



## **UNIVERSITY OF EMBU**

**2017/2018 ACADEMIC YEAR**

### **SECOND SEMESTER EXAMINATIONS**

#### **THIRD YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (COMPUTER SCIENCE)**

#### **CSC 324 USER CENTERED DEVELOPMENT AND EVALUATION**

**DATE: APRIL 12, 2018**

**TIME: 2:00 PM – 4:00 PM**

#### **INSTRUCTIONS:**

**Answer Question ONE and ANY other two Questions**

#### **QUESTION ONE (30 MARKS)**

- Briefly discuss why stages in the software process are said to be iterative? (5 marks)
- Explain the difference between throw away and incremental prototyping approaches (5 marks)
- explain the difference between the system pre-emptive and user pre-emptive dialogue initiative (5 marks)
- Discuss five principles of learnability in a system design (5 marks)
- Explain Any two observation methodologies used for evaluation (5 marks)
- With the aid of the diagram explain the Seeheim model. (5 marks)

#### **QUESTION TWO (20 MARKS)**

- Explain the difference between a process oriented and a structure oriented design rationale technique? Would you classify psychological design rationale as process oriented or structural oriented? Why? (10 marks)

- b) You have been asked to design a commercial website .Users will be able to browse and download music to the hard disk any associated devices such as mp3 players. Briefly explain how you will identify the potential end users and then explain the how you conduct summative evaluation for this users once the system is built. (10 marks)

**QUESTION THREE (20 MARKS)**

- a) Task analysis breaks activities into a series of goals and sub goals .In order to print a document you must first select “print” command. You must then select the printer and then select the number of copies and so on. Briefly describe the benefits tasks analysis can offer to the design of interactive computer systems. (10 marks)
- b) Explain the five principles for flexibility for usability support (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) State and explain any two techniques used for requirement gathering .In each case give the most appropriate scenario and when best it can be used. (10 marks)
- b) Explain any two evaluating designs through experts. (10 marks)

**QUESTION FIVE (20 MARKS)**

- a) Discuss five major benefits of involving the users in almost all the stages of the user centered development software product. (10 marks )
- b) Explain five Sneiderman Golden rules of Interface design. (10 marks)

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