



# MACHAKOS UNIVERSITY

University Examinations for 2017/2018 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF ECONOMICS AND FINANCE

BACHELOR OF ECONOMICS & STATISTICS

BACHELOR OF ECONOMICS

BACHELOR OF ARTS

**EAE 100: ECONOMICS OF INFORMATION TECHNOLOGY**

**DATE: 20/12/2017**

**TIME: 11:00 – 1:00 PM**

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## INSTRUCTIONS

Answer **QUESTION ONE**(compulsory) and any other **TWO** questions. Question One carries 30marks and the rest 20 marks each.

## QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Define the following terms as used in Economics of IT (10 marks)
- i) Bundling
  - ii) Lock-in
  - iii) Digital economy
  - iv) Software entropy
  - v) Assignment scope
- b) In economics the objective of a firm is to maximize profit, and one of the ways of ensuring that firms optimize is by ensuring that software's are well maintained. Explain the factors which would impact negatively on the work of updating or modifying existing software applications (10 marks)
- c) i) What is Business Process Outsourcing (2 marks)
- ii) What are some of the measures undertaken by the government to improve the sector (3 marks)
- iii) Explain the key challenges facing the BPO sector in the Kenya. (5 marks)

### **QUESTION TWO (20 MARKS)**

- a) Define the term "electronic data processing" and use a fitting example to illustrate the process of data processing in a firm that has adopted the use of electronic data processing device. (8 marks)
- b) "Information technology has the potential to continue driving growth for the foreseeable future" Explain some of the trends that have been observed that suggest that ICT will continue to be a driver of growth (8 marks)
- c) Explain the two major economic benefits of bundling (4 marks)

### **QUESTION THREE (20 MARKS)**

- a) Describe three types of price discrimination, giving limitations of each. (15 marks)
- b) Why is price discrimination important in high-tech industries (5 marks)

### **QUESTION FOUR (20 MARKS)**

- a) Explain the term 'program' as used in IT and give a brief description of the different types of programs used to operate computers and their devices. (10 marks)
- b) In your opinion, has the use of information technology improved the productivity of workers in Kenyan firms? Discuss your answer. (10 marks)

### **QUESTION FIVE (20 MARKS)**

- a) With an illustration, explain the stages of the waterfall information system development approach. (14 marks)
- b) Explain the metrics problems with small maintenance projects (6 marks)