



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. 2 levels
- b. 3 levels
- c. 4 levels
- d. 5 levels

2. Black colour in image processing is usually represented by _____ 1M

- a. 0
- b. 1
- c. 255
- d. 256

3. Enhancement can be done in _____ ways. 1M

- a. 4
- b. 3
- c. 1
- d. 2

4. Blurring is generally done using _____ filtering technique. 1M

- a. High boost
- b. High pass
- c. Median
- d. Low pass



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



- 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

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

15. The given mask is _____ operator 2M

1	-1
0	0

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

16. There are _____ distance transforms in image segmentation. 2M

- 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

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

- 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 _____

2M

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

22. Walsh-Hadamard transform is a _____ transform.

2M



- a. Non-sinusoidal
- b. Sinusoidal
- c. Cosine
- d. Non-Cosine

23. Huffman is a _____ compression technique. 2M

- a. Lossy
- b. Lossless
- c. Video
- d. Audio

24. Shannon-Fano is a _____ compression technique. 2M

- a. Lossy
- b. Lossless
- c. Video
- d. Audio

25. Arithmetic coding is a _____ compression technique. 2M

- a. Lossy
- b. Lossless
- c. Video
- d. Audio

26. _____ is used in JPEG encoder and decoder system. 2M

- a. Entropy encoding
- b. DWT
- c. HAAR
- d. Hadamard

27. NTSC is a _____
2M

- a. Colour model
- b. Grey model
- c. White model
- d. Black model

28. Digital Negative is a type of _____ 2M

- a. Neighbourhood processing



- b. Point processing
- c. Neighbourhood mapping
- d. Point mapping

29. Image segmentation is based on _____ and _____ 2M

- a. Similarity and Dissimilarity
- b. Continuity and Discontinuity
- c. Merging and Unmerging
- d. Splitting and Unsplitting

30. High boost filter is a type of _____ 2M

- a. Neighbourhood processing
- b. Point processing
- c. Neighbourhood mapping
- d. Point mapping