

**UNIVERSITY EXAMINATIONS****FIRST SEMESTER 2025/2026 ACADEMIC YEAR****THIRD YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN COMPUTER SCIENCE****COMP 317/BICT 314: SOFTWARE PROJECT MANAGEMENT*****STREAM: R******TIME: 2 HRS******DAY: FRIDAY [11.30 – 13.30 P.M]******DATE: 30/01/2026*****THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES****PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.**

INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTION IN SECTION B**SECTION A****QUESTION ONE [30 MARKS] – COMPULSORY**

- (a) Define Software Project Management and explain why it is essential in software development. **[6 Marks]**
- (b) What are the four P's of project management and why are they important? **[4 Marks]**
- (c) Explain the importance of the feasibility study in software project management. **[3 Marks]**
- (d) What is the SMART framework for setting objectives, and why is it used? **[5 Marks]**
- (e) Differentiate between functional and non-functional requirements in software projects. **[4 Marks]**
- (f) Communication contributes to 90% success of a project. Identify **FOUR** categories of project stakeholders, giving examples of information a project manager communicates to each of them during project implementation. **[8 Marks]**

SECTION B**QUESTION TWO [20 MARKS]**

- a) Project procurement is one of the processes that contribute to project success or failure. Discuss. **[6 Marks]**
- b) Discuss work breakdown structure and how it can be used during project implementation **[4 Marks]**
- c) Project feasibility must be conducted with an objective, unbiased approach to provide information upon which decisions can be based. The acronym TELOS refers to the **FIVE** areas of feasibility. Discuss each of these areas citing key question and example **[10 Marks]**

QUESTION THREE [20 MARKS]

- (a) Explain the software project management planning process. **[4 Marks]**
- (b) Software cost estimation is an activity carried out at various stages during the software development process. Discuss **FOUR** specific points at which cost estimates are needed **[8 Marks]**
- (c) Discuss **FOUR** software cost estimation techniques available to the project manager stating when each is applicable. **[8 Marks]**

QUESTION FOUR [20 MARKS]

- (a) Explain the triple constraints of a software project management **[4 Marks]**
- (b) Discuss **FIVE** characteristics of a good project manager. **[5 Marks]**
- (c) One of the most ignored factors in a project is the project risk.
 - (i) Explain the term project risk in software project management **[3 Marks]**
 - (ii) Discuss **FOUR** possible risks for a software upgrading project. **[8 Marks]**

QUESTION FIVE [20 MARKS]

- (a) Discuss **FIVE** sources of funding for digital projects in government institutions. **[10 Marks]**
- (b) As a project manager, supporting your project team is necessary to ensure a smooth project implementation. Discuss **FIVE** ways in which a project team can be empowered to boost their performance and ensure project success. **[10 Marks]**