



PAN AFRICA CHRISTIAN UNIVERSITY

DIPLOMA OF INFORMATION COMMUNICATION TECHNOLOGY

END OF SEMESTER ERM EXAMINATION

DEPARTMENT: COMPUTING & INFORMATION TECHNOLOGY

COURSE CODE: DICT 0212

CAMPUS: ROYSAMBU

COURSE TITLE: SOFTWARE ENGINEERING

EXAM DATE: TUESDAY, 10TH DECEMBER 2019

TIME: 0900HRS-1100HRS

DURATION: 2 HOURS

INSTRUCTIONS

- This exam script has **TWO (2)** sections.
- Read all questions carefully before attempting.
- Answer All questions in Section **A** and any other Three questions in Section **B**.
- Write only your **student number** on the answer booklet provided.
- None programmable calculators permitted
- Calculators on phones, tablets and computers are NOT permitted in Theory Papers

SECTION A: (Answer ALL questions in this section)

QUESTION ONE

- a) Define the following terms as used in software engineering
 - i. Software metrics [2 Marks]
 - ii. Software Failures [2 Marks]
 - iii. Risk management [2 Marks]
 - iv. Milestones [2 Marks]
- b) Explain TWO objectives of quality planning in software development [4 Marks]
- c) Outline THREE risk management process activities. [6 Marks]
- d) Describe THREE stages for software testing [6 Marks]
- e) State and explain any THREE reasons for measuring software quality [6 Marks]

SECTION B: (Answer any THREE (3) questions in this section)

QUESTION TWO

- a) Define the term quality control [2 Marks]
- b) Enumerate the EIGHT causes of software errors. [8 Marks]

QUESTION THREE

- a) Differentiate between activity lists and activity attributes [4 Marks]
- b) Discuss THREE attributes of a good software [6 Marks]

QUESTION FOUR

- a) Differentiate between functional and non-functional requirements in a software development [6 Marks]
- b) Explain the following approaches to software Quality assurance and standards [4 Marks]
 - i. Product Standards
 - ii. Process Standards

QUESTION FIVE

- a) Define Software Quality Management [4 Marks]
- b) Discuss THREE Quality management activities as used in software engineering [6 Marks]

QUESTION SIX

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EXAMINATIONS PAPER



In software engineering concepts it's agreed that effort is required to make an accurate estimate of the cost required to develop a software system. Discuss any FIVE Software cost estimation techniques that you may use.
[10 Marks]