

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

Nov / Dec 2024-2025	
(B. Tech.) Program: Computer Engineering (Honors)	
Scheme: I	
Regular: LY Semester: VII	
Course Code: HCSC701 and Course Name: Security Information Management	
Date of Exam: <b>03-12-24</b>	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 <b>two</b> questions out of three: (05 marks each)	10		
a)	Differentiate between policies, procedures, guidelines, and standards in InfoSec		CO1	U
b)	If you are deploying an application on a cloud platform (e.g., AWS or Azure), what specific actions would you take to secure the application code and data? Provide examples of cloud tools or services you could use.		CO2	Ap
c)	Describe the steps involved in conducting a risk assessment		CO3	U
Q 2	Solve any <b>two</b> questions out of three: (05 marks each)	10		
a)	List the key components of an incident response plan.		CO5	U
b)	Explain the role of Active Directory in securing a network		CO6	U
c)	Explain the difference between XSS and SQL Injection attacks.		CO5	U
Q.3	Solve any <b>two</b> questions out of three. (10 marks each)	20		
a)	Given a scenario where your cloud application has suffered a data breach, describe the immediate steps you would take to address the breach, mitigate damage, and restore user trust. How would you communicate this to users?		CO2	Ap
b)	Develop a risk management plan for a financial institution		CO3	Ap
c)	Given a scenario where an application is vulnerable to brute-force login attacks, what steps would you take to implement effective		CO4	Ap



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	access control measures and prevent unauthorized access?			
Q.4	Solve any <b>two</b> questions out of three. (10 marks each)	20		
a)	Given a government application that handles sensitive personal data (e.g., social security numbers, health records), how would you apply access control policies to ensure only authorized personnel can access this information?		CO4	Ap
b)	Explain the concept of RTO (Recovery Time Objective) and RPO (Recovery Point Objective). How do these concepts apply to the recovery of healthcare applications that store patient records and critical medical data?		CO5	U
c)	Analyze the effectiveness of CAPTCHA in preventing automated attacks		CO6	An

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