

Mid-West University

Examinations Management Office

Semester End Examination 2081

Bachelor level/ B. Sc. (CSIT)/ 7th Semester

Full Marks: 60

Time: 3 hours

Pass Marks: 30

Subject: Network Security (COM475B)

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

Group A

Very Short Answer Question (Attempt *All EIGHT* Questions). [8x2 = 16]

1. What is the relevance of network security concepts in modern era of ICT?
2. List-out the different security attacks and their prevention.
3. What is key management and distribution in network security?
4. How can you differentiate HTTP with HTTPS?
5. What is federated identity management?
6. What are web securities issues?
7. What is PGP in electronic mail security?
8. Explain cryptographic suites.

Group B

Short Answer Question (Attempt *Any FIVE* Questions). [5x4 = 20]

9. Draw a general model for network security. Explain the OSI security architecture in brief. (2+2)
10. Explain how symmetric key is distributed using symmetric and asymmetric encryption. (4)
11. What is Kerberos? List-out the process of remote user authentication using symmetric encryption. (1+3)
12. What is SSH? Compare SSL with TLS. (1+3)
13. What is wireless application protocol? Explain WAP End- to- End security. (1+3)
14. How encapsulating security payload works? Explain in brief. (4)

Group C

Long Answer Question (Attempt *Any THREE* Questions). [8x3 = 24]

15. What are the key challenges in wireless network security? Explain about the network security model. (3+5)
16. What is PKI? 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 is distributed using symmetric encryption under the presence of a KDC. (2+6)
18. What is S/MIME? Explain IEEE 802.11 I wireless LAN security in detail. (2+6)

The End