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BACHELOR OF COMPUTER APPLICATIONS
(CYBER SECURITY)

EXAMINATION : DECEMBER-2025

SEMESTER - IV

Sub: Cyber Security II (BCA-CS-442-20)

Date : 31/12/2025

Total Marks : 60

Time: 2.00 pm to 4.30 pm

Instructions:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labeled diagrams wherever necessary.

Q.1. Fill in the blanks.

(5)

1. A computer virus that actively attacks an anti-virus program or programs in an effort to prevent detection is called a _____.
a) Retrovirus
b) Trojan
c) Adware
d) Spyware
2. A Self-Replicating Computer program that uses a Network to send copies of itself to other nodes & it may do so without any user intervention, is called a _____.
a) Virus
b) Worm
c) Torjan
d) Spyware
3. An algorithm mapping or translation of one sequence of bits into another is called as _____.
a) Hash Result
b) Hash
c) Hash Function
d) Hash Algorithm
4. Attempt to compromise security by using the same techniques of the attacker used by ethical hacker, is called as _____.
a) Blackhat Hacking
b) Scanning
c) Penetration Testing
d) Ethical Hacking
5. In asymmetric crypto system, the _____ is used for creating a digital signature
a) Key Pair
b) Private Key
c) Digital Signature Certificate
d) Public key

Q.2. State True/False.

(5)

1. Impersonation of a trusted e-mail sender to attempt to convince the recipient to part with Confidential Information, the ultimate objective being to defraud the recipient is called phishing.
2. If terminals or a complex consisting of two or more interconnected computers whether or not the interconnection is continuously maintain is called as Computer network.
3. For applications that are running on the machine, the operating system acts as host.
4. From event log file, Errors posted by the operating system, services and applications are collected.
5. Attacks can be run against a Web application that insert Malformed data often, too much at once which can Confuse, Crash, or make the Web Application Divulge too much Information to the attacker are called as Buffer overflow Attack.

Q.3. Answer the following. (Solve any 5) (10)

1. Define the term “Private Key”.
2. Define the term “Trojan”.
3. Define the term “Hoax”.
4. Define the term “Kiting”.
5. What is SSID?
6. What is the use of Firewall?

Q. 4. Answer the following in detail. (Solve any 6) (30)

1. Write a short note on “Money Laundering”.
2. Write a shot note on “Defense in Depth” model
3. Explain the carrier objects used by Malwares.
4. Write a short note on SQL Injections.
5. Explain in details Wireless packet sniffing.
6. Explain the different types of Malware in detail.
7. Explain in details different types of wireless attack.

Q. 5. Answer the following in detail. (Solve any 1) (10)

1. Explain any 5 types of ATM related frauds & their countermeasures.
 2. What do you mean by “Penetration Testing”? Explain the five stages involved in Penetration Testing.
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