

Reg.No. _____



Karunya UNIVERSITY

(Karunya Institute of Technology & Sciences)
(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – Nov/Dec – 2016

Code : 14CS3056
Sub. Name : Internetworking Multimedia

Semester : 2016-17 ODD
Duration : 3hrs
Max. marks : 100

ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	Give a model for accounting resource utilization in bursty flows in a multimedia application.	CO1	10
	b.	With relevant diagrams describe the working of Real time Transport Protocol in multimedia streaming applications.	CO1	10
(OR)				
2.	a.	Store and forward delay is the major delay component in any multimedia data transfer. Propose any two solutions to reduce the store and forward delay in overloaded multimedia networks.	CO1	10
	b.	Elucidate the role of multicast in the Internet.	CO2	10
3.	a.	What are the advantages and drawbacks of Network Text Editor.	CO1	3
	b.	Write short notes on the design issues of transport protocols for multimedia systems.	CO1	5
	c.	Design and explain a network service model which is capable enough to create and maintain communication in multimedia scenario	CO1	12
(OR)				
4.	a.	Consider a RSVP multicast session involving one sender and three receivers RCV1-RCV3. How does resource reservation protocol work for placing reservations? List various messages passed between the sender and receiver.	CO2	10
	b.	Assume that you have to stream a MP3 file using the server side pipeline. How does HTTP, RTSP and RTP works together to establish a time synchronized streams of audio?	CO2	10
5.	a.	Discuss the significance following lossless compression techniques over lossy compression techniques used to compress the multimedia data. (i) Huffman compression (ii) Run length compression (iii) Lempel-Ziv dictionary based compression	CO1	15
	b.	State the theorem proposed by Nyquist which describes the sampling rate.	CO1	5
(OR)				
6.	a.	Compare and contrast OSPF and MOSPF	CO1	5
	b.	What are the various levels of interest in text, still image and moving images?	CO1	5
	c.	Illustrate various center based tree routing algorithms used for multimedia networks.	CO1	10
7.	a.	With a neat sketch discuss how media streams are conveyed by RTP between interactive participants in video teleconferencing applications. What are the roles of RTP multiplexing in the interactive applications?	CO2	10
	b.	Explain how TCP adoption algorithm manages the increase in overload in multimedia networks.	CO1	10
(OR)				
8.	a.	Compare and contrast Session Announcement and Session Initiation protocols.	CO2	10

	b.	An advertising company required to conduct a multisite conferencing among its managers in various locations. But the company is not having the established shared multiplexed network among its branches. Suggest and explain the various methods of achieving Multisite Conferencing in the absence of the shared multiplexed network.	CO2	10
		<u>Compulsory:</u>		
9.	a.	Discuss the role of media on demand technology in achieving a low cost and high quality media sharing.	CO1	10
	b.	Describe the importance of various security mechanisms used in multicast multimedia applications	CO3	10

ALL THE BEST