## 2025

## **ELEMENTS OF MULTIMEDIA**

Full Marks: 100

Time: Three hours

## The figures in the margin indicate full marks for the questions.

Answer **Question No. 1** and *any four* from the rest.

1.	A)	Fill in the blanks: $(10x1 = 10)$			
i. Digital signals have two amplitude levels called					
	ii.				
	iii.	A capital letter is calledletter in text.			
	iv.	Clickable, push able graphical objects are called			
	v.	J 1			
	vi.	An alpha channel contains information.			
	vii.	The unit of sound volume is measured in			
	viii.	Sounds above 20KHz are called			
	ix.	Two makes up a video frame.			
	х.	Google Chrome is an internet			
B) State True or False:					
	D)	State True or False: $(1 \times 10 = 10)$			
	i.	Continuous media are time independent.			
	ii.	International diacritics like ã, é are included in the ASCII character set.			
	iii.	Print resolution is measured in dots per inch.			
	iv.	Purple is a warm colour.			
	v.	In the YUV colour model, Y-signal encodes colour information.			
	vi.	Dot-matrix colour printers can print faster than colour laser printers.			
•	vii.	Musical tone between 4 and 16 Hz cannot be heard but felt via the sense of touch.			
V	iii. Component video contains both colour and brightness information on a single				
	_	channel.			
	ix.	Apps used for chat are called Instant Messengers.			
	х.	The range of a Personal Area Network is 10 feet.			

...Contd.

2.	A)	What are the elements of multimedia?	(6)
	B)	What are the components of a multimedia system? Give examples.	(2+2=4)
	C)	Describe the different types of data compression with diagrams.	4+4+2=10)
3.	A)	Explain what is a typeface, font and font style.	(6)
	B)	What is the difference between a symbol and an icon?	(4)
	C)	Draw any 5 symbols and any 5 icons.	(5+5=10)
4.	A)	State the differences between Vector and Raster Graphics.	(5+5=10)
	B)	Describe the process of anti-aliasing with a diagram.	(5)
	C)	Mention any five ways in which you can acquire digital images.	(5)
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5.	A)	What is acoustics? How is it different from psychoacoustics?	(2+2=4)
	B)	Differentiate between musical sound and noise.	(3+3=6)
	C)	Describe the composition of a MIDI file with a diagram.	(6+4=10)
6.	A)	What is a video? Explain what are video frames and frame rate	(2+2+2=6)
	B)	Briefly describe the different types of TV Broadcast standards.	(3x3 = 9)
	C)	Name any five video file formats.	(5)
		52/1.	
7.	Wr	ite short notes on any four of the following:	(4x5 = 20)
	A)	Case sensitive text	
	B)	Image Depth	
	C)	Interlacing	
	D)	LAN ESTD.: 2006	
	E)	Browser	
	F)	Immersive VR	

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