Seat No._____

GANPAT UNIVERSITY

B. TECH. SEMESTER VI (EC) ELECTRONICS & COMMUNICATION ENGINEERING

REGULAR EXAMINATION, April - June 2015

2EC 602:- COMPUTER NETWORKS

TIME: 3 HOURS

TOTAL MARKS: 70

INSTRUCTION:-

1. Attempt all questions.
2. Answers to the two sections must be written in separate answer books.
3. Figures to the right indicate full marks.
4. Assume suitable data, if necessary.

SECTION-I

Que. 1	(A)	What is silly window syndrome? Explain solution of it at sender and receiver both.	6
	(B)	Explain the Hierarchical routing algorithm.	6
		OR	
Que. 1	(A)	Explain the Congestion control in TCP.	6
	(B)	Explain the client – server communication using state transition diagram in TCP.	6
Que. 2	(A)	Write short note on W.W.W.	3
	(B)	Define cipher text and plaintext. Also explain the traditional ciphering using suitable example.	4
	(C)	What is supernetting? Determine the initial address and last address for IP Address 100.150.180.240/13	4
		OR	
Que. 2	(A)	Explain the flooding technique in detail.	3
	(B)	Draw the TCP header format and explain each field.	4
	(C)	Draw the IP header format and explain each field.	4
Que. 3	(A)	Explain Shortest path routing algorithm using suitable example.	6
	(B)	Write short note on Domain Name System (DNS).	6

SECTION-II

Que. 4	(A)	Explain the ATM model in detail.	6
	(B)	Explain the various methods for generation of frames.	6
		OR	
Que. 4	(A)	Explain the HDLC protocol with its frame format in detail.	6
	(B)	Explain the collision free Protocol using Bit Map method and Binary Countdown.	6
Que. 5	(A)	Derive the equation for throughput versus Total traffic for Slotted Aloha.	4
	(B)	Differentiate the connection-oriented and connection-less services.	4
	(C)	Draw and explain the stop & wait protocol.	3
		OR	
Que. 5	(A)	Differentiate the LAN and WAN.	4
	(B)	Calculate CRC code for data: 1011101 and generator polynomial 1011.	4
	(C)	Give the name of layer used in network devices switch and Hub.	3
Que. 6	(A)	Define: internet and subnet.	2
	(B)	Draw the OSI model and explain each layer in detail.	10

END OF PAPER
