



MACHAKOS UNIVERSITY

University Examinations 2019/2020 Academic year

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATION COMMUNICATION TECHNOLOGY

AUGUST SESSION EXAMINATION FOR

DOCTOR OF PHILOSOPHY IN EDUCATIONAL ADMINISTRATION

ECT 903: ADVANCED EDUCATIONAL TECHNOLOGY

DATE: 17/12/2019

TIME: 9.00-12.00 PM

INSTRUCTIONS

ANSWER QUESTION ONE & ANY OTHER TWO QUESTIONS BELOW

QUESTION ONE (20 MARKS)

- a) Briefly explain 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) Explain briefly, the term Stimulus Generalization? (5 marks)

QUESTION TWO (15 MARKS)

Trace the origin and evolution of Educational Technology.

QUESTION THREE (15 MARKS)

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

- a) Computers. (5 marks)
- b) Televisions / Radios, (2.5 marks)
- c) Printed Materials (5 marks)
- d) Operating Systems (2.5 marks)

QUESTION FOUR (15 MARKS)

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

- a) Cognitivism Learning Theory (5 marks)
- b) Constructivism Learning Theory (5 marks)
- c) 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)