

**R18**

Code No: 157JE

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech IV Year I Semester Examinations, February - 2025**

**WEB SECURITY**

**(Computer Science and Engineering - Artificial Intelligence and Machine Learning)**

**Time: 3 Hours**

**Max.Marks:75**

**Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART – A**

**(25 Marks)**

- 1.a) What are Offline Encryption Systems? [2]
- b) Write about biometrics? [3]
- c) Mention the three basic types of backups? [2]
- d) What are Password Sniffers and Stealers? [3]
- e) What is Role-Based Access Control? [2]
- f) Briefly discuss on SPKI/SDSI? [3]
- g) What is the goal of trustworthy record retention? [2]
- h) Distinguish between misuse detection and anomaly detection? [3]
- i) What is Generalization function with respect to Generalization-Based Publishing? [2]
- j) List the three different request scenarios based on the mobility of requesters and resources? [3]

**PART – B**

**(50 Marks)**

- 2.a) Enumerate the five different roles that encryption can play in modern information systems?
- b) Mention the Problems with passwords and the commonly-used solutions. [5+5]

**OR**

- 3.a) Discuss on legal restrictions on cryptography.
- b) How to Stop Replay Attacks with Public Key Cryptography? [5+5]

- 4.a) Discuss in detail about cookies.
- b) Enumerate the different kinds of security tools used to enhance the security of your site. [5+5]

**OR**

- 5.a) Mention the several different types of attacks on data and approaches for protecting against these attacks?
- b) How to use PHP securely? [5+5]

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6.a) Explain the Overview of a Credential-Based Access Control Framework.

b) Describe the Generic Data Cubes of OLAP Systems.

[5+5]

**OR**

7.a) Elaborate on XML Access Control Requirements.

b) Discuss on Automated Trust Negotiation.

[5+5]

8.a) Describe the access path model, a re-engineering approach to database systems.

b) Discuss the new kind of storage architecture necessary to thwart the security attacks.[5+5]

**OR**

9.a) Explain about Consumer Driven Watermarking.

b) Describe the 6-dimensional Damage Quarantine and Recovery (DQR) problem.

[5+5]

10.a) Describe the privacy-Aware LBAC Architecture.

b) Explain about S<sup>PPF</sup>-Tree.

[5+5]

**OR**

11.a) Discuss the various components of location middleware.

b) Describe the Extent-Dependent Privacy Guarantees.

[5+5]

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