Roll No…….. **Total No. of Printed Pages: 1**

Total No. of Questions: [09]

B.Sc. (IT) (Semester – 6th)

NETWORK SECURITY

Subject Code: BITE1-666

Paper ID: [130434]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 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 **(2 marks each)**

Q1. Attempt the following:

a) Define FDDI.
b) What is HTTP?
c) What is the role of Digital Signatures in network security?
d) Write the range of various classes of IP addressing.
e) What is the difference between threat and attack?
f) What are the roles of public and private keys?
g) Differentiate encryption and Decryption.
h) What is the difference between substitution and transposition technique?
i) Why security is necessary to protect data from unauthorized user?
j) Define HIPPI.

Section – B **(5 marks each)**

Q2. Difference between OSI and TCP/IP model.
Q3. Explain various security mechanisms of networking.
Q4. Explain SSL layer of network security in detail.
Q5. Write a note on application programming interface for IPv6.
Q6. Explain transaction oriented applications of TCP.

Section – C **(10 marks each)**

Q7. Explain IP security architecture and show how HTTP and ESP works?
Q8. Define IP multicasting? Explain multicasting protocols.
Q9. Explain seven layer architecture of OSI model.