2025

(November-December)

COMPUTER SCIENCE
Paper: CSC-M-101

Cyber Security

Time: 2 ½ Hours **Total Mark: 45** **Pass Marks: 14**

(The figures in the right margin indicate full marks of the questions)

1. Choose the correct option from the following (*any six*): 1×6=6
    i. Which protocol is used to send secure data?
        a) FTP b) HTTPs c) HTTP d) None of these
    ii. What was the original precursor to the modern Internet?
        a) NSFNET b) CERN c) ARPANET d) BITNET
    iii. In the context of social engineering, 'Vishing' is a fraudulent practice of:
        a) Making phone calls or leaving voice messages to trick individuals.
        b) Sending fraudulent emails disguised as reputable sources.
        c) Using text messages to deceive victims.
        d) Creating fake websites to steal login credentials.
    iv. When using a public Wi-Fi network, which of the following is a critical security best practice to protect your data?
        a) Disabling the device's firewall for faster connectivity.
        b) Using a Virtual Private Network (VPN) to encrypt the connection.
        c) Enabling file and printer sharing for convenience.
        d) Using the same password as your home network.
    v. A common E-Commerce threat where a fraudulent website is

created to impersonate a legitimate one to steal user credentials is known as:

a) Phishing   b) Pharming   c) Carding   d) Spoofing

vi. On social media platforms, a 'Hashtag' (#) is primarily used to:

a) Automatically encrypt the text of a post.

b) Ensure the privacy of a post from unauthorized users.

c) Tag and notify a specific user in a comment.

d) Categorize content and make it discoverable by topic.

vii) Which of the following is a major challenges in Cyber Security.

a) Increase use of encryption

b) Lock of skilled professional

c) Use of strong password

d) Regular software updates.

2. Answer the following questions *(any 3)*:   4×3=12

i.   Define cyber space. Explain the regulation of cyber space.

ii. Define cyber crime and its categories with suitable examples?

iii. Explain any four common security threats on social media platforms?

iv. Explain the elements of E-commerce security?

3. Answer the long following questions: 3×6=18

i.   Explain the layers of OSI model?   6

ii. Define digital payment. Explain the different modes of digital payment.   2+4=6

iii. Explain the IT act 2000 in cyber security.   6

4. Write short notes on *(any three)*   3×3=9

i.   Concept of cyber security.

ii. Zero day and zero click attacks.

iii. RBI guaidelines for digital payments.

iv. Data Backup