



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELORS IN
INFORMATION AND COMMUNICATION TECHNOLOGY**

3RD YEAR 1ST SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: ITB 1307

COURSE TITLE: ICT DIFFUSION, TRANSFER AND ADOPTION

EXAM VENUE:

STREAM:

DATE:

EXAM SESSION:

TIME: 2.00 HOURS

INSTRUCTIONS:

- a) Answer Question 1 (Compulsory) and ANY other two questions
- b) Candidates are advised not to write on the question paper
- c) Candidates must hand in their answer booklets to the invigilator while in the examination room

QUESTION 1 (30 MARKS)

- a) Define the following terms as used throughout the course unit
 - i) Diffusion
 - ii) Innovation
 - iii) Adoption
 - iv) Re-invention **(8 marks)**
- b) Describe the perceived characteristics of innovation that influence the rate of adoption **(10 marks)**
- c) Opinion leaders are informal leaders that can influence others. This informal leadership is not a function of the individual's final position or status in the system but is earned and maintained by individuals' technical competence, social accessibility, and conformity to the system's norms. Describe four approaches of identifying opinion leaders **(8 marks)**
- d) List the four theories on the diffusion of innovation as presented by Everett Rogers (1995) **(4 marks)**

QUESTION 2 (20 MARKS)

- a) Briefly discuss the main elements of diffusion **(8 marks)**
- b) Discuss the characteristics of opinion leaders in relation to technology adoption **(10 marks)**
- c) List the main steps in the innovation-development process **(2 marks)**

QUESTION 3 (20 MARKS)

- a) A company intends to adopt a technology that was recently launched and has hired you to help in its adoption. Discuss the steps you'll take to ensure successful adoption **(10 marks)**
- b) Explain the concept of the diffusion model and its three-dimensional phases **(6 marks)**
- c) Highlight some of the communication channels that can be used in the diffusion of innovation **(4 marks)**

QUESTION 4 (20 MARKS)

- a) Briefly explain the innovation-decision process **(10 marks)**

- b) Discuss any three social factors that may affect the diffusion of innovation **(6 marks)**
- c) Consequences are the changes that occur to an individual or a social system as a result of the adoption or rejection of an innovation. Giving examples, briefly discuss the desirable and undesirable consequences of mobile banking in our society. **(4 marks)**

QUESTION 5 (20 MARKS)

- a) Describe the categories of adopters of innovations and highlight their characteristics **(10 marks)**
- b) Who are change agents? Discuss their roles in the diffusion and adoption of innovation **(10 marks)**