

PAN AFRICA CHRISTIAN UNIVERSITY

DIPLOMA INFORMATION COMMUNICATION TECHNOLOGY

END OF TERM EXAMINATION

DEPARTMENT: COMPUTING & INFORMATION TECHNOLOGY

COURSE CODE: DICT 0212

CAMPUS: ROYSAMBU

COURSE TITLE: SOFTWARE ENGINEERING

EXAM DATE:

TIME:

INSTRUCTIONS

- This exam carry a total of SIX Questions of [10 Marks Each]
- Section One (I) is compulsory.
- Answer any 3(Three) Questions from Section Two (II)
- Read all questions carefully before attempting.

Section One Compulsory 10 marks

Question One.

Give the application areas of the following system concepts.

- a) System Entropy,
- b) System Boundary.
- c) User Acceptance testing
- d) Feasibility Study
- e) System Design

[10 marks].

Section Two Attempt any Three Questions.

Question Two.

Many software process models have been proposed to support software development life cycle. One of the first models to be proposed is the Waterfall model. Distinguish this model from the rest commonly applied models.

[10 Marks].

Question Three

After taking part in a series of successful software projects, you have recently been appointed a project manager within a software engineering organization. Your first project in this position will be to build a large web-based application. The team has had experience of doing this type of work before. In all of the previous projects, requirements have been thoroughly documented by the customers. The above scenario is an outline specification for a software project. What software process model would you choose and why?

[10 Marks]

Question Four

Show in real life scenario where the following software design strategies are used.

- i. Cohesion
- ii. Coupling
- iii. Encapsulation
- iv. Polymorphism
- v. Inheritance.

[10 Marks]

Question Five.

After a major release of a software system, there often follows a period of corrective maintenance. Discuss why this can occur and how it could be avoided or if it is inevitable.

[10 marks]

Question Six.

Discuss the differences between classical and Iterative model type of system development life cycle.

[10Marks]

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