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BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)
SPECIALIZATION IN CYBER SECURITY (CS)
EXAMINATION : DECEMBER - 2022
SEMESTER - II

Sub: Cyber Security - I (BCA – 245-18/BCA-CS-245-20)

Date :31/12/2022

Total Marks : 60

Time: 2.00 pm to 04.30 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 labelled diagrams wherever necessary.
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Q.1. Fill in the blanks.

(5)

1. Existence of weakness, design or implementation error that can lead to an unexpected, undesirable event compromising the security of the system is called as _____.
a) Threat
b) Exploit
c) Vulnerability
d) Attack
2. _____ is a program to query Internet domain name servers.
a) Nslookup
b) tracert
c) telnet
d) Ping
3. _____ reveals the IP of the mail server.
a) MX record
b) tracert
c) telnet
d) Ping
4. Individuals who work both offensively and defensively at various times as per their benefits are known as _____ Hackers.
a) Black Hat
b) White Hat
c) Gray Hat
d) Blue Hat
5. First stage involve in the Reverse Engineering process is _____.
a) Prescreening
b) Disassembly
c) Assembly
d) compilation

Q.2. State True/False.

(5)

1. All the passwords of windows operating system are stored in SAM file.
2. Broadcast networks have a single communication channel that is shared by all the machines on the network.
3. Symmetric-key cryptography refers to encryption methods in which both the sender and receiver share the same key.
4. Punishment for the Tampering with Computer source documents is given under section 67 of IT Act 2000.
5. LAN, spans a large geographical area often a country or a continent.

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

1. Define the term “Dumpster Diving”.
2. Define the term ‘Threat’.
3. Explain the function of Bridges in Networks?
4. Define the term ‘Private key’.
5. Define the term “Reverse Social Engineering”.
6. Differentiate between Physical Port & Virtual Port.
7. Define the term ‘Black Hat Hacker’.

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

1. Write a short note on IP address classes and structures.
2. Write a short note on ‘Social Engineering Techniques’.
3. Write a Short note in “Intrusion Detection System”.
4. Explain the different types of Cryptography.
5. How Malware Propagate to other machines?
6. Explain the DoS and DDoS attacks.
7. State the Advantages and Disadvantages of Honeypot.

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

1. Explain the TCP/IP reference model in detail.
 2. Explain in detail working of any 5 networking hardware components.
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