



MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL COMMUNICATION TECHNOLOGY &
EARLY CHILDHOOD EDUCATION

EXAMINATION FOR DOCTOR OF PHILOSOPHY IN EDUCATION

ECT 921: ADVANCED DESIGN AND DEVELOPMENT OF SCIENCE
EDUCATION CURRICULUM.

DATE: 5/5/2019

TIME: 2:00 – 5:00 PM

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO OTHERS.

1. a) The Curriculum Development process in Science Education may pose a number of Key issues. *Explain and illustrate two issues* related to each of the following:
 - a) Teacher training. (6 marks)
 - b) Transition between levels of curriculum implementation. (6 marks)
 - c) Production of resources. (6 marks)
- b) Identify **three scientific skills** that fall into each of the following categories:
 - a) Manipulative Skills. (3 marks)
 - b) Cognitive Skills. (3 marks)
 - c) Social Skills. (3 marks)
 - d) Language Skills. (3 marks)
2. What suggestion would you recommend for the *effective implementation of the new Competence-Based Curriculum at School level in Kenya?* (15 marks)
3. Discuss **three core values and two core attitudes** developed through the Science Curriculum. (15 marks)
4. Discuss any **five reasons** that justify the continuous evaluation of the Science curriculum. (15 marks)
5. Justify **any three values of subjecting** aims and objectives to:
 - a) Philosophical Screens. (6 marks)
 - b) Psychological Screens. (6 marks)
 - c) Sociological Screens. (3 marks)