Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

MCA (2015 Batch) (Sem.–3)

INFORMATION SECURITY

Subject Code : MCA-302

Paper ID : [74074]

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**
3. **Use of non-programmable scientific calculator is allowed.**

SECTION-A

1. What are threats? Explain the different categories of Threats.

2. Explain in detail about designing of security architecture with diagrams.

SECTION-B

3. What are the different means of User Authentication? How is it different from Authorization?

4. a) What is need for Database Security in Database Management Systems?

   b) What are the Principles for Access Control? Explain the Role - Based Access Control with example.

SECTION-C

5. Discuss Software Security in detail and the various software security issues.

6. a) Differentiate between Viruses and Worms.

   b) Differentiate between Payload - Attack agents and Payload - Information Theft.

SECTION-D

7. Illustrate the Concept of Trusted Computing Systems in detail.

8. Discuss the plan, procedures and implementation of IT Security Controls and Management in detail.

SECTION-E

9. Write briefly :

a) What are the approaches used for implementing Information Security?

b) What are Root kits?

c) What is Encryption?

d) What is Virtualization Security?

e) Describe Hash Function with example.

f) How to control access on Databases?

g) What are Reflector and Amplifier Attacks?

h) Define Man in the Middle.

i) What is Distributed Denial of Service Attack?

j) What do you mean by Stack Overflow?