

Roll No

IT - 503**B.E. V Semester**

Examination, December 2015

Computer Networks**Time : Three Hours****rgpvonline.com****Maximum Marks : 70**

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

Unit-I

1. a) What are the application of computer network?
- b) Write the Range of LAN, WAN and MAN?
- c) Define Point to Point Network?
- d) What is TCP/IP model? Explain the functions and protocols and services of each layer? Compare with OSI model?

OR

Explain OSI reference model?

Unit-II

2. a) How many connections are Possible in a point to point Network with 10 devices? **rgpvonline.com**
- b) What is Piggybacking?
- c) Write the main functions of data link layer?
- d) A CRC code is transmitted as 1001011100101. Check if there are some errors using divisor as 10101.

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OR

Explain Go-back N and selective repeat ARQ mechanisms in sliding window Flow Control along with example?

Unit-III

3. a) How throughput is improved in slotted ALOHA over pure ALOHA?
- b) In what situations connection based MAC protocols are suitable?
- c) List out the advantage and drawback of ring topology?
- d) Discuss IEEE 802.5 token Ring in detail?

OR

Explain FDDI? How FDDI offer higher reliability than token ring protocol?

Unit-IV

4. a) If IP Address 192. 168.5.128 and mask 255. 255. 255. 128. What is the Broadcast Address?
- b) In a Class B Network use subnetting mask 255. 255. 248. 0? Find out how many bits used for subnetting?
- c) Write the default mask of class A, B, C Network?
- d) Explain congestion and its control methods in detail?

OR

Explain Adaptive Routing methods in detail.

Unit-V

5. a) Write the Port Number of UDP and TCP Protocol?
- b) What are the Major Functions of Transport layer?
- c) Explain Ping Command and also write its full form of Ping Command?
- d) Explain different Internetworking devices?

OR

Explain the Frame Format of TCP Protocol?

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