



MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL COMMUNICATION TECHNOLOGY &
EARLY CHILDHOOD EDUCATION

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

DOCTOR OF PHILOSOPHY IN EDUCATION

ECT 902: ADVANCED EDUCATIONAL TECHNOLOGY

DATE: 21/3/2022

TIME: 9:00 – 12:00 NOON

INSTRUCTIONS

ANSWER QUESTION ONE & ANY OTHER TWO QUESTIONS BELOW

QUESTION ONE:

- a) Briefly explain the traditional views of the teaching Learning Process. (5 Marks)
- b) Briefly Analyze different philosophical viewpoints of Educational Technology (5 marks)
- c) Explain the Changes in view -points in Teaching Learning Process (5 marks)
- d) Explain the Theories supporting the new Views of the Teaching Learning Process. (5 marks)

QUESTION TWO:

- a) Critically evaluate the Constructivists Theory on Learning interventions and the nature of the learner. (10 marks)
- b) Explain the major contributions of Behaviorism in the emergence of Educational Technology? (5 marks)

QUESTION THREE:

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:

Critically examine the Psychological Basis 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:

- a) Explain the term Digital Divide? (5 marks)
- b) Explain Vygotsky's Socio-cultural Theory of Human learning (5 marks)
- c) Explain Vygotsky's Two Levels of Human Learning. (5 marks)