



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

**THIRD YEAR SECOND SEMESTER EXAMINATION FOR
BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)**

SIT 304: INFORMATION SYSTEMS MANAGEMENT

DATE: 13/11/2020

TIME: 8.30-10.30 AM

INSTRUCTIONS

Answer question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

- a) Define the following terms as applied in information management system. (6 marks)
 - i. Management
 - ii. Information
 - iii. System
- b) Discuss the three types of database management system model. (6 marks)
- c) Outline five functions of telecommunication system. (5 marks)
- d) Discuss TWO approaches of building an Information System Plan (4 marks)
- e) Outline major goals of information security. (5 marks)
- f) After implementation of a new system in an organization, the system project proved to be a failed endeavor. Explain TWO reasons that might have led to this unfortunate eventuality. (4 marks)

QUESTION TWO (20 MARKS)

- a) Discuss how a company would determine value for information system using portfolio analysis model. (8 marks)
- b) Information technology can cause organization change. Using relevant examples explain FOUR spectrums that can lead to this change. (8 marks)
- c) Explain TWO data collection methods used in Information Systems. (4 marks)

QUESTION THREE (20 MARKS)

- a) Information system project fail as a result of FOUR factors. Discuss giving relevant examples. (8 marks)
- b) Information stored in information systems have salient quality features. Explain FOUR qualities of information. (8 marks)
- c) List four uses of Information in an organization. (4 marks)

QUESTION FOUR (20 MARKS)

- a) Information systems integration has facilitated the development of new online business models. Discuss THREE main business models. (6 marks)
- b) Explain giving examples FOUR ways of securing e-commerce. (8 marks)
- c) When implementing information systems builders, are concerned with THREE main areas with regard to system vulnerability. Discuss these concerns. (6 marks)

QUESTION FIVE (20 MARKS)

Case Study

TITLE: ROYAL HOTEL'S ESPRESSO! RAPID RESPONSE SOLUTION

The Royal Hotel in New York City, NY was a luxury all-suite hotel primarily serving an executive clientèle visiting Manhattan on business. These guests were busy and demanding as they used their suite not only as a place to sleep but also as a temporary office. The general manager stressed the importance of the high quality of service due to the high percentage of repeat guests. "Our guests are extremely discerning, it is completely unacceptable to have a light bulb out in the bathroom when the guest checks in, particularly if she is a returning guest," the general manager said.

To ensure the extremely high quality of service, the general manager decided to purchase and install M-Tech's Espresso! Rapid Response Solution. With this new technology, the housekeepers could report deficiencies directly to the computer, instead of verbally communicated to the maintenance department after they ended of their shift. The housekeepers just needed to dial a special code from the phone in the guest room and an automated attendant would walk them through the reporting process step by step in the language of their choice. Espresso! Then automatically generated, prioritized and dispatches a work order to a printer, fax, or alphanumeric pager. Therefore, the new system should be able to reduce the response time as the housekeepers did not have to wait until the end of the shift to tell the maintenance department, and sometimes they even forgot to tell the maintenance department. Also, Espresso! Had a reporting function so that the management team could obtain information about most frequently occurring or recurring issues, top reporting and completing performers and so on. With this kind of information, the maintenance department could identify recurrent problems and stop them before they even occurred.

Upon installation, a week of on-site training was also offered. The installation and the training session seemed to run smoothly. Employees appeared eager to learn about the new system.

However, soon after roll-out the GM discovered that the employees had reverted to the old manual system and had rapidly lost interest in Espresso.

Case questions

- a) Briefly explain the elements comprising the FOUR components of the new reporting system. (8 marks)
- b) Discuss the causes of the system failure. (6 marks)
- c) Discuss at least THREE objectives meant to be achieved by the new system. (6 marks)