The Co-operative University of Kenya

END OF SEMESTER EXAMINATION DECEMBER 2022

EXAMINATION FOR THE BACHELOR OF COMPUTER SCIENCE (YR I SEM II)

UNIT CODE:

UNIT TITLE:SOFTWARE PROJECT MANAGEMENT……

INSTRUCTIONS:
- Answer question **ONE (compulsory)** and any other **TWO** questions

QUESTION ONE

a) Explain the Work Break-Down structure, highlighting its key elements (6 mks)
b) Write short notes on (6 mks)
  i. Stakeholders management
  ii. Factors responsible for project failure

c) Explain the process of software project planning? (4 mks)
d) A software project is estimated to be finished in 6 months, using two programmers. However, due to a change in circumstances, it is desirable that the project be speeded up. A proposal is put forward to increase the number of programmers to six, thus allowing the project to be completed in 4months.

Required:

i. Explain the risk, if the project committee does not come up with any new proposal to cope the change in circumstances and stick to one-year plan despite of changes in circumstances (4 mks)

e) Draw the activity network and explain its steps. (FB, BB and critical Path) and estimate the shortest time to complete the project (10 mks)

	ACTIVITY	DURATION(WEEKS)	PRECEDENTS
A	HARDWARE SELECTON	8	-
B	SOFTWARE DESIGN	6	-
C	INSTANT HARDWARE	4	A
D	TEST SOFTWARE	5	B
E	FILE TAKE-ON	4	B
F	WRITE USER MANUALS	12	-
G	USER TRAINING	4	E,F
H	INSTALL AND TEST	2	C,D

QUESTION TWO
  (a) Explain the role of the software Project Manager in helping set expectations for clients (8 mks)
  (b) Explain 3 factors that determine the successfulness of a software project (6 mks)
  (c) Differentiate between Strategic assessment and Technical assessment as used in Software Project management (6 mks)

QUESTION THREE
  (a) Define and give the significance of cost-benefit analysis in ICT projects (6 mks)
  (b) Explain the various software effort estimation techniques. (6 mks)
  (c) Explain the project implementation and the approaches to implementation (8 mks)

QUESTION FOUR
  a) Explain the selection criteria for Software Configuration management tools (8 mks)
  b) Consider the projects cash flow estimates for four project at your own, Rank the four projects in order of financial desirability and make a note of your reasons for ranking them in that way? (6 mks)
  c) Explain the concept of monitoring and evaluation in software projects (6 mks)

QUESTION FIVE
  (a) Identify and explain best practices for resetting stakeholder expectations on software projects (4 mks)
  (b) Explain the advantages and disadvantages of off-the-shelf software (6 mks)
  (c) Differentiate the term Scope Creep and configuration management (4 mks)
  (d) Explain the units of measuring the size of the software (6 mks)