



MCA DEGREE EXAMINATIONS: NOV/DEC 2023

(Regulation 2020)

Third Semester

MASTER OF COMPUTER APPLICATIONS

P20CAE0001: Information Security

COURSE OUTCOMES

CO1: Understand the basic concepts of information security, its model and development life cycle.

CO2: Assess the need for information security and its legal, ethical and its professional issues.

CO3: Identify the information security needs.

CO4: Enable planning of security solutions.

CO5: Implement and practice security policies.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

- | | | |
|--|-----|-------------------|
| 1. Interpret the importance of information security. | CO1 | [K ₂] |
| 2. Classify the steps to effectively Balance Data Access and Security. | CO1 | [K ₂] |
| 3. Classify the needs of Information Security. | CO2 | [K ₄] |
| 4. List out the managing risks in Information Security. | CO2 | [K ₂] |
| 5. Interpret the security architecture blueprint. | CO3 | [K ₂] |
| 6. List the different types of security education. | CO3 | [K ₂] |
| 7. Outline the advantages of using Firewalls. | CO4 | [K ₂] |
| 8. Inspect the parts of process of scanning. | CO4 | [K ₂] |
| 9. Relate the role of IT security professional. | CO5 | [K ₂] |
| 10. Categorize the principle of digital forensics. | CO5 | [K ₄] |

PART B (6 x 5 = 30 Marks)

- | | | |
|---|-----|-------------------|
| 11. Classify the NSTISSC Security Model with suitable diagram. | CO1 | [K ₄] |
| 12. Categorize the various components of Information System with suitable figure. | CO1 | [K ₄] |
| 13. Examine the Legal, Ethical and Professional Issues in Information Security. | CO2 | [K ₄] |

14. Classify the Security architecture design for Microsoft Azure. CO3 [K4]
15. Classify the various functions of Intrusion Detection and Prevention Systems (IDPS) and How IDPS works with suitable figure. CO4 [K4]
16. Differentiate between Data Privacy and Data Security of Personal Data. CO5 [K4]

Answer any FIVE Questions

PART C (5 x 10 = 50 Marks)

17. Analyze the phases of Security System Development Life Cycle with advantages and disadvantages. CO1 [K4]
18. Distinguish between threats and attacks. Analyze the various types of threats and attacks. CO2 [K4]
19. Justify the reason why Information Security Policies, Standards and Procedures should be top Priority in Industry. CO3 [K3]
20. Differentiate between Firewall and Anti-virus. How does a firewall work? List the Functions and types of Firewall. CO4 [K4]
21. Determine how employment policies and practices are used to enhance information security in organization (Assume any one organization). CO5 [K4]
22. Discusses about how to maintain your IT security system once they are installed. CO5 [K4]
