

PRN No.	
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PAPER CODE	V325-2104A(EE)
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May 2025

TY (SEMESTER - II)

COURSE NAME:
MULTIMEDIA
AND AR/VR

Branch: Information Technology

COURSE CODE: ITUA32204B

(PATTERN 2020 R1)

Time: [1 HR 30 Min]

[Max. Marks: 40]

Instructions to candidates:

- 1) Figures to the right indicate full marks.
- 2) Use of scientific calculator is allowed
- 3) Use suitable data wherever required
- 4) All questions are compulsory. Solve any two sub questions each from each Question 1 ,2, 3 and 4 respectively

Q. No.	Question Description	Max. Marks	CO mapped	BT Level									
Q.1	a) Encode the string "DEADFACEBADCAFE" using Huffman Coding and also build a tree.	[5]	1	3									
	b) Encode the given string " WABBACWABBACWABBACWA" using LZW method. Initial dictionary table is given as below	[5]	1	3									
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Index</th> <th>Entry</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>1</td> </tr> <tr> <td>B</td> <td>2</td> </tr> <tr> <td>C</td> <td>3</td> </tr> <tr> <td>W</td> <td>4</td> </tr> </tbody> </table>	Index	Entry	A	1	B	2	C	3	W	4		
Index	Entry												
A	1												
B	2												
C	3												
W	4												
	c)Elaborate any 2 multimedia authoring tools	[5]	1	2									
Q2	a) Apply Shanon Fano Algorithms for compressing the string "EEEEDDCCBA". Initial frequency table is given as below.	[5]	2	3									
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>E</td> <td>4</td> </tr> <tr> <td>D</td> <td>2</td> </tr> <tr> <td>C</td> <td>2</td> </tr> <tr> <td>B</td> <td>1</td> </tr> <tr> <td>A</td> <td>1</td> </tr> </tbody> </table>	E	4	D	2	C	2	B	1	A	1		
E	4												
D	2												
C	2												
B	1												
A	1												
	b) Compress the Input String: "CABACAB" using Arithmetic Coding. Frequency table is given as below calculate probability also.	[5]	2	3									

		Character	Frequency			
		A	3			
		B	2			
		C	2			
	c) Explain dynamic range correction and how Gamma correction works.	[5]	2	2		
Q3.	a) Explain augmented reality and history of augmented reality	[5]	3	2		
	b) How augmented reality works explain with any one example.	[5]	3	2		
	c) Explain the relationship between augmented reality and other technologies-media	[5]	3	2		
Q.4	a) Compare between augmented reality and virtual reality with examples.	[5]	4	2		
	b) Comment on virtual reality? and what are the types of head-mounted display	[5]	4	2		
	c) How virtual reality really works explain it with any example	[5]	4	2		

BT Levels:

[1] Remembering [2] Understanding [3] Applying [4] Analyzing [5] Evaluating [6] Creating