

**BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT**

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

USN 

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Course Code 

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| 2 | 1 | C | S | 6 | 5 | 4 |
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Sixth Semester B.E. Degree Examinations, September/October 2024

**INTRODUCTION TO CYBER SECURITY**

Duration: 3 hrs

Max. Marks: 100

**Note:** 1. Answer any FIVE full questions choosing ONE full Question from each Module.

2. Missing data, if any, may be suitably assumed

| <u>Q. No</u>    | <u>Question</u>   | <u>Marks</u> | <u>(RBTL:CO:PI)</u> |
|-----------------|---|--------------|---------------------|
| <b>Module-1</b> |   |              |                     |
| 1.              | a. Define the following terms:<br>(i) Phishing                      (ii) Cybernetics              (iii) Cybersquatting<br>(iv) Cyber terrorism                      (v) Cyberwarfare. | 05           | (1:1:1.2.1)         |
|                 | b. Explain the categorization of cybercriminals.  | 07           | (2:1: 1.2.1)        |
|                 | c. Describe various types of cybercrimes against an individual.   | 08           | (2:1:1.2.2)         |
| <b>OR</b>       |   |              |                     |
| 2.              | a. Summarize<br>(i) The legal perspectives on cybercrime.<br>(ii) An Indian perspective on cybercrime.  | 08           | (2:1:2.1.2)         |
|                 | b. Explain the role of extended enterprise with respect to cybercrime.  | 06           | (2:1: 1.2.1)        |
|                 | c. Outline the impact of the 5P Netizen mantra on enhancing cyber security.   | 06           | (2:1: 1.2.2)        |
| <b>Module-2</b> |   |              |                     |
| 3.              | a. Explain the phases involved in the planning of a cybercrime.   | 08           | (2:2: 2.1.2)        |
|                 | b. Differentiate the passive and active attacks involved in a cyberattack.  | 06           | (2:2: 2.1.3)        |
|                 | c. Describe the classification of cybercrimes with examples.  | 06           | (2:2: 1.2.1)        |
| <b>OR</b>       |   |              |                     |
| 4.              | a. Define social engineering. Explain the different ways of social engineering that attackers use to gather unauthorized personal information.  | 08           | (2:2: 2.1.2)        |
|                 | b. Outline the safety and security measures while using the compute in a cybercafe.   | 06           | (2:2: 1.2.1)        |
|                 | c. Discuss how botnets can be used as a fuel to cybercrimes.  | 06           | (2:2: 1.2.2)        |
| <b>Module-3</b> |   |              |                     |
| 5.              | a. Describe the different approaches involved in password cracking.   | 08           | (2:3: 1.2.1)        |
|                 | b. Compare between a proxy server and an anonymizer.  | 06           | (2:3: 2.1.3)        |

**Note: (RBTL - Revised Bloom's Taxonomy Level: CO - Course Outcome: PI- Performance Indicator)**

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| c. | Outline the concept of Trojan horses and backdoors. | 06 | (2:3: 2.1.3) |
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**OR**

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| 6. | a. | Distinguish between a Virus and a Worm.                             | 08 | (2:3: 1.2.1) |
|    | b. | Define a DoS attack. Explain different levels of DoS attacks.       | 06 | (2:3: 2.1.2) |
|    | c. | Discuss the traditional techniques of attacks on wireless networks. | 06 | (2:3: 1.2.2) |

#### **Module-4**

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| 7. | a. | Explain the four different methods of phishing that reveal personal information on Internet. | 08 | (2:4: 1.2.1) |
|    | b. | Discuss in detail the spear phishing technique.  | 06 | (2:4: 2.1.2) |
|    | c. | Describe any six types of phishing scams.  | 06 | (2:4: 2.1.3) |

**OR**

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| 8. | a. | Describe the countermeasures to prevent being a victim of phishing attack. | 08 | (2:4: 1.2.1) |
|    | b. | Discuss the countermeasures to prevent being a victim of identity theft.   | 06 | (2:4: 1.2.2) |
|    | c. | Differentiate between Spam and Hoax mails.                                 | 06 | (2:4: 2.1.3) |

#### **Module-5**

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| 9. | a. | Define digital forensics science. Discuss the need for computer forensics in investigation of cybercrime. | 08 | (2:5: 1.2.1) |
|    | b. | Explain difference between forensics policy and security policy.  | 06 | (2:5: 2.1.3) |
|    | c. | Explain the rules of identifying the digital evidence in computer forensics.                              | 06 | (2:5: 2.1.2) |

**OR**

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|----|----|---|----|--------------|
| 10 | a. | Explain the phases in the computer forensics life cycle.                  | 08 | (2:5: 1.2.2) |
|    | b. | Outline the precautions to be taken while collecting electronic evidence. | 06 | (2:5: 1.2.1) |
|    | c. | Explain the chain of custody concepts in cyber forensics.                 | 06 | (2:5:2.1.3)  |

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