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4 SEM TDC GECS (CBCS) 4 (A/B)

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(May/June)

COMPUTER SCIENCE

(Generic Elective)

Paper : GE-4

Full Marks : 53

Pass Marks : 21

Time : 3 hours

*The figures in the margin indicate full marks
for the questions.*

Paper : GE-4(A)

(Information Security and Cyber Laws)

1. Answer the following questions : 1×5=5

- (a) Define vulnerability.
- (b) What is digital crime?
- (c) What is authentication?
- (d) What is a cipher?
- (e) Expand IDS.

(2)

2. Answer any *five* of the following questions :

2×5=10

- (a) List any four types of computer network threats.
- (b) Differentiate between threat and attack.
- (c) What is password cracking?
- (d) Define public-key cryptography.
- (e) What is risk analysis?
- (f) State any two differences between internal and external threats.

3. Answer any *five* of the following questions :

4×5=20

- (a) Explain hardware and software vulnerabilities.
- (b) Discuss different types of malicious software.
- (c) Write a short note on Windows XP/NT security features.
- (d) Describe the process of risk analysis.
- (e) Discuss session hijacking and its risks.
- (f) Explain the importance of data security in computer networks.

(3)

4. Answer any *three* of the following questions :

6×3=18

- (a) Describe logging and intrusion detection systems with their advantages.
- (b) Discuss tools of an attacker and various information gathering techniques.
- (c) Describe firewalls in detail and explain their types and working.
- (d) What is two-factor authentication? Explain.

(4)

Paper : GE-4(B)

(Web and E-Commerce Technologies)

1. Answer the following questions briefly :

1×7=7

- (a) Define E-commerce.
- (b) What is B2B model?
- (c) What is domain name?
- (d) Expand DES.
- (e) What is EDI?
- (f) What is electronic cash?
- (g) What is Internet Marketing?

2. Answer any *five* of the following questions :

2×5=10

- (a) Mention any two advantages of E-commerce.
- (b) Write two differences between Internet and Extranet.
- (c) What is encryption? Why is it important?
- (d) Define digital payment system with two examples.
- (e) What is shopping cart software?
- (f) State two disadvantages of online shopping.

(5)

3. Answer any *six* of the following questions :

6×6=36

- (a) Explain the scope and applications of E-commerce in detail.
- (b) Describe the evolution of Internet and its role in business.
- (c) Explain different types of cyber crimes and legal provisions related to them.
- (d) Discuss Electronic Data Interchange (EDI), its advantages and limitations.
- (e) Explain various types of electronic payment systems.
- (f) Describe the process of planning and developing an E-commerce website.
- (g) Discuss the pros and cons of Internet Marketing with suitable examples.

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