



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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UNIVERSITY EXAMINATIONS 2023/2024

FOURTH YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF COMPUTER TECHNOLOGY

CIT 3452: INNOVATION AND TECHNOLOGY TRANSFER

DATE: APRIL 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

- a) Briefly explain any six factors that influence positioning of an innovation based incubator. [6 Marks]
- b) Leadership is about setting a direction or vision for others to follow. It can be exercised by creating roles individuals can fill or by creating the kind of culture or climate which triggers innovation. Explain three leadership roles in the context of innovation in organisations. [6 Marks]
- c) Academics and specialists define many different types of innovation. Define the three types of innovation according to Marquis. [6 Marks]
- d) A number of characteristics of an innovation have been found to affect diffusion. Briefly describe three characteristics of an innovation affecting diffusion. [6 Marks]
- e) Outline six main challenges that are facing medium enterprises as innovators in today's competitive environment. [6 Marks]



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QUESTION TWO (20 MARKS)

- a) Briefly describe six factors influencing satisfaction of firms and research organizations in collaboration [6 Marks]
- b) Universities can often help small and big companies with R&D. highlight four ways companies can benefit from collaborating with universities in research and development. [4 Marks]
- c) While there is increasing acquisition and use of information and communication technologies (ICTs) in Africa, the rate of technical change is still low compared to other regions of the world. Explain any six causes that have led to this situation. [6 Marks]
- d) Give definitions and example of the following terms in relation to intellectual property rights; [4 Marks]
- i) Trade Secret
 - ii) Patent

QUESTION THREE (20 MARKS)

- a) Governmental intervention to aid and assist innovation rests upon a variety of factors: public nature of knowledge; uncertainty; complementary assets; network externalities; market inflexibility. Elaborate six roles the state plays in promoting innovation. [6 Marks]
- b) Outline six common reasons for the failure of strategic alliances. [6 Marks]
- c) Companies with strong investments in innovation tend to achieve better cash flows and earnings performances. Outline four ways innovation can add value to companies [4 Marks]
- d) Describe four main attributes of a creative individual. [4 Marks]

QUESTION FOUR (20 MARKS)

- a) Identify six benefits of Licensing Intellectual Property Rights. [6 Marks]
- b) *Innovativeness* is the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than the other members of a system. Briefly discuss five adopter categories with an appropriate illustration on the basis of innovativeness. [10 Marks]
- c) Highlight any four Sources of funding for new (innovative) companies. [4 Marks]



QUESTION FIVE (20 MARKS)

- a) Universities can often help small and big companies with R&D. Describe three ways of linking organizations to educational establishments. [6 Marks]
- b) Briefly explain any three dimensions of innovation [6 Marks]
- c) Highlight four main reasons for resistance of any innovation of new ideas in most organization. [4 Marks]
- d) Briefly describe four modes of payment for technology transfer [4 Marks]

