UNIVERSITY OF ESWATINI

FACULTY OF EDUCATION

DEPARTMENT OF CURRICULUM AND TEACHING

MAIN EXAMINATION QUESTION PAPER (JUNE, 2019)

TITLE OF PAPER: **CURRICULUM STUDIES IN COMPUTER SCIENCE II**

COURSE CODE: **CTE 338/CTE 538**

PROGRAMME: **B.Sc.COMP.SCI.ED./PGCE**

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

a) In an attempt to leverage ICTs to achieve SDG 4 goals, UNESCO accentuates certain factors as essential ICT policies (UNESCO, 2017). Mention any five (5) of the factors. [05 marks]

b) A myriad of challenges bedevil developing economies, thereby impeding meaningful inception of Computer Science education curricular in institutions of learning. Identify and explain any five (5) such challenges, suggesting plausible mitigating measures to address the quagmire. [20 marks]

QUESTION TWO

a) Explain the concept *computer ethics* as propounded by Moor (1985), detailing four (4) ways in which it impacts educational computing. [10 marks]

b) The rules of etiquette are as important in cyberspace as they are in the real world. Explain any five (5) ubiquitous etiquette infractions by *netizens* as postulated by Ramon Barquin and Jane Fishkin (eds.) (2005). [15 marks]

QUESTION THREE

a) Identify and explain five (5) principles of constructivism subsumed in Dewey, Piaget, Bruner and Vygotsky's theories, within the context of educational computing. [20 marks]

b) Explain five (5) limitations of the constructivist approach in Computer Science education. [05 marks]

QUESTION FOUR

a) Distinguish between *assistive* and *adaptive* technologies as used in Computer Science education. [05 marks]

b) Explain five (5) barriers to effective use of adaptive technology. [20 marks]

QUESTION FIVE

Discuss the major technologies for students with mobility impairments within the context of educational computing. [25 marks]