1905E698 Candidate's Seat No :

B.C.A. (Sem.-V) Examination
CC 303 Data Communication and Networking
Time : 3 Hours] **May-2017** [Max. Marks : 70

Q1. A	i	Define the Terms (1) Network (2) Bandwidth (3) Amplitude (4) Frequency	4
	ii	Difference between Serial Communication and Parallel Communication	3

OR

	i	Discuss three important bodies that help standardize data communications.	4
	ii	Explain Asynchronous Communication in detail.	3
Q1. B	i	Which are the different Transmission methods? Explain PCM in detail.	4
	ii	Which are the different types of Modulations? Explain Frequency modulation technique.	3

OR

	i	Give differences between Analog Signal and Digital Signal.	4
	ii	Define the terms. (1) Phase (2) Half Duplex (3) Period	3
Q2. A	i	What is Multiplexing and Demultiplexing? Which are the different methods? Explain FDM in detail.	7

OR

	i	Name the different types of Error Detection methods. Explain Parity Check Method?	4
	ii	Which Error Recovery method is used when more than one frame is send at a time? Explain in detail.	3
Q2. B	i	Which are the Different ways for Error Recovery? Which protocol is used when Window Size is fix for transferring data?	7

OR

	i	Write a short note on Cyclic Redundancy Check.	4
	ii	Explain Types of Error in detail.	3
Q3. A	i	What is Topology? List the topologies. Give Difference between Star and Mesh Topology.	7

OR

	i	Which are the different types of Switching? Explain Virtual Circuit Approach.	4
	ii	Write a short on Microwave Communication.	3
Q3. B	i	List the different Types of Guided Media. Give Difference between Coaxial Cables and Optical Fibre.	7

OR

	i	Write a short note on Mobile Telephone System.	4
	ii	Write a short note on Tree Topology.	3

Q4. A	i	What is the full form of OSI? Explain the functionality of OSI Model.	7

OR

	i	Write a Short note on LAN,MAN and WAN	4
	ii	Explain VLAN in detail	3
Q4. B	i	What is the use of CSMA/CD Explain in detail.	4
	ii	Difference between Bridge and Gateway	3

OR

	i	Explain 802.15 in detail.	4
	ii	What is the full form of ISDN? Differentiate its Interfaces	3
Q5. A		**Answers the Following Questions**	7

1 A set of rules that govern data communications between the sender and the receiver is called_____

    (A) Topology   (B) Rules

    (C) Law   (D) Protocol

2 _____ Device is use to regenerate Digital signal

    (A) Modem   (B)Amplifier

    (C) Router   (D) Repeater

3 _____ multiplexing technic is used when transmission medium is Optical Fibre.

    (A) Statistical TDM   (B)FDM

    (C) WDM   (D) Synchronous TDM

4 Optical fibre use _____ to guide the light through optical fibre.

    (A) Copper   (B) Reflection

    (C) Refraction   (D) Buffer

5 Satellites used _____ no of Frequency Bands for signals transmission

    (A) 3   (B) 2

    (C) 1   (D) 4

6 _____ Device is use to establish the Connection between computer and Ethernet

    (A) Bridge   (B) Gateways

    (C) Transceiver   (D) Switch

7 Wi-max is an Example of_____

    (A) Wireless LAN   (B) Wireless MAN

    (C) Wireless WAN   (D) Wi-Fi

Q5. B	**State true of false**	7

1 ASK is Affected by noise.

2 Statistical Time Division Multiplexing is More intelligent in TDM Technique.

3 Attenuation is increases Strength in signal

4 Ring Topology traffic flows in bidirectional

5 Telephone System is working on Circuit Switching Technique.

6 Self-healing mechanism is used by Token Ring.

7 Wireless LAN has a base station.