Third Semester B. E. (Computer Science and Engineering) Examination

CYBER LAWS AND ETHICS IN IT

Time: 3 Hours [Max. Marks: 60

Instructions to Candidates :—

- (1) All questions carry marks as indicated against them.
- (2) Number your answers properly.
- (3) Assume suitable data and illustrate answers with neat sketches wherever necessary.
- 1. (a) Explore the following Key Intellectual property issues by providing suitable example(s):—
 - Reverse Engineering
 - Trademark Infringement.

6(CO1)

- (b) "Cyber jurisprudence is the legal study that concentrates on the logical structure, the meanings and uses of its concepts, and the formal terms and modes of operation of cyber law". Elaborate the above statement with suitable examples.

 4(CO1)
- 2. (a) Define cyber stalking. How does a cyber stalker operate? 4(CO2)
 - (b) Which cyber crime techniques in online banking do you consider the most dangerous? 3(CO2)
 - (c) Following are some cyber-crime scenarios which can attract prosecution as per the penalties and offences prescribed in the IT Act 2000, Give the provision applicable (Sections) under IT act for the following cyber-crimes.
 - (i) Harassment via fake public profile on social networking site.
 - (ii) Introducing viruses, worms, backdoors, rootkits, trojans, bugs.
 - (iii) Source code theft. 3(CO2)

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Contd.

- 3. (a) List different types of exploits with respect to computer security attacks. Discuss with example following exploits in detail:
 - (i) Trojan Horses
 - (ii) Rootkits

(iii) Phishing. 6(CO4)

(b) Analyze the following situation:

Your computer science instructor has assigned a semester-long project to develop a zero day exploit for the Windows 10 operating system.

Do you think this is an appropriate class project ? Why or why not?

4(CO4)

OR

(c) Analyze the following situation:

You are the CFO of a sporting goods manufacturer and distributor. Your firm has annual sales exceeding \$500 million, with roughly 25 percent of your sales coming from online purchases. Today, your firm's Web site was not operational for almost an hour. The IT group informed you that the site was the target of a distributed denial-of-service attack. You are shocked by an anonymous call later in the day in which a man tells you that your site will continue to be attacked unmercifully unless you pay him \$250,000 to stop the attacks. What are the measures needs to be taken in order to avoid such incidents?

- 4. (a) Explain and briefly discuss three key advantages that trade secret law has over the use of patents and copyrights in protecting intellectual property. Are there any drawbacks with the use of trade secrets to protect intellectual property?

 5(CO3)
 - (b) What is the essential difference between competitive intelligence and industrial espionage, and how is competitive intelligence gathered? 5(CO3)

OR

(c) What is cybersquatting, and what strategy should be used to protect an organization from it? 5(CO3)

5. (a) Consider the following scenario:

You are a new brand manager for a product line of Coach purses. You are considering purchasing customer data from a company that sells a large variety of women's products online. In addition to providing a list of names, mailing addresses, and email addresses, the data includes an estimate of customers' annual income based on the zip code in which they live, census data, and highest level of education achieved. You could use the data to identify likely purchasers of your high-end purses, and you could then send those people emails announcing the new product line and touting its many features:

- List the advantages and disadvantages of such a marketing strategy.
- Would you recommend this means of promotion in this instance?

 Why or why not?

 4(CO4)

OR

- (b) What is the right of privacy, and what is the basis for protecting personal privacy under the law? 4(CO3)
- (c) Outline a scenario in which user might be acting ethically but might still want to remain anonymous while using the Internet.

Identify two approaches someone might take to learn user identity even if you attempt to remain anonymous. 3(CO4)

(d) Consider the following situation:

You are a young, recently graduated attorney working part-time as part of the re-election campaign team for your midsized city's mayor. Several citizens have taken to writing strongly worded letters to the local newspaper voicing their displeasure with your candidate's actions in his initial term as mayor. The campaign manager has suggested that you file at least three defamation lawsuits against the most vocal complainers as a warning to others of what they can expect if they are too vocal in their disagreement with the mayor. The goal is to intimidate others who might be inclined to write negative letters to the newspaper. How this suggestion will be useful to handle defamation case?

- 6. (a) Write short note on contingent workers along with advantages and disadvantages. 5(CO4)
 - (b) Which of the following statements about whistle-blowing is true? Explain with justification:
 - (a) Violators of the False Claim Act are liable for four times the dollar amount that the government is defrauded.
 - (b) Whistle-blowing is an effective approach to take in dealing with all work-related matters, from the serious to mundane.
 - (c) From the moment an employee becomes known as a whistleblower, a public battle may ensue, with negative publicity attacks on the individual's personal integrity.
 - (d) A whistle-blower must be an employee of the company that is the source of the problem. 5(CO4)

OR

(c) What is the digital divide? Where does it exist? Why is it important to bridge the digital divide? 5(CO4)