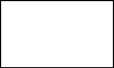
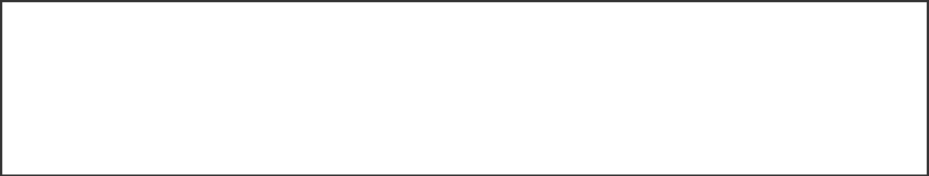
**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, APRIL 2023**

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|  | **2BC4134** | Roll No. | Total Printed Pages: 2 |
| **2BC4134** |  |
| BCA II Year IV-Semester (Main/Back) End Semester Examination, April 2023  **(CS)** | |
| **BCYCCA4104 : Application Security** | | | |

# Time: **3** Hours. Total Marks: **60**

Min. Passing Marks: **21**

*Attempt* ***five*** *questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.*

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

# **1.--------------------------Nil--------------------** **2.------------------Nil-----------------------**

|  |  |  |  |
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| --- | --- | --- | --- | --- |
|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | Write short note on security principle in software development. | **(6)** | **Analyze** |
|  |  |  |  |  |
|  | **(b)** | Explain how broken authentication and session management are used to block the attacks on web applications? | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.2** | **(a)** | Explain SDLC architecture with security perspective. | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | Discuss major security loopholes presented in SDLC architecture. | **(6)** | **Analyze** |
|  |  |  |  |  |
|  |  | **UNIT-II (CO2)** |  |  |
|  |  |  |  |  |
| **Q.3** | **(a)** | Discuss the concept of using acunetix with example. | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Differentiate symmetric and asymmetric key cryptography with example. | **(6)** | **Analyze** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.4** | **(a)** | Define DoS and its impact on different applications with example. | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | Differentiate waterfall model and agile method with example. | **(6)** | **Analyze** |
|  |  |  |  |  |
|  |  | **UNIT-III (CO3)** |  |  |
|  |  |  |  |  |
| **Q.5** | **(a)** | Discuss any three security testing tools for vulnerability analysis. | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | Discuss A1, A6, A3 and A9 vulnerabilities with respect to OWASP 2022. | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.6** | **(a)** | Discuss A2, A7, A3 and A4 vulnerabilities with respect to OWASP 2013. | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | State the basic concept of broken web authentication with example. | **(6)** | **Remember** |
|  |  |  |  |  |
|  |  | **UNIT-IV (CO4)** |  |  |
|  |  |  |  |  |
| **Q.7** | **(a)** | Explain Information gathering and tools which use for this purpose. | **(6)** | **Analyze** |
|  |  |  |  |  |
|  | **(b)** | Discuss the buffer overflow attack and which language is vulnerable to this attack? | **(6)** | **Remember** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.8** | **(a)** | Explain foot printing. Define the following terminologies:  a) Open source or passive information gathering  b) Active information gathering | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Explain the impact of social engineering attack on an organization. | **(6)** | **Analyze** |
|  |  |  |  |  |
|  |  | **UNIT V (CO5)** |  |  |
|  |  |  |  |  |
| **Q.9** | **(a)** | Explain SAST with example in application security. | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | Differentiate DAST and SAST in terms of security. | **(6)** | **Remember** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.10** | **(a)** | Explain agile security with example. | **(6)** | **Analyze** |
|  |  |  |  |  |
|  | **(b)** | Define container security with example. | **(6)** | **Understand** |