

"Investing in Africa's future" COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE (CBPLG)

Software Engineering 2 - NCSC 413

END OF FIRST SEMESTER EXAMINATIONS

August 2021

LECTURER: Dr. Yogesh Awasthi

DURATION: 7 HOURS

INSTRUCTIONS

Answer the question as per the instructions given in the sections

Start each question on a new page on your answer sheet.

The marks allocated to **each** question are shown at the end of the section.

Section A (60 Marks)

Q1. Answer any six questions from Section A. $(10 \times 6 = 60)$

- a. Distinguish between Verification and Validation.
- b. What is Software Configuration Management (SCM)? Explain the functions of SCM Repository with neat diagram
- c. Why the software reliability is important in development of any product?
- d. How do explain the component based software engineering? What are the major activities of component based software engineering?
- e. Difference between Equivalence Partitioning and Boundary value Analysis.
- f. Why the Capability Maturity Model is required to access the quality of software engineering product?
- g. Why maintenance of software is important? Discuss some of the problems that are faced during maintenance of software.
- h. Compare the reverse engineering and forwarded engineering process.

Section B (40 Marks)

Q2. Answer any two questions from Section B. $(20 \times 2=40)$

a. A software engineering students who is a very good programmer produces software with a low number of defects but consistently ignores organizational quality standards. How should her lecturer react to this behavior?

b. Testing, including debugging and fixing of bugs, is the most expensive task in a project. List the major activities in the entire testing process, and give your view on what % of the testing effort each consumes.

c. Some people argue that developers should not be involved in testing their own code but that all testing should be the responsibility of a separate team. Give arguments for and against testing by the developers themselves.

END OF PAPER Good Luck