and recommends solutions to the physical plant manager at PCTC
 - Create on-demand responses to inquiries into availability and rates for office and meeting space to PCTC
 - Produces food ordering information for the restaurants based on an interactive food ordering model that management can change as needed
 - Produces forecast information that will help plan office space requirements for PCTC tenants over the five years

Required:

- (i) Indicate which of the above features characterizes this system as a management information (MIS). Explain why for each feature.
(4 marks)
- (ii) Indicate which of the above features characteristics this system as a decision support system (DSS) explain why each feature
(3 marks)
- (iii) Indicate which of the above features characterizes the system as a expert system (ES). Explain why for each feature
(4 marks)
- b) Explain the purpose of an information system from a business-perspective what role does it play in the business information value chain?
(5 marks)
- c) Explain the relationship between an organization and its information system. How has this relationship changed over time
(4 marks)

.Question Four

- a) Information is required both for strategic decision making and for operational purposes. Explain with examples how strategic information differs from operation information
(4 marks)

- b) Distinguish between structured and unstructured decisions (4 marks)
- c) Give an example of each type of decision that clearly illustrate the differences (4 marks)
- d) Describe in general terms, how development in information technology have altered the information systems that supports decision making (8 marks)
- e) Risk-based taxonomy is based on a vast number of reported instances of actual attacks. Describe any FIVE attacks to information systems, citing suitable examples (10 marks)

Question Five

- a) Identify and explain FIVE principle goals IS disaster recovery planning in an organization (10 marks)
- b) Information systems are vulnerable to several threats. Explain THREE threats against contemporary information systems (6 marks)
- c) Explain FOUR moral dimensions of the information age (4 marks)