

Roll No. ....

Total Pages : 02

BT-7/D-19

37207

ADVANCED COMPUTER NETWORKS

IT-415N

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. What is a Computer Network ? Draw and explain seven layered network architecture. 15
2. (a) Discuss protocols associated with layers of TCP/IP protocol suite.  
(b) Explore MAC protocols for high speed MANs. 8+7=15

Unit II

3. (a) Explain in detail about the advantages of IPv6 over IPv4.  
(b) What is the need of checksum field in the IPv4 and why it covers only the header ? 8+7=15

4. (a) Draw a neat sketch and explain IPv6 protocol architecture.  
(b) Elaborate interoperation concepts of IPv4/IPv6. 8+7=15

Unit III

5. (a) Explain security related issues in mobile IP.  
(b) Write a detailed note on address assignments and session discovery. 8+7=15
6. (a) What is meant by Network Security ? Explore secure HTTP.  
(b) Discuss digital signature and digital certificates. 8+7=15

Unit IV

7. Why do we need Wireless Application Protocols (WAP) ? Explore the various protocols in a WAP protocol suite. 15
8. Explain the following :  
(a) VOIP Services  
(b) CMIP  
(c) DVMP. 5+5+5=15