

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

May-June 2026		
Program: B.Tech Scheme III		
Regular Examination: LY Semester: VIII		
Course Code: AIDLC8033 and Course Name: Threat Analysis and Modeling		
Date of Exam: <u>23-05-26</u>	Duration: 02.5 Hours	Max. Marks: 60

Instructions:

- (1) All questions are compulsory.
- (2) Draw neat diagrams wherever applicable.
- (3) Assume suitable data, if necessary.

Q. No.	Question	Max. Marks	CO	BT level
Q 1	Solve any two questions out of three: (05 marks each)	10		
a)	Define threat modeling. Explain structured approaches used in threat		CO1	U
b)	Describe structured approaches to threat modeling and explain their advantages.		CO1	U
c)	Explain the importance of brainstorming during threat identification.		CO5	U
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	Explain spoofing, tampering and repudiation threats in detail with		CO2	U
b)	Describe Information Disclosure and Denial-of-Service threats. Explain mitigation techniques for both threats		CO2	U
c)	Explain the role of threat modeling tools in identifying web application vulnerabilities.		CO5	Ap
Q.3	Solve any two questions out of three. (10 marks each).	20		
a)	Explain the structure of attack trees and discuss their role in security analysis. Construct an attack tree for online banking fraud.		CO3	Ap
b)	Explain web threats, cloud provider threats and mobile threats with suitable case studies.		CO5	U
c)	Explain Operational Threat Models and threats to threat modeling approaches.		CO6	U
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	Differentiate between open-source and commercial threat modeling tools with suitable examples.		CO4	An

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

May-June 2026		
Program: B.Tech Scheme III		
Regular Examination: LY Semester: VIII		
Course Code: AIDLC8033 and Course Name: Threat Analysis and Modeling		
Date of Exam: 03.05.26	Duration: 02.5 Hours	Max. Marks: 60

b)	Explain defensive tactics and technologies used for mitigating threats in modern systems.		CO4	U
c)	Explain attacks against cryptosystems and discuss best practices for building secure cryptographic systems.		CO6	U
