

**Master of Technology**  
**Third Semester Main Examination, December 2021**  
**Secure Software Engineering [MTCYS301(1)]**

**Time: 3:00 Hrs**

**Max Marks 70**

**Note:** 1. Attempt any five questions.  
2. All question carry equal marks.

- Q.1 What is software engineering? discuss principles of software engineering.
- Q.2 Discuss in brief all steps necessary for an effective requirement analysis.
- Q.3 What is the difference between functions? And structural testing? explain any two fictional testing technique.
- Q.4 What are the difference between functional and structural testing? Explain any two functional structural testing techniques.
- Q.5 Explain how to setting system failure intensity objectives.
- Q.6 Explain UML diagrams for security requirements?
- Q.7 What are different software design approaches an software engineering? What do you mean by good software design?
- Q.8 Write short notes (Any two) -
- i) Fault tolerance
  - ii) User interface design
  - iii) Exception handing.

**Master of Technology**  
**Third Semester Main Examination, December 2021**  
**Security Threats And Modeling [MTCYS302(1)]**

**Time: 3:00 Hrs**

**Max Marks 70**

**Note : Attempt any five questions out of eight.**

**All questions carry equal marks.**

- Q.1 (a) What is Threat Modeling? Briefly give strategies for Threat Modeling. also explain the trust boundaries.
- Q.2 (a) Explain Trust Boundaries  
(b) Explain Tampering with Memory and Network.
- Q.3 (a) How the CAPEC thread are addressed ?  
(b) Explain in detail the concept of Authentication in Mitigating Spoofing.
- Q.4 What is cloud tenant thread? Explain its types all.
- Q.5 List thread models tools, Explain all general useful tools.
- Q.6 (a) What is DED List its various elements . Explain ?  
(b) With the help as diagram explain thrust boundaries in a web server .
- Q.7 (a) Explain techniques of repudiation attacks.  
(b) Explain various tampering threads.
- Q.8 Write short note on :- (Any four )
- i) Denial – of – serine.
  - ii) Spoofing
  - iii) Tampering
  - iv) repudiation
  - v) elevation of privilege threats