



MACHAKOS UNIVERSITY

University Examinations 2019/2020 Academic year

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL COMMUNICATION AND TECHNOLOGY

AUGUST SESSION EXAMINATION FOR

DOCTOR OF PHILOSOPHY IN EDUCATIONAL ADMINISTRATION

ECT 901: INFORMATION-PROCESSING MODELS IN TEACHING AND LEARNING

DATE: 18/12/2019

TIME: 2.00-5.00 PM

INSTRUCTIONS

Answer question ONE and any other two questions

QUESTION ONE (20 MARKS)

- a) Learners process Information at *three levels of memory: the Sensory memory; the working memory; and the long-term memory.*

Explain two strategies on how a teacher may engage learners at each of these levels to actualize effective teaching. (12 marks)

- b) Illustrate *four ways* of meaningfully developing learners' motivation. (8 marks)

QUESTION TWO (15 MARKS)

- a) Explain the difference between the following Representational structures:
Semantic networks, Schemata, Frames, and Scripts. (15 marks)

- b) Suggest any *five* strategies for developing memory growth. (5 marks)

QUESTION THREE (15 MARKS)

Representational systems may be: *propositional; analogical or procedural.* Discuss the implications of these representational systems for teaching/learning situations?

QUESTION FOUR (15 MARKS)

Discuss three ways in which Information-processing models may influence the choice of teaching approach.

QUESTION FIVE (15 MARKS)

Discuss any three models of motivation in the teaching of your subject of specialization. (15 marks)

Examination Irregularity is punishable by expulsion