



MACHAKOS UNIVERSITY

University Examinations 2018/2019

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL COMMUNICATION TECHNOLOGY AND
EARLY CHILDHOOD EDUCATION

EXAMINATION FOR DOCTOR OF PHILOSOPHY IN EDUCATION

ECT 901: INFORMATION-PROCESSING MODELS IN

TEACHING AND LEARNING.

DATE: 4/5/2019

TIME: 8:00 – 11:00 PM

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY TWO OTHERS.

1. a) Effective processing of information consists of **three levels of memory: the Sensory memory; the working memory; and the long-term memory.**
Explain **two features on how each** of these aspects contributes to effective teaching. (20 marks)
- b) Explain **five ways** of meaningfully engaging learners. (10 marks)
2. Representational systems may be: **propositional; analogical or procedural.**
What are the implications of these to teaching/learning situations? (15 marks)
3. a) Explain the difference between the following Representational structures:
Semantic networks, Schemata, Frames, and Scripts. (10 marks)
- b) Suggest a strategy for developing memory growth. (5 marks)
4. Information-processing is the same as learning. Discuss. (15 marks)
5. Discuss any **three models of motivation in the teaching of your subject of specialization.** (15 marks)