



**POORNIMA UNIVERSITY, JAIPUR**  
**END SEMESTER EXAMINATION, 2023-2024 EVEN SEMESTER**

Write Roll No Below: \_\_\_\_\_

BCA Cyber Security II ( ) - IV (Main/Back) End Semester Examination, April 2024

**BCYCCA4104: Application Security**

**Time:** 3 Hours

**Total Marks:** 60

**Min. Passing Marks:** 21/24/27

**Question Paper ID:** 000758

**Instructions:** Attempt all five questions. There is an internal choice either (a or b) in Q1 to Q5. Marks of each question or its parts are indicated against each question/part. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

**Bloom Level(BL):** 1-Remembering, 2-Understanding, 3-Applying, 4-Analysing, 5-Evaluating, 6-Creating

Use of following supporting material is permitted during examination for this subject: Nil

- Q1. (a)** (i) State the basic concept of session management in application software with example.[6 Marks] **Marks BL CO**  
12 1 1  
(ii) Discuss different formats in web security with examples.[6 Marks]  
(OR)  
(b) (i) Explain the concept of a Failure state in SDLC. [6 Marks]  
(ii) Discuss different data types in web security concerning OWASP 2021.[6 Marks]
- Q2. (a)** (i) Explain Server side request forgery as a case study with target,methods,outcomes and countermeasures with respect to OWASP 2021.[6 Marks] **Marks BL CO**  
12 1 2  
(ii) Explain Injection as a case study with target,methods,outcomes and countermeasures with respect to OWASP 2021.[6 Marks]  
(OR)  
(b) (i) Explain Broken Web Authentication as a case study with target, methods, outcomes, and countermeasures concerning OWASP 2021.[6 Marks]  
(ii) Explain Cryptographic storage failure as a case study with target, methods, outcomes, and countermeasures concerning OWASP 2021.[6 Marks]
- Q3. (a)** (i) Briefly explain the URL interpretation Attacks with its architecture and types.[6 Marks] **Marks BL CO**  
12 2 3  
(ii) How Could Authentication-Based Vulnerabilities Impact You? Illustrate its type also.[6 Marks]  
(OR)  
(b) (i) Discuss the buffer overflow attack and which language is vulnerable to this attack.[6 Marks]  
(ii) Discuss any 5 automated tools for web vulnerability scanning.[6 Marks]
- Q4. (a)** (i) Discuss Authentication Vulnerabilities with its types(any 7).[6 Marks] **Marks BL CO**  
12 2 4  
(ii) Explain the impact of SQL injection attack on an web application and explain its mitigation techniques.[6 Marks]  
(OR)  
(b) (i) Explain Application Coding vulnerabilities with its types.[6 Marks]  
(ii) Discuss the different Java applet security with example.[6 Marks]
- Q5. (a)** (i) Define container security with example.[6 Marks] **Marks BL CO**  
12 1 5  
(ii) Explain agile security with example.[6 Marks]  
(OR)  
(b) (i) Differentiate DAST and SAST in terms of security.[6 Marks]  
(ii) Discuss DEVSECOPS with its benefits.[6 Marks]

\*\*\*End of Question Paper\*\*\*