Bachelor level/B.Sc. CSIT/VII Semester   Full Marks: 60
Time: 3 hrs.   Pass Marks: 30
Subject: Network Security (COM475B)

Candidates are required to give answers in their own words as far as practicable. Figures in the margins indicate marks.

Group A

Very short questions (Attempt all)   [8 x 2 = 16]

1. Are computer security and network security same or different? Justify
2. What is the difference between a firewall and IDS?
3. Mentions the different security attacks and their prevention mechanism.
4. Which is more secure HTTP or HTTPS? Why?
5. What is symmetric and asymmetric encryption??
6. What are web securities challenging issues?
7. Define public key infrastructure?
8. What does IPsec stand for, and what is its main purpose?

Group B

Short answer questions (Attempt any five)   [5 x 4 = 20]

9. Draw a general model for network security. Explain the network security concept in brief.   [2+2]
10. Explain how symmetric key is distributed using symmetric and asymmetric encryption.   [4]
11. What is RUA? List-out the process of remote user authentication using symmetric encryption.   [1+3]
12. What is TLS? Compare SSH with SSL.   [1+3]
13. What is wireless transport layer security? Explain WAP End- to- End security.   [1+3]
14. How internet key exchange works? Explain in brief.

Group C

Long answer questions (Attempt any three)   [3 x 8 = 24]

15. What are the key challenges in wireless network security? Explain about the network security model. [4+4]
16. What is FIM? Diagrammatically explain how a user is authenticated using Kerberos version 4.   [2+6]
17. Highlight the use of X.509 certificates? Explain a simple key distribution scenario where a symmetric key distributed using symmetric encryption under the presence of a KDC.   [3+5]
18. What is S/MIME? Explain IEEE 802.11 I wireless LAN security in detail.   [2+6]

The End