MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FIRST YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF ECONOMICS AND STATISTICS

BACHELOR OF ECONOMICS

EAE 100: ECONOMICS OF INFORMATION TECHNOLOGY

DATE: 22/1/2021   TIME: 2.00-4.00 PM

INSTRUCTIONS:

    (i)   **Answer question one (Compulsory) and any other two questions**

    (ii)   **Do not write on the question paper**

    (iii)   **Show your working clearly**

QUESTION ONE (COMPULSORY) (30 MARKS)

a)   Review and maintenance is one of the stages in a typical system life cycle. Explain the term *system life cycle* and highlight reasons why a system should be periodically reviewed and maintained.   (9 marks)

b)   Explain the term Digital Economy as used in Economics of IT, giving its characteristics and circumstances when it can be used.   (8 marks)

c)   Based on arguments in economics of Information Technology, do you think there is a difference between product differentiation and price discrimination?   (4 marks)

d)   How can Timing aspects, Link between applications, and size/type of a company influence the data processing method?   (9 marks)

QUESTION TWO (20 MARKS)

a)   What is software maintenance? How is it measured?   (6 marks)

b)   Explain the main types of Price discrimination evident in the Kenyan Economy Today

(9 marks)

c)   What are the economic effects of selling two or more information goods at a single price?

(5 marks)

QUESTION THREE (20 MARKS)

a) Explain the various ways in which use of Information Technology contributes to growth of a country. (10 marks)

b) A small Project poses a number of constraints especially when it comes to measurement of maintenance costs, which cannot be estimated with accuracy. Briefly describe these constraints. (9 marks)

c) Why is Intellectual Property Law important? (1 mark)

QUESTION FOUR (20 MARKS)

a) Differentiate between a software and hardware and discuss various soft wares used in ICT sector today. (10 marks)

b) Explain two ways in which IT remedies deficiencies caused by poor prices, exchange markets and information in well-functioning markets (4 marks)

c) Which are the 3 main categories of ICT? (6 marks)

QUESTION FIVE (20 MARKS)

a) Discuss the seven main stages involved in a typical system lifecycle framework. (7 marks)

b) Briefly describe any six indicators that can be used to confirm the presence of Information Communication Technology in any given country (6 marks)

c) Explain your understanding on the following terms:
   i) Lock-in
   ii) Function point
   iii) Switching costs
   iv) Total factor productivity
   v) Business processes outsourcing
   vi) Conventional data processing
   vii) Assignment scope (7 marks)