Code No: 5405AB

R17

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M. Tech I Semester Examinations, December – 2018/January - 2019
COMPUTER NETWORKING
(Computer Science)

Time: 3hrs   **Max.Marks:75**

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A

<div align="right">

5 × 5 Marks = 25

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1.a) Explain briefly about peer-to-peer network.   [5]

b) Discuss the functionalities of Standard Network Management Protocol.   [5]

c) Explain in detail about Domain Name Service.   [5]

d) Discuss the Advanced features in 802.11   [5]

e) How is Virtual local area network connected? Explain.   [5]

PART - B

<div align="right">

5 × 10 Marks = 50

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2.a) Give the cell format and connection setup in ATM networks.

b) Differentiate between packet switching and circuit switching.   [5+5]

<div align="center">OR</div>

3. Briefly explain following with neat sketch.
   a) Content Distribution Networks
   b) Delay Tolerant Networks.   [5+5]

4. Explain Datagram format of IPv6 and compare with IPv4.   [10]

<div align="center">OR</div>

5.a) Explain how to build a routing table. Compare static routing with dynamic routing.

b) Describe in brief about Internet Control Message Protocol.   [5+5]

6.a) Describe TCP header format in detail. What is the difference between persistent HTTP with pipelining and persistent HTTP without pipelining?

b) Discuss the Coexistence of UDP and TCP flows.   [6+4]

<div align="center">OR</div>

7.a) Explain the TCP three way handshake protocols for connection establishment.

b) Discuss about TCP Tahoe and TCP Reno.   [5+5]

8.a) List and explain the characteristics of wireless networks.
 b) Explain the CDMA in wireless networks. [5+5]

OR

9.a) How to manage the mobility in cellular networks.
 b) Explain cellular network architecture. And discuss 3G and 4G networks. [5+5]

10. Write short note on the followings:
 a) Domain name system protection.
 b) VOIP signaling Protocols. [5+5]

OR

11.a) Explain the standards of SONET/SDH.
 b) How does SONET carry data from a DS-1 Service? [5+5]

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