III B.Tech I Semester Examinations – November, 2016

**COMPUTER NETWORKS**

Time: **3** hours (CSE/IT) Max. Marks: **60**

**SECTION – A**

**Answer all TEN questions 10×1M=10M**

1. By means of which machines different and frequently incompatible networks are connected

a) Internet b) Gateway c) Router d) Hub

1. ----------is a connection oriented with no error and flow control

a) Frame Relay b) X.25 c) ATM d) None

3. What is Bit-Map protocol?

4. If ‘m’ bits are used to represent the sequence number of frames the sender and receiver window sizes in selective repeat sliding window protocol is---------------------

5. ---------------Service is very difficult to ensure in datagram subnets

a) Routing b) Congestion control c) Addressing d) Circuit Setup.

6. ------------------is an example of network service access point

a) Name Server b) Port c) IP Address d) MAC Address.

7. What is the port number for http?

a) 25 b) 21 c) 80 d) 69

8. -------------------is a technique used to distribute the traffic among multiple network connections on round robin basis

a) Down Ward multiplexing b) Up Ward multiplexing

c) Down Ward demultiplexing d) Up Ward demultiplexing

9. ------------------is used for squirreling away pages for subsequent usage.

a) Mirroring b) Content Delivery c) Proxy d) NONE.

10. Write the five tuple notation of Resource Record

**SECTION – B**

**Answer all FIVE questions 5×2M= 10M**

11. What is Point Of Presence (POP) in INTERNET?

12. What is the role of DNS.

13. Explain the role of HTTP in World Wide Web?

14. Sketch the UDP header format.

15. Differentiate connection oriented and connection less protocols in transport layer.

**SECTION – C**

**Answer all FOUR questions 4×5M = 20M**

16. Write Short notes on ATM Virtual circuits.

**(OR)**

17. Discuss the design issues of network software.

18. How to deal with congestion control in TCP? Explain.

**(OR)**

19. Explain the format of TCP header.

20. Write about various protocols used in TCP/IP reference model.

**(OR)**

21. With neat sketch explain the 3-D model of ATM networks.

22. Write the process for streaming and compressing the audio in multimedia.

**(OR)**

23. What is the role of URLs in World Wide Web? Explain.

**SECTION – D**

**Answer all TWO questions 2×10M= 20M**

24. How to access a channel by multiple nodes? Discuss various multiple access protocols and their performance.

**(OR)**

25. a) With an example show that Hamming code used for both error detection and correction.

b) How effectively flow control is achieved with sliding window in noisy channel?

26. How to ensure reliability, delay, jitter and bandwidth in networking? Explain the techniques-Leaky & Token bucket algorithms.

**(OR)**

27. Differentiate the working principle of adaptive and non adaptive routing algorithms with one example algorithm.

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