

School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering Mid Term Examination - May 2024

Duration : 90 Minutes Max Marks : 50

Sem VI - R1UC607C - Secure Software Engineering

<u>General Instructions</u> Answer to the specific question asked Draw neat, labelled diagrams wherever necessary Approved data hand books are allowed subject to verification by the Invigilator

- 1) K2 (2) How do you ensure software security? 2) K1 (3) Discuss Top down and bottom up approach of Design? 3) What are common challenges in software security? K2 (4) K2 (6) 4) Explain the importance of identifying and mitigating these threats and sources to enhance the overall security posture of software system K3 (6) 5) Compare and contrast the concepts of authentication and authorization in the context of software security. 6) K3 (9) What are some common threats to software security? How can organizations mitigate threats to software security? What are the benefits of detecting software security issues early in the K4 (8) 7) development lifecycle? 8)
- B) Discuss the importance of maintaining secure configurations for servers, databases, and other components to minimize security vulnerabilities.

OR

How does timely patch management influence the security properties ^{K4 (12)} of software systems?