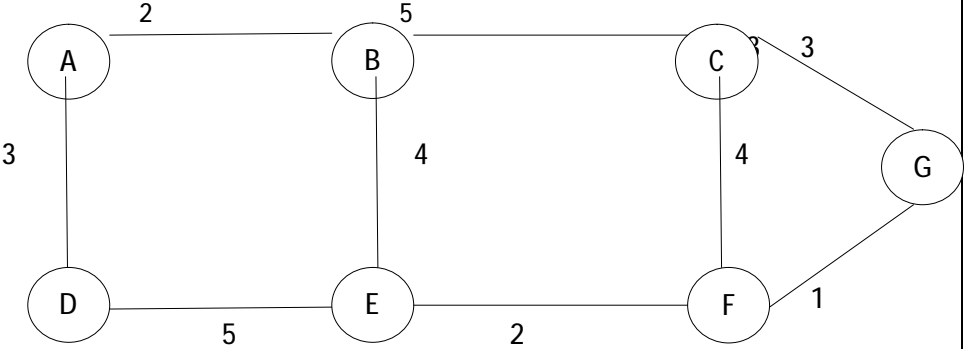


15EC64**Visvesvaraya Technological University, Belagavi****MODEL QUESTION PAPER – Set II****6th Semester, B.E (CBCS) EC/TC****Course: 15EC64- Computer Communication Networks****Time: 3 Hours****Max. Marks: 80****Note: (i) Answer Five full questions selecting any one full question from each Module.****(ii) Question on a topic of a Module may appear in either its 1st or/and 2nd question.**

		Module-1	Marks
1	a	Explain with neat diagrams the basic topologies for a network	06
	b	Explain with neat diagram the logical connection between layers and its function of TCP/IP Protocol suits.	05
	c	Illustrate with an example two types of framing	05
OR			
2	a	Explain circuit switched and packet switched network	05
	b	Compare OSI with TCP/IP	06
	c	Explain ARP operation	05
Module-2			
3	a	With neat diagrams , Explain persistence methods in CSMA	06
	b	With neat diagram , Explain Ethernet frame format .	05
	c	A pure ALOHA network transmits 200 bit Frames on a shared channel of 200kbps. What is the throughput if system produces : (i) 1000 Frames per sec (ii) 250 Frames per sec	05
OR			
4	a	Describe polling and Token passing in controlled Access method	06
	b	Write short notes on 10 Base5 thick Ethernet, 10 Base 2 thin Ethernet	05
	c	A slotted ALOHA Network transmits 200bit Frames using a shared channel with a 200kbps bandwidth. Find the throughput if the system produces: (i) 1000 Frames per sec (ii) 250 Frames per sec	05
Module-3			
5	a	Explain with architecture of two kinds of services in wireless Ethernet	06
	b	Apply spanning tree algorithm and mark forwarding and blocking ports for a system with 4 LANS and 5 switches. (i) S1 connects LAN1 and LAN2 (ii) S2 connects LAN1 and LAN3 (iii) S3 connects LAN2, LAN3 and LAN4 (iv) S4 connects LAN2, LAN4 (v) S5 connects LAN3, LAN4	06
	c	Explain Network Address Translation (NAT)	04

		OR	
6	a	With a neat diagram explain two types of Network defined by Bluetooth	06
	b	Explain VLAN with a neat diagram and also membership and configuration of VLAN	06
	c	Explain Forwarding process of a router	04
		Module-4	
7	a	With a neat diagram explain IPV4 Datagram format	06
	b	Explain with neat diagram the three phases in Mobile host communication	06
	c	With a neat diagram Describe areas in an Autonomous system in OSPF	04
		OR	
8	a	With a neat diagram explain general format of ICMP messages	06
	b	Apply link state routing for the given Fig. Q.8(b) below and create a least cost tree using Dijkstra Algorithm	10
			
		Fig. Q. 8(b)	
		Module-5	
9	a	Explain why the send window size for Go- Back N must be less than 2^m	05
	b	Explain sending and receiving buffers in TCP	05
	c	With a neat diagram explain TCP segment format	06
		OR	
10	a	Explain why the size of the send and receiver window in selective repeat can be atmost one half of 2^m	05
	b	Discuss the general services provided by UDP	05
	c	Explain with a neat diagram connection establishment using three way handshaking in TCP	06

Note: In the updated syllabus, in Module-3, Routers has been added along with the Switches.
