



MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL COMMUNICATION TECHNOLOGY & EARLY CHILDHOOD EDUCATION

ECT 902: ADVANCED EDUCATIONAL TECHNOLOGY

DATE: 30/4/2019

TIME: 8:00 – 11:00

INSTRUCTIONS:

Answer question ONE and any other TWO questions.

QUESTION ONE (COMPULSORY) (20 MARKS)

- a) What are the four Pillars of understanding the true nature of Educational Technology? (5 marks)
- b) Briefly explain Jerome Bruner's operations of the Three Modes of Representations of the learner. (5 marks)
- c) Differentiate between Conditioned Stimulus and Conditioned Response. (5 marks)
- d) What Is Stimulus Generalization? (5 marks)

QUESTION TWO (15 MARKS)

- a) What is the difference between Classical Conditioning and Operant Conditioning? (5 marks)
- b) What is Behaviorism? (10 marks)

QUESTION THREE (15 MARKS)

Critically analyze the operations of the following four technologies in the field of education.

- i) Computers. (5 marks)
- ii) Televisions / Radios, (2.5 marks)
- iii) Printed Materials (5 marks)
- iv) Operating Systems (2.5 marks)

QUESTION FOUR (15 MARKS)

Critically examine the Psychological Basis of Educational Technology with respect to the following areas:

- i) Cognitivism Learning Theory (5 marks)
- ii) Constructivism Learning Theory (5 marks)
- iii) Behaviorism Learning Theories. (5 marks)

QUESTION FIVE (15 MARKS)

- a) What is Digital Divide? (5 marks)
- b) Critically evaluate the Constructivist Theory on learning intervention and the nature of the learner. (5 marks)
- c) Critically evaluate the Constructivists' influence on computer science. (5 marks)