BITS, Pilani-Dubai,Campus, Knowledge Village,Dubai
IV th Year First Semester 2003-2004
Degree:B.S. Branch:C.S.E

COURSE NO. : EA UC451

COURSE TITLE : : Internetworking Technologies

Time :50 mts Date :26-10-2003 Marks: 30 Test:1

Q1.a) A computer monitor has a resolution of 640 * 480 and can show 256 colors. Calculate the size of each frame buffer required for this monitor.(2.5 marks)

b)Calculate the data rate required for a 640*480 resolution color monitor (with 1024 colors) for a refresh rate of 30 Hz.(2.5 marks)

Q2. Why not just stream multimedia presentations off of web servers using the HyperText Transfer Protocol (HTTP)? (5 marks)

Q3. Outline the steps involved in achieving a particular Qos for multimedia using RSVP protocol. (5 marks)

Q4. Outline the difference between receiving multimedia information in the form of a HTTP object and in the form of a stream from a remote server.
(5 marks)

Q5.Outline how synchronization of video and audio can be ensured with the help of RTP protocols.(5 marks)

Q6.a) What are the types of Quality of services for multimedia over internet and specify the means to achieve the same.(2.5 marks)

b)How Qos can be improved using RTP along with RTCP?(2.5 marks)

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Time :50 mts Date :30-11-2003 Marks: 30 Test:2

Q1. Outline with relevant timing diagrams how ATM network can cater to the needs of both TDM and packet switching networks. (5 marks)

Q2. Outline the steps involved in transmitting TCP/IP packets over ATM network between a TCP/IP transmitter and TCP/IP receiver, explaining the role played by each layer of ATM for successful transmission.(5 marks)

Q3.Explain with relevant diagrams how digital information from computers can be Transmitted via POTS lines from a source to the destination along with analog voice step by step. (5 marks)

Q4.a) What sort of temporal relationship has to be maintained for
1)pure audio (1 m)
2)Video and matching audio (1 m)

b)List and explain the delays encountered in the transmission and presentation of multimedia content captured in real-time. (3 m)

Q5. Explain with relevant diagrams why EDF alone may not be suitable for retrieval of information from multimedia servers.? (2.5 M)
What is the advantage of going for SCAN_EDF algorithms in the case of multimedia servers? (2.5 M)

Q6.a) Outline the differences in accessing a shared medium in the case of wired and wireless lans using relevant diagrams(2.5M)

b) Consider two BSS stations 1 and 2 in infrastructure based wireless lans. A node in BSS1 wants to talk to a node at BSS2. How is it made possible? (2.5 M)