

UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
DEPARTMENT OF CURRICULUM AND TEACHING
RESIT EXAMINATION QUESTION PAPER (JULY, 2018)
CTE 301: INFORMATION AND COMMUNICATION TECHNOLOGY IN
EDUCATION

DURATION: **THREE (3) HOURS**

INSTRUCTIONS:

1. This paper contains five (5) questions. Answer any four (4) questions.
2. Each question has a total of 25 marks.

**THIS PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN
GRANTED BY THE INVIGILATOR**

QUESTION ONE

By use of suitable illustrations, discuss nine [9] prevalent global trends in ICT integration in education. [25 marks]

QUESTION TWO

Within the context of any one of your teaching subjects, discuss five [5] major types of educational ICTs. [25 marks]

QUESTION THREE

ICT in education is anchored on the paradigms listed below. Discuss the relevance of each one of them in enhancing ICT integration in institutions of learning. [25 marks]

- i) Problem based learning
- ii) Distributed Cognition
- iii) Cognitive flexibility theory
- iv) Cognitive apprenticeship
- v) Self regulated learning

QUESTION FOUR

- a) Citing relevant examples, distinguish between old ICTs and new ICTs. [10 marks]
- b) Discuss any five [5] educational benefits of animations in teaching and learning any one of your teaching subjects. [10 marks]
- c) Explain five [5] main challenges posed by the inclusion of educational animations in teaching and learning. [05 marks]

QUESTION FIVE

Select any constructive ICT tool from the MS Office suite. Within the context of a topic or concept derived from your major teaching subject, illustrate how the selected ICT tool can be used to enhance comprehension of the said concept or topic. [25 marks]

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SUPPLEMENTARY EXAMINATION QUESTION PAPER, JULY 2018**

TITLE OF PAPER : CURRICULUM STUDIES IN BIOLOGY II
COURSE CODE : CTE328/528; EDC378
STUDENTS : BEd. LEVEL III, PGCE
TIME ALLOWED : THREE (3) HOURS

INSTRUCTIONS: 1. This examination paper has five (5) questions. Answer four (4) questions only
2. Each question has a total of 25 points.

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1. a) Swaziland, like the majority of African countries, is a consumer rather than a producer of science and technology. Explain why it is important for Swazi children to be taught Science, Technology and Society issues in school. [10]
- b) The structure of Science Technology and Society (STS) science courses varies, depending on whether emphasis is on STS science or traditional science. Compare and contrast the characteristic features of a science course that, to a large extent, emphasises traditional science and one that, to a large extent, emphasises STS science. [10]
- c) Science Technology, Engineering and Mathematics (STEM) education aims to provide learners with skills of the 21st century. Describe two characteristics of such skills. [5]
2. a) Describe the considerations you would make when planning a gender responsive science lesson for a mixed gender class. Indicators for gender responsiveness must be evident in the planning. [10]
- b) Over the years, women have been reported to be underrepresented in the science professions. Provide the causes for this under-representation. [15]
3. a) When the Swaziland Integrated Science Programme (SWISP) was implemented, teachers complained that they could not properly apply it to Swazi schools. Discuss the numerous issues that confronted teachers when using this curriculum. [10]
- b) A contextualised science curriculum in which the content reflects the students' everyday experiences is now being emphasised for schools in Swaziland. Outline the steps you would take to develop a relevant and affordable science curriculum for rural secondary schools in a specified region in Swaziland. Include considerations you would make to plan, design, implement and evaluate your curriculum. [15]
4. a) Terry Allsop identified problems faced by low income/developing countries in conducting practical activities in their science instruction. Discuss the problems faced by science teachers in Swaziland in this regard and their implications in effectively implementing the SGSCE syllabus. [15]
- b) Describe the factors that affect interaction between sensory information and Short Term Memory which may interfere with learners' acquisition of science concepts. [10]
5. a) Discuss the role of the following in meaningful learning: [3x3]
i) prior concepts
ii) subsumers
iii) advance organisers
- b) According to Bruner, certain processes take place in cognitive structure during discovery learning. Discuss these processes. [10]

- c) Concept mapping is an instructional tool that is beneficial to both the learner and the teacher. Explain how this is so. [6]