The Assam Kaziranga University

End-Semester Examination: May-June, 2017

Programme:BTech **Semester: 6th** **Branch/Stream:CSE**

Course Code: ET1346 **Course Name: Computer Networks**

Time: 3 hours **Total Marks: 70**

All the students are instructed to write their ID number in the question paper

PART-A

Answer ALL the following ten questions. Each question carries 1 marks. **1X10=10 Marks**

1. What is the meaning of Client and Server.
2. Write down the Difference between Connection less and Connection oriented service.
3. Define all IANA Ranges.
4. Define the functions of Application Layer and Physical Layer.
5. Define Simplex Mode, Half-duplex Mode and Full-duplex Mode.
6. Define Unicast, Multicast and Broadcast.
7. Define FQDN and PQDN.
8. What is Proxy ARP?
9. Define Multiplexing and Demultiplexing.
10. Define the functions of Data-link Layer and Transport Layer.

PART-B

Answer any four (4) from the following five (5) questions. Each question carries 15 Marks.

Q1.

a. Discuss IGMP with its Operations. **(8)**
b. Discuss ICMP with its message types. **(7)**

Q2.

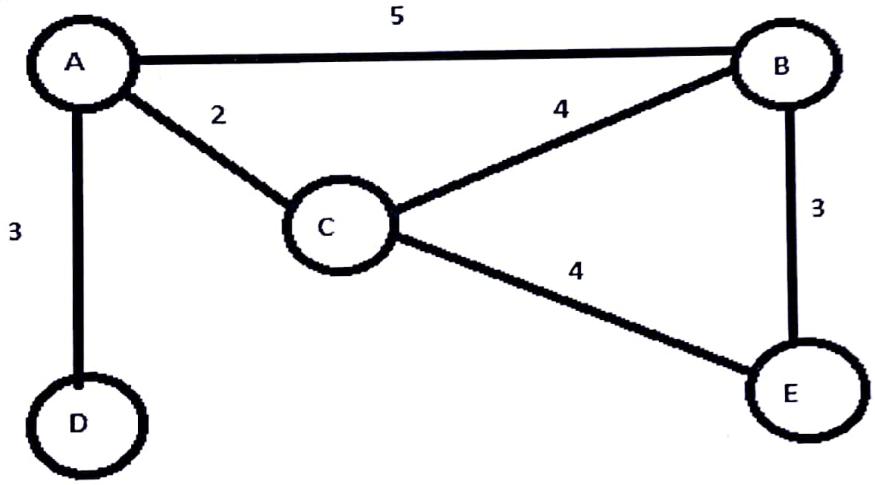
a. Explain different TCP Services with necessary diagrams. **(5)**
b. A bit word **1011** is to be transmitted. Construct the even parity seven-bit Hamming code for this data. **(2)**
c. Generate the CRC code for the data word of **110010101**. The divisor is **10101**. **(3)**
d. A seven bit hamming code is received as **1110101**. What will be the correct code? **(3)**
e. A **class B** network on internet has a subnet mask of **255.255.240.0**. What is the maximum number of host per subnet? **(2)**

Q3.

a. Define Selective Repeat ARQ with an example showing its flow diagram. **(5)**
b. Discuss about Presentation Layer. **(4)**
c. Discuss TCP segment format with necessary diagrams. **(5)**
d. Write down the difference between Reliable and Unreliable **(1)**

Q4.

a. Write down about Resolution with different resolution processes and diagrams. **(4)**
b. Write down about different Name Servers. **(4)**
c. Calculate the Routing Table for all the nodes present in the following diagram using Dijkstra's Algorithm. **(7)**



3 X 5 = 15 Marks

Q5. Short notes .

a. DHCP
b. BOOTP
c. RARP
d. RIP
e. UDP Operation