



**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY :: PUTTUR
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QUESTION BANK (DESCRIPTIVE)

Subject with Code: Information Security Management (20CS1016)
Year & Sem : III B.Tech & I-Sem

Course & Branch: B.Tech - CIC
Regulation : R20

UNIT I

INTRODUCTION

1	a)	Define Information Security. List out its characteristics.	[L1][CO1][6M]
	b)	Discuss in detail about components of Information Security?	[L2][CO1][6M]
2		Illustrate the 27 cells in NSTISSC Security Model in detail with diagram	[L3][CO1][12M]
3	a)	Recall the History of Information Security	[L1][CO1][6M]
	b)	How to Securing the Components of information system?	[L2][CO1][6M]
4	a)	What is Security? Outline the security layers, a successful organization should have?	[L2][CO1][6M]
	b)	List the types of end users and assess how security management helps them?	[L5][CO1][6M]
5	a)	Illustrate about CIA Triangle and explain.	[L3][CO1][6M]
	b)	Compare Direct with Indirect Attack and explain	[L5][CO1][6M]
6	a)	Inspect the roles supported by Security SDLC	[L4][CO1][6M]
	b)	What are the approaches in balancing Security and Access	[L1][CO1][6M]
7	a)	Make Use of Waterfall Method and identify the threats in the Information	[L3][CO1][6M]
	b)	Devise the approaches to Information Security Implementation	[L4][CO1][6M]
8	a)	Explain the procedure in balancing Security and Access	[L2][CO1][6M]
	b)	Express the SDLC Steps related to Security	[L2][CO1][6M]
9	a)	Discuss about the Critical Characteristics of Information in detail	[L2][CO1][6M]
	b)	How Policy, Education and Technology helps Security model?	[L2][CO1][6M]
10	a)	Differentiate Subject of the Attack and Object of the Attack	[L4][CO1][6M]
	b)	Distinguish Top-Down approach and Bottom-up approach	[L4][CO1][6M]

UNIT II
SECURITY INVESTIGATION

1	a)	How Security helps in reducing business damage	[L2][CO2][6M]
	b)	Deduce the Need for Security in terms of Organization	[L4][CO2][6M]
2	a)	Explain in detail about Threats and Categorize it in detail with examples	[L4][CO2][6M]
	b)	How to identify Vulnerability in Information. Deduce with steps in it.	[L5][CO2][6M]
3		Differentiate the types of Attack in detail with example diagrams	[L4][CO2][12M]
4	a)	Distinguish between Laws and Ethics	[L4][CO2][6M]
	b)	Write a short note on Attack Replication Vectors	[L2][CO2][6M]
5		Explain in detail about Access Control Matrix with an example	[L2][CO2][12M]
6	a)	What is Computer Security and explain the types in it.	[L2][CO2][6M]
	b)	Write a short note on Ethics and Education	[L1][CO2][6M]
7		Illustrate in detail about the elements of an Information Security Policy with neat diagram	[L3][CO2][12M]
8	a)	Examine Cultural differences in Ethical Concepts	[L4][CO2][6M]
	b)	Describe the types of Law in Security Investigation	[L2][CO2][6M]
9	a)	How an organization protects the collected data before using it.	[L2][CO2][6M]
	b)	What are the steps in protecting the functionality of an organization? Explain	[L2][CO2][6M]
10	a)	Justify the areas where Threats are being attacked with example	[L5][CO2][6M]
	b)	What are the Ethical Concepts in Information Security? Discuss on it.	[L2][CO2][6M]

UNIT III
SECURITY ANALYSIS

1	a)	Explain in detail about Risk Identification and steps in it.	[L2][CO3][6M]
	b)	Examine the Risk Factors of Information Security in detail.	[L4][CO3][6M]
2	a)	Explain in detail about Risk Assessment and steps in it.	[L2][CO3][6M]
	b)	Analyze the Components of Information System in detail.	[L4][CO3][6M]
3		Why Asset Identification & Valuation is important in RM Process? Justify	[L5][CO3][12M]
4	a)	Chart Information Asset Classification in detail	[L3][CO3][6M]
	b)	Build Information Asset Valuation with example	[L3][CO3][6M]
5		Define Risk Management and Illustrate its Components	[L3][CO3][12M]
6	a)	Discuss in detail about Risk Control and its Strategies	[L2][CO4][6M]
	b)	Identify and Prioritize the Threats and Threat Agents with example	[L3][CO4][6M]
7		Explain the Process in Components of Risk Identification in detail with neat diagram	[L2][CO4][12M]
8	a)	Discriminate Automated Risk Management Tools	[L5][CO4][6M]
	b)	Discuss about Categorization of IT Components	[L2][CO4][6M]
9	a)	Classify and prioritize the Assets in Risk Management Process	[L4][CO4][6M]
	b)	What is the term “Know Yourself and Know the Enemy” mean? How it helps Risk Management team to solve the Attacks?	[L2][CO4][6M]
10		What is Access Control Mechanism? Explain in detail how Information flow and confinement problem works in this mechanism.	[L2][CO4][12M]

UNIT IV
LOGICAL DESIGN

1	a)	Explain about the Blueprint for Security in detail	[L2][CO5][6M]
	b)	How Policy is framed for an organization? Explain its importance.	[L2][CO5][6M]
2	a)	Devise the steps in planning for Information Security Policy	[L4][CO5][6M]
	b)	Discuss in detail about the types of Policies.	[L2][CO5][6M]
3		Write Short Note on the following terms i) Policy ii) Standards iii) Practices iv) Procedures v) Guidelines	[L1][CO5][12M]
4	a)	Explain in detail about ISO 17799/BS7799	[L2][CO5][6M]
	b)	Why Code of Practice is required for ISM?	[L4][CO5][6M]
5		Differentiate in detail about Policy, Standard and Practices with neat diagram	[L3][CO5][12M]
6	a)	Identify the Objectives and drawbacks of ISO 17799	[L3][CO5][6M]
	b)	Dissect in detail about the sections in ISO/IEC 17799	[L4][CO5][6M]
7	a)	Formulate in detail about the NIST Model framework	[L6][CO5][6M]
	b)	Discuss in detail about the VISA International Security Model	[L2][CO5][6M]
8	a)	Why NIST SP 800-18 is an important model? Justify.	[L5][CO5][6M]
	b)	Design the components of Contingency Planning with neat diagram	[L3][CO5][6M]
9	a)	Discriminate DRP with BCP in securing information.	[L4][CO5][6M]
	b)	Explain about Contingency Planning with steps in detail	[L2][CO5][6M]
10		What is sphere of use and sphere of protection? How it helps in designing the Security Architecture? Deduce it with neat diagram.	[L4][CO5][12M]

UNIT V
PHYSICAL DESIGN

1	a)	Define Security. Explain the layers of Security in detail	[L2][CO6][6M]
	b)	What is Internet Firewall? Illustrate Internet Protocol stack with neat diagram	[L3][CO6][6M]
2	a)	Distinguish Stateful firewall and Stateless firewall	[L4][CO6][6M]
	b)	Discriminate the Classifications in IDS	[L5][CO6][6M]
3		Organize Firewall categorization methods in detail	[L4][CO6][12M]
4	a)	Classify Honey Pots, Honey Nets, and Padded Cell Systems	[L4][CO6][6M]
	b)	Illustrate the taxonomy attacks with relation to Security Goals	[L3][CO6][6M]
5		Explain in detail about IDS with neat sketch	[L3][CO6][12M]
6	a)	Define Cryptography and explain the taxonomy of Security Goals	[L2][CO6][6M]
	b)	Explain the Security Services provided by Cryptography	[L2][CO6][6M]
7		Examine in detail about Scanning and Analysis Tools	[L3][CO6][12M]
8	a)	Explain the seven major sources of physical loss in Physical Security	[L2][CO6][6M]
	b)	Recall about Positioning and Staffing the Security Function	[L1][CO6][6M]
9	a)	Determine the steps in Physical Access Controls	[L3][CO6][6M]
	b)	Identify the Password Experiment groups and explain about it.	[L2][CO6][6M]
10		Inspect the general idea behind symmetric-key cryptography with neat diagram	[L4][CO6][12M]