

School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering Semester End Examination - Jul 2024

Duration : 180 Minutes Max Marks : 100

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) What are the types of security?

K1(2)

K3(9)

- 2) Define software security testing and its importance in ensuring the K2(4) integrity of software systems.
- ³⁾ Explain the role of penetration testing in assessing the security ^{K2(6)} posture of software applications.
- 4) What are System Assembly Challenges, and why are they critical in K3(9) modern software development?
- ⁵⁾ Explain risk management in detail?
- 6) What are the implications of failing to address integration ^{K5(10)} challenges for software security?
- 7) What are the limitations of existing approaches for addressing ^{K4(12)} security concerns in highly complex systems?
- 8) Why is Requirements Engineering important for developing secure K5(15) software?
- **9)** Explain the various threats that can create major harm to ^{K5(15)} companies.
- ¹⁰⁾ Describe the activities involved in the Construction phase of the ^{K6(18)} SQUARE process model.