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Total Number of Pages : 01

B.Tech
PCCS4302

5th Semester Back Examination 2019-20
DATA COMMUNICATION AND COMPUTER NETWORK
BRANCH : BIOMED, CSE, IT, ITE
Time : 3 Hours
Max Marks : 70
Q.CODE : HB486

Answer Question No.1 which is compulsory and any FIVE from the rest.
The figures in the right hand margin indicate marks.

- Q1 Answer the following questions : (2 x 10)**
- a) Specify the main job of the ARP and RARP.
 - b) State the function of gateways.
 - c) Which are the key elements of the protocol?
 - d) Define network topology. How many types of network topologies are available?
 - e) What do you mean by Proxy server?
 - f) Differentiate between Hub, Switch, and Router.
 - g) What is the role of IEEE in the world of computer network?
 - h) Write about the classes of Network.
 - i) What is the maximum segment length of a 100Base-FX network?
 - j) What is the importance of implementing a Fault Tolerance System? Are there limitations?
- Q2 a) Analyze the layers in OSI Reference Models? Describe each layer briefly. (5)**
b) How many types of modes are used in data transferring through networks? (5)
- Q3 a) Distinguish between TCP and UDP. (5)**
b) Explain about Sliding Window Protocols. (5)
- Q4 a) Define multiplexer. Describe about different multiplexing techniques. (5)**
b) Design the structure of IPV4, IPV6. (5)
- Q5 a) Describe about the Carrier Sense Multiple Access Protocols. (5)**
b) Explain about TCP congestion control and Quality of service of transport layer. (5)
- Q6 Enlist the various types of error correcting techniques. (10)**
- Q7 What is pure ALOHA and slotted ALOHA? Consider the delay of both at low load. Which one is less? Explain your answer. (10)**
- Q8 Write short answer on any TWO : (5 x 2)**
- a) Firewall
 - b) DNS
 - c) IEEE 802.11