

Model Question Paper Only for Reference

End Semester Examination (ESE – THEORY)

BE (Semester- VIII)

Subject :-(EX-DLO-8034: Digital Image Processing (CBCGS-H))

Branch: Electronics Engineering

Date: 05/10/2020

Class: BE ELEX

Timing: M: 9:30 AM to 10:30 AM

(15 MINS Buffer Time for uploading)

Maximum Marks: 50

Instructions -

- 1. Assume suitable data wherever necessary and state the assumptions made.
- 2. Diagrams / sketches should be given wherever necessary.
- 3. Use of logarithmic table, drawing instruments and non-programmable calculators is permitted.

1. Black and white images have only		1M
a. b. c. d.	2 levels 3 levels 4 levels 5 levels	
2. Bla	ck colour in image processing is usually represented by	1M
a. b. c. d.	0 1 255 256	
3. Enh	nancement can be done in ways.	1M
a. b. c. d.	4 3 1 2	
4. Blui	rring is generally done using filtering technique.	1M
a. b.	High boost High pass	

- c. Median
- d. Low pass

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5. In how many ways a histogram can be used to enhance an image	1M
2 2	
a. 2 b. 1	
c. 3	
d. 4	
6. In digital negative black becomes	1M
a. Blue	
b. Red	
c. Grey	
d. White	
7. Processing of images is done using	1M
a. Image Compression system	
b. Image Manipulation system	
c. Image Posting system	
d. Image Processing system	
8 is an image type	1M
a. Half-Toned	
b. MPEG	
c. JPEG	
d. TIFF	
9 is a type of noise that generally comes during image acquisition	1M
a. Rayleigh	
b. Binary	
c. secondary	
d. Primary	
10. IGS coding	1M
a. Variable length	
b. Fixed length	
c. Uniform length	
d. Binary length	

2M

11. _____ is an example of digital negative



- a. X-ray
- b. MRI
- c. Paper printing
- d. Photos

12. There are ______ point processing techniques in spatial domain enhancement. 2M

- a. 7
- b. 6
- c. 5
- d. 4

13. In _____histogram, the range of only grey levels changes. 2M

- a. Linear
- b. Horizontal
- c. Vertical
- d. Equalization

14. In _____histogram, the range of grey levels as well as the no. of pixels changes.

2M

2M

- a. Linear
- b. Horizontal
- c. Vertical
- d. Equalization
- 15. The given mask is _____ operator

1	-1
0	0

- a. Prewitt
- b. Ordinary
- c. Robert
- d. Sobel

There are distance transforms in image segmentation.	2M
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- a. 3
- b. 4
- c. 5
- d. 6



- 17. There are _____ ways of region segmenting based on similarity. 2M
 - a. 2
 - b. 4
 - c. 3
 - d. 5

18. The given mask below represents ______ line detection.2M

2	-1	-1
-1	2	-1
-1	-1	2

- a. Horizontal
- b. Vertical
- c. +45°
- d. -45°

19. The formulae given below is of ______in image morphology. 2M

 $f \bullet b = (f \oplus b) \ominus b.$

- a. Dilation
- b. Erosion
- c. Opening
- d. Closing

20. Chain codes are based on _____ and _____ connectivity. 2M

- a. 4 way, 8 way
- b. 5 way, 10 way
- c. 16 way, 20 way
- d. 7 way, 10 way

21. Image transforms are used for _____

- a. Compression
- b. Shortening
- c. Expanding
- d. Softening

22. Walsh-Hadamard transform is a _____transform.

2M

2M

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a Non-sinus	oidal				
b. Sinusoidal					
c. Cosine					
d. Non-Cosin	ne				
23. Huffman is a _	compression technique.	2M			
a. Lossy					
b. Lossless					
c. Video					
d. Audio					
24. Shannon-Fan	o is a compression technique.	2M			
a. Lossy					
b. Lossless					
c. Video					
a. Audio					
25. Arithmetic coding is a compression technique.					
a. Lossy					
b. Lossless					
c. video d. Audio					
26	is used in JPEG encoder and decoder system.	2M			
a. Entropy encodi	ng				
b. DWT					
C. HAAR					
a. Hadamara					
27. NTSC is a					
2M					
a. Colour mo	del				
b. Grey mode	el				
c. White mod					
28. Digital Negativ	ve is a type of	2M			
a. Neighbour	hood processing				



- c. Neighbourhood mapping
- d. Point mapping