BTS-VI(S.S)-11-22-1102 Reg. No. | | | | | | | | |

C

B.Tech. Degree VI Semester Special Supplementary Examination November 2022

CS 19-202-0601 COMPUTER NETWORKS

(2019 *Scheme*)

Time: 3 Hours Maximum Marks: 60

Course Outcome

On successful completion of the course, the students will be able to:

CO1: Familiarize with fundamental underlying principles of computer networking.
CO2: Explain the details and functionality of layered network architecture.
CO3: Apply mathematical foundations to solve computational problems in computer networking.
CO4: Acquire knowledge in ethical, legal, security and social issues related to computer networking.

Bloom's Taxonomy Levels (BL): L1 – Remember, L2 – Understand, L3 – Apply, L4 –Analyze, L5 – Evaluate, L6 – Create

PO – Programme Outcome

PART A

(Answer *ALL* questions)

			(8 × 3 = 24)	Marks	BL	CO	PO
I.	(a)	List out the functions of FTP.		3	L1	4	1
	(b)	Explain how DNS helps in address translation.		3	L1	4	1
	(c)	Discuss Transport Layer Services. List out the services provided by the Transport Layer.		3	L2	2	1
	(d)	Explain the UDP header with a diagram.		3	L1	2	2
	(e)	Discuss about IP classful Addressing.		3	L2	1	3
	(f)	Explain about Data Fragmentation in IP.		3	L1	2	2
	(g)	Write notes on Data centre networking.		3	L2	4	3
	(h)	What are channel partitioning protocols?		3	L2	4	3

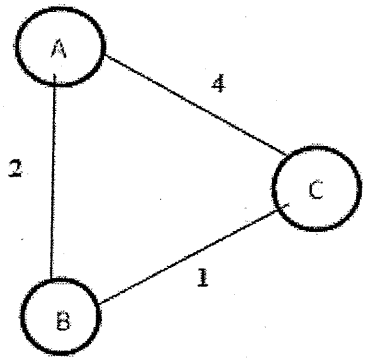
PART B

(4 × 12 = 48)

II.	Explain the working of: (i) SMTP (ii) Email (iii) P2P file sharing.	12	L2	1	12
	OR				
III.	Write notes on: (i) HTTP (ii) Socket Progamming.	12	L2	1	12
IV.	Discuss TCP transition states on connection establishment and termination.	12	L1	2	2
	OR				
V. (a)	Explain any two congestion control algorithms.	6	L1	2	1
(b)	Discuss about TCP timeout and retransmission.	6	L2	2	2
VI. (a)	Explain the IPV4 Header with a diagram.	5	L1	2	1
(b)	Consider Class C IP Address 195.1.1.0. Find out the subnet mask and first address of every subnet if we need 10 subnets of 12 hosts each.	7	L3	3	4
	OR				

(P.T.O.)

			Marks	BL	CO	PO
VII.	(a)	Explain briefly about BGP.	5	L1	2	1
	(b)	Implement Distance Vector Routing Algorithm in the following network and construct the routing table.	7	L3	3	4



VIII.		Explain about Multiple Access Protocols.	12	L1	4	1
		OR				
IX.	(a)	Write notes on VLAN.	6	L2	4	1
	(b)	Discuss about Software Defined Networking.	6	L2	4	1

Bloom's Taxonomy Levels
L1 = 45%, L2 = 45%, L3 = 10%

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