Total No. of Questions : 12]	SEAT No.:	1
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[4959]-190 **B.E.** (**IT**) **MULTIMEDIA SYSTEMS**

(2008 Pattern) (Elective - II(c)) Time: 3 Hours] [Max. Marks : 100] Instructions to the candidates: Answers to the two sections should be written in separate answer books. Solve Question 1 or Question 2, Question 3 or Question 4 and Question 5 or 2) Question 6 from Section I. Solve Question 7 or Question 8, Question 9 or Question 10 and Question 11 3) or Question 12 from Section II. 4) Use of non-programmable electronic calculator is allowed. Figures to the right indicate full marks. 5) **SECTION - I** Elaborate any three distributed multimedia applications. *Q1*) a) [9] With the help of a figure, elaborate ODA and OMF architecture. b) [9] OR Explain storage and retrieval of multimedia data in multimedia database **Q2)** a) system.` [9] b) Explain architecture of multimedia database system. [9] **Q3**) a) Compare the following: [8] i) lossy and lossless data compression techniques. ii) intra frame and inter frame compression techniques. b) Write the steps for Shannon-Fano algorithm for encoding any word. [8] OR **Q4**) a) Draw the block diagram for JPEG compression technique and state the

purpose of each block. [8]

Elaborate the Huffman coding technique with the following example. [8] b)

Q5)	a)	Explain RMF and WMA audio file formats.	
	b)	What is MIDI ? Explain MIDI messages.	[6]
	c)	Elaborate any DPCM audio compression technique.	[4]
		OR	
Q6)	a)	Elaborate the sound characteristics.	[8]
	b)	Elaborate WAV File format.	[8]
		<u>SECTION - II</u>	
Q7)	a)	Explain video Compact Cassette and Camcorder.	[8]
	b)	Write short note on CCIR and CIF.	[8]
		OR	
Q8)	a)	Explain any two video signal transmission formats.	[8]
	b)	Write a short note on any two video file formats.	[8]
Q9)	a)	Explain concept & forms of Virtual Reality.	[8]
	b)) Explain following Virtual Reality devices.	
		i) Hand gloves	
		ii) Head mounted display	
		OR	
Q10)	(a)	Explain different applications of VR.	[8]
	b)	Elaborate on the basics of VRML.	[8]
Q11)	a)	Explain Flip Book animation and Rotoscoping animation technique	es.[8]
	b)	Write a short note on 3D-Max.	[10]
		OR	
Q12)	(a)	Explain the animation on web.	[8]
	b)	Elaborate what is anticipation, squash and stretch with example.	[10]

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