**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, December 2022**

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|  | **1BC1007** | Roll No. | Total Printed Pages: 1 |
| **1BC1007** |  |
| BCA I Year I-Semester (Main/Back) End Semester Examination, December 2022  **(Cyber Security)** | |
| **BCYCCA1105 : Fundamentals of Cyber 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)** | | Explain global perspective & latest news of cyber-crime. | **(6)** | **Analyze** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Differentiate active and passive attack. | **(6)** | **Understand** | |
|  | | |  | | **OR** |  |  | |
| **Q.2** | | | **(a)** | | Discuss the evolution of cyber security with different domains. | **(6)** | **Remember** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Discuss cyber security principles with example. | **(6)** | **Understand** | |
|  | | |  | | **UNIT-II (CO2)** |  |  | |
| **Q.3** | | | **(a)** | | Explain any four attacks on Computer System Security. | **(6)** | **Analyze** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Explain the term “steganography” with example. | **(6)** | **Understand** | |
|  | | |  | | **OR** |  |  | |
| **Q.4** | | | **(a)** | | Describe the following attacks:  (i) Man in Middle attack. (ii) Masquerade | **(6)** | **Remember** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Explain any four attacks on Computer System Security. | **(6)** | **Analyze** | |
|  | | |  | | **UNIT-III (CO3)** |  |  | |
| **Q.5** | | | **(a)** | | Explain the idea of digital signature with example | **(6)** | **Understand** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Differentiate between DSA and AES algorithm | **(6)** | **Remember** | |
|  | | |  | | **OR** |  |  | |
| **Q.6** | | | **(a)** | | State the idea behind the concept of AES algorithm with diagram. | **(6)** | **Analyze** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Explain the term “Cryptography “with its different perspective. | **(6)** | **Understand** | |
|  | | |  | | **UNIT-IV (CO4)** |  |  | |
| **Q.7** | | | **(a)** | | Explain the working of Data Standard Algorithm (DSA)? | **(6)** | **Remember** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Differentiate white, black and grey hat hacker with example. | **(6)** | **Understand** | |
|  | | |  | | **OR** |  |  | |
| **Q.8** | | | **(a)** | | Differentiate between network and data link layer of OSI model. | **(6)** | **Apply** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Explain the penetration testing with different tools. | **(6)** | **Understand** | |
|  | | |  | | **UNIT V (CO5)** |  |  | |
| **Q.9** | | | **(a)** | | Explain database security with example. | **(6)** | **Analyze** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Write short note on mongo dB and sql. | **(6)** | **Remember** | |
|  | | |  | | **OR** |  |  | |
| **Q.10** | | | **(a)** | | Explain Common database Vulnerabilities and Owasp top 10. | **(6)** | **Analyze** | |
|  | | |  | |  |  |  | |
|  | | | **(b)** | | Write a short note on SQL injection. | **(6)** | **Understand** | |