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SF—12—2022

FACULTY OF COMPUTER STUDIES

B.Sc. (Second Year) (Fourth Semester) EXAMINATION

JUNE/JULY, 2022

(CBCS/Revised Pattern)

COMPUTER SCIENCE

Paper BCS-404-B

(Essentials of Computer Security)

(Thursday, 30-6-2022)

Time : 2.00 p.m. to 5.45 p.m.

Time—3.45 Hours

Maximum Marks—75

- N.B. :—*
- (i) All questions are compulsory.
 - (ii) Assume suitable data, if necessary.
 - (iii) Figures to the right indicate full marks.

1. Attempt any *five* of the following : 15

- (a) Explain computer security.
- (b) Explain database management systems.
- (c) Explain symmetric Encryption.
- (d) Explain intrusion detection.
- (e) Explain means of Authentication.
- (f) Explain Digital Envelopes.
- (g) Explain Relational Database.

2. Attempt any *three* of the following : 15

- (a) Explain Access control principles.
- (b) Explain threats and attacks.
- (c) What is intruder behavior ?
- (d) What are the password selection strategies ?

P.T.O.

3. Attempt any *three* of the following : 15
- (a) Explain model for computer security.
 - (b) Explain role-based access control.
 - (c) Explain means of authentication.
 - (d) Explain the need of database security.
4. Attempt any *three* of the following : 15
- (a) Explain the challenges of computer security.
 - (b) Explain asymmetric encryption.
 - (c) Explain physical characteristics used in Biometric application.
 - (d) Explain subjects, objects.
5. Write short notes on any *three* : 15
- (a) Database encryption
 - (b) Analysis Approaches
 - (c) Digital Signature
 - (d) Fundamental Security Design Principles
 - (e) Vulnerability of passwords.