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03/02/2020

KENYATTA UNIVERSITY

FIRST SEMESTER, 2019/2020

EAE 100: ECONOMICS OF INFORMATION TECHNOLOGY

DATE:

TIME:

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE

- (a) Differentiate between the following terms as used in Economics of information technology:
- (i) Downsizing and rightsizing (2 marks)
 - (ii) Data processing and electronic data processing (2 marks)
 - (iii) Transaction and Batch (2 marks)
 - (iv) Major enhancements and minor enhancements (2 marks)
 - (v) Second-degree price discrimination and third-degree price discrimination (2 marks)
- (b) Using appropriate examples, explain the concept of bundling. (5 marks)
- (c) Business Process Outsourcing has faced many challenges. Discuss the developments that your country has implemented to address these challenges. (6 marks)
- (d) To encourage invention and innovation, the government creates temporary monopolies to incentivize the producers of such works. Using appropriate diagrams, discuss the "trade off" that the government has to allow to achieve the objective. (6 marks)
- (e) Differentiate between a firmware and a hardware. (3 marks)

QUESTION TWO

- (a) A company has extended its operations in your country. Advise them on how to develop a system to run its operations effectively. (10 marks)
- (b) Give two reasons why price discrimination is important in high tech industries. (4 marks)
- (c) Explain the factors determining the methods of data processing. (6 marks)

QUESTION THREE

- (a) "Information Technology revolution has enabled the emergence of more globalized markets". Use examples to support this statement. (6 marks)
- (b) Discuss the challenges facing the BPO sector in Kenya. (5 marks)
- (c) Using appropriate illustration, explain how information technology dampens the severity of business cycles. (6 marks)
- (d) Explain the aim of normalization in data models. (3 marks)

QUESTION FOUR

- (a) Explain the practices that have negative impact on software maintenance. (8 marks)
- (b) The Government of Kenya is implementing the "Ajira Digital Program" under the Ministry of ICT, Innovation and Youth Affairs.
 - (i) Explain the economic benefits associated with the successful implementation of the program. (4 marks)
 - (ii) Highlight the possible challenges in implementing this program. (3 marks)
- (c) Highlight the basic principles of systems development. (5 marks)

QUESTION FIVE

- (a) Explain the components of data models with respect to modern methods of system development. (6 marks)
- (b) Information technology contributes to economic growth. Discuss the channels through which this takes place, supporting the fact that developed countries have invested heavily in information technology. (8 marks)
- (c) Using appropriate examples, discuss the stages of data processing. (6 marks)