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Total No. of Printed Pages: 1

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M. Sc. IT (Semester – 3rd)
INFORMATION SECURITY
Subject Code: MITE1312
Paper ID: 220425

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It carries 16 marks. It consists of 4 questions of 4 marks each.
2. Section B consist of 4 questions of 8 marks each. The student has to attempt any 3 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(4 marks each)

- Q1. Explain security architecture for open systems with an neat diagram.
- Q2. Explain cloud security in detail.
- Q3. Explain the distributed denial-of-service attacks in detail.
- Q4. Explain the Bell-LaPadula model for computer security in detail.

Section – B

(8 marks each)

- Q5. Explain symmetric and asymmetric encryption in detail with example.
- Q6. What do you means by authentication? Explain different types of authentication methods.
- Q7. Explain different types of software security issues.
- Q8. What are the IT security controls, plans and procedures to implement these security plans, explain these in detail.

Section – C

(10 marks each)

- Q9. Explain step-by-step public-key encryption with the help of an example and a diagram
- Q10. Explain access control principles, subjects, objects, and access rights. Describe UNIX file access control and role-based access control.
- Q11. Explain malicious software and its types? Explain operating system security in detail.