**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, December 2022**

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|  | **1BC1321** | Roll No. | Total Printed Pages: 2 |
| **1BC1321** |  |
| BCA I Year I-Semester (Back) End Semester Examination, December 2022  **(All Spl.)** | |
| **BCSCCA1101 – Information Security Fundamentals** | | | |

# 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)** | Discuss Principles of information security with the help of suitable example of each. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | What do you understand by information security and what is the importance of it in real life? | **(6)** | **Analysing** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.2** | **(a)** | How to implement IT security in an organization? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | What are the roles and responsibilities of a security professional in an organization? | **(6)** | **Remembering** |
|  |  |  |  |  |
|  |  | **UNIT-II (CO2)** |  |  |
|  |  |  |  |  |
| **Q.3** | **(a)** | What are the business needs of information security? Also discuss protecting the functionality of business. | **(6)** | **Analysing** |
|  |  |  |  |  |
|  | **(b)** | Write down some important operations for safe business with the help of information security. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.4** | **(a)** | What do you understand by information security and how it can be preserved? | **(6)** | **Evaluating** |
|  |  |  |  |  |
|  | **(b)** | Safeguarding the data is important in the business. Justify the statement with proper example. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  | **UNIT-III (CO3)** |  |  |
|  |  |  |  |  |
| **Q.5** | **(a)** | How to protect the computer system from unauthorized access? Explain with the help of an example. | **(6)** | **Analysing** |
|  |  |  |  |  |
|  | **(b)** | What do you understand by sniffing and spoofing? Also discuss IP and MAC spoofing. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.6** | **(a)** | Discuss-  I] Malwares II] Anti-Virus III] Social Engineering | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Differentiate between Denial of Service and Distributed Denial of service. | **(6)** | **Evaluation** |
|  |  |  |  |  |
|  |  | **UNIT-IV (CO4)** |  |  |
|  |  |  |  |  |
| **Q.7** | **(a)** | Define risk assessment and how we can assess a risk? | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Differentiate between Monitoring and Diagnosing. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.8** | **(a)** | List down the procedure to mitigate the risk and why it is important? | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Define Risk analysing and treatment using an example for the same. | **(6)** | **Designing** |
|  |  |  |  |  |
|  |  | **UNIT V (CO5)** |  |  |
|  |  |  |  |  |
| **Q.9** | **(a)** | Differentiate between Network based and Host based IDS. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Discuss the types of firewalls. Also discuss some of the important features of Modern firewalls. | **(6)** | **Analysing** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.10** | **(a)** | What do you understand by system hardening? Also discuss some of the important hardening types. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | How server hardening can be achieved and what are the consequences of not doing the same? | **(6)** | **Remembering** |