



PES University, Bangalore
(Established under Karnataka Act No. 16 of 2013)

UC15MC533

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MAY 2017: END SEMESTER ASSESSMENT (ESA) MCA. IV SEMESTER

UC15MC533 – Advanced Computer Networks

Time: 3 Hrs		Answer All Questions	Max Marks: 100
1.	a)	What is the role of ISOC, IAB, IRTF, IETF and ICANN in Internet administration?	5
	b)	What is FDM? Explain FDM Process with neat diagrams.	1+4
	c)	Explain the structure of a packet switch with a neat diagram.	4+2
	d)	Discuss the advantages of protocol layering.	4
2.	a)	Discuss the Ethernet frame format with the explanation of each field. Also discuss the minimum and maximum frame size in Ethernet.	2+2+2
	b)	Explain a simple network using SONET equipment with a neat diagram? Discuss about each device.	2+4
	c)	Explain in detail SONET Ring Networks.	4+4
3.	a)	Discuss the different wireless link characteristics.	4
	b)	What are the different ways in which a wireless host can associate with an Access Point?	3+3
	c)	Discuss the cellular network architecture with a neat diagram.	3+3
	d)	Discuss the agent registration process used in Mobile IP.	4
4.	a)	What are the two approaches to multicasting? Explain them with example topologies.	4+4
	b)	Compare a TCP segment with an SCTP packet.	10
	c)	What is the purpose of SACK chunk in SCTP?	2
5.	a)	What is open loop and closed loop congestion control? Name and explain the different open loop congestion control policies.	2+6
	b)	When did congestion occurs in Networks? How did delay and throughput affect the performance of networks when the load on network varies?	2+3+3
	c)	What are the issues with IntServ Model? How it can be resolved in DiffServ Model?	4