FACULTY OF SCIENCE AND TECHNOLOGY

END OF SEMESTER EXAMINATIONS - APRIL 2025

PROGRAMME: MIT

YEAR/SEM: YEAR 1/SEMESTER 2

COURSE CODE: MIT810

NAME: IT STRATEGIC AND INFRASTRUCTURE MANAGEMENT

DATE: 2025-04-16

TIME: 2:00-5:00PM

INSTRUCTIONS TO CANDIDATES:

1. Read the instructions very carefully

2. The time allowed for this examination is STRICTLY three hours

3. Read each question carefully before you attempt and allocate your time equally between all the Sections

4. Write clearly and legibly. Illegible handwriting cannot be marked

5. Number the questions you have attempted

6. Use of appropriate workplace examples to illustrate your answers will earn you bonus marks

7. Any examination malpractice detected will lead to automatic disqualification.

DO NOT WRITE ANYTHING ON THE QUESTION PAPER

Section A Attempt all Questions (40 marks)

Question 1:

a) Explain any four key components of IT Infrastructure Management (**8 marks).**
b) Elaborate on any five benefits of effective of IT Infrastructure Management (**10 marks**).
c) Discuss any five core processes of IT Service Management (ITSM) (**10 marks**).
d) Provide at least six benefits of IT Service Management (ITSM) (**12 marks**).

Section B Attempt only 3 Questions. Each Question carries 20 marks

Question 1:

A company has over 10 years in the field providing IT services to customers. However, the client base keeps reducing and the remaining customers keep complaining of poor IT services received. As an IT Consultant;
a) Advise on the various quantifiable guidelines that the company can use for measuring and reporting on IT performance (**10 marks**)
b) Advise on the best practises for successful measuring and reporting on IT performance (**10 marks)**

Question 2:

A company with many clients that request remote services is faced with a problem of failure to know the number of services requested per day, which services were successfully provided, the pending service requests and the level of customer satisfaction. An IT Consultant, advise the company on the following;
a) The right service request fulfilment process based on ITIL recommendations. Also illustrate it (**12 marks)**
b) Recommendations for what to prioritize to get closer to customers (**8 marks)**

Question 3:

Implementing a service catalog is an efficient way to improve service request management.
a) Explain the types of service catalog that exist (**4 marks)**
b) Discuss the critical components of an IT service catalog (**4 marks)**
c) Elaborate on the best practices for creating an IT service catalog (**12 marks)**

Question 4:

Providing excellent IT support services requires collaboration and open communication between the software development Team and the IT operations Team. This is way is termed as â??running the IT support the DevOps wayâ?•.
a) Explain the benefits of running the IT support the DevOps way (**10 marks**)
b) Elaborate on the best practises for implementing DevOps for IT services (**10 marks)**

Question 5:

A company has over 10 years in the field providing IT services to customers. However, the client base keeps reducing and the remaining customers keep complaining of poor IT services received. What hurts customers the most is the fact that the IT team cannot meet their needs fully the first time they contact them. They always have to call back over and over again for their requests to be solved. Now the customers want a way of interacting directly with an IT Support professional using a chat platform and get their issues solved in real-time. As an IT Consultant;

    a) Advise on the benefits of having customers directly interacting with an IT Support professional in real-time using a chat platform **(10 marks).**

    b) Advise on the best practises for having customers directly interacting with an IT Support professional in real-time using a chat platform **(10 marks).**

Question 6:

A company with over 200 employees is faced with a problem of its employees complaining that their IT Team can not fix their issues in a timely manner. The IT Team software is also overwhelmed by the number of issues reported per day via individual emails and non-documented phone calls to random IT Team members. The IT Team is thinking of a way to establishing a first point of contact (help desk) for all employees so that they can easily accept, track, and respond to support requests in an organized fashion. As an IT Consultant,

    a) Advise the IT Team on the various types of IT help desks that can be categorised (**6 marks**)

    b) Recommend the specific type of IT help desk that is best suited to solve the company situation (**4 marks**)

    c) Advise the IT Team on the various functions that would be performed by the help desk (**10 marks**)