

Program: BE INFORMATION TECHNOLOGY Engineering
Curriculum Scheme: Revised 2016
Examination: Third Year Semester V
Course Code: ITDLO5012 and Course Name: Image Processing
Max. Marks: 50

Time: 1 hour

Question No.	Question Statement	Options			
		A:	B:	C:	D:
1	Which one of the following is not color model.	HSI	RCB	CMYK	RGB
2	NTSC color model consists of which of three components	Red,Green,Blue	.Luminance,Hue,Saturation	Cyan,Magenta,Yellow	Hue,Saturation,Intensity
3	Following is the transfer function of $s=cx^rY$	Power Law Transformation	Logarithmic Transformation	Histogram processing	Contrast stretching
4	In contrast stretching, if $r1=r2$, $s1=0$ and $s2=L-1$ what will be the output	The transformation becomes a thresholding function that creates an octal image	The transformation becomes a override function that creates an octal image	The transformation becomes a thresholding function that creates a binary image	The transformation becomes a thresholding function that do not create an octal image
5	which filtering technique gives smoother image because of attenuation of high frequencies	high boost filter	Highpass filter	Lowpass filter	Zero-phase-shift filter
6	Walsh transform return a value called as	Sequency value	Frequency value	Null value	Filtered value
7	The mask which is used for the line detection is called as:	Laplacian	Butterworth	Gaussian	Ideal
8	In Image segmentation the equation for the Gradient computation is	$ Gx - Gy $	$ Gx / Gy $	$ Gx x Gy $	$ Gx + Gy $
9	In boundary descriptor whose value is given by the ratio of length of the major axis to the minor axis, which of the following is the useful descriptor of a boundary:	Eccentricity	Area	Perimeter	Radius
10	In image morphology removing of the extra tail pixels in an image is a process of:	Hit or Miss Transformation	Erosion	pruning	dilation
11	In image compression technique the useful information ignored the human eye is called as:	coding redundancy	spatial redundancy	temporal redundancy	irrelevant info
12	In image processing clustering approach is used by which segmentation technique?	K-means algorithm	Histogram based algorithm	Threshold based algorithm	Edge detection based algorithm
13	In image segmentation based on discontinuity for finding horizontal lines we use mask of values:	$[2 -1 -1; -1 2 -1; -1 -1 2]$	$[-1 -1 2; -1 2 -1; 2 -1 -1]$	$[-1 -1 -1; 2 2 2; -1 -1 -1]$	$[-1 2 -1; -1 2 -1; -1 2 -1]$

14	The approach or method which is used to texture the inner region of the object is:	extraction	recognition	discontinuity	similarity
15	The total flow of light on the object	Radiance	Darkness	Brightness	Luminance
16	The human eye can observe a small range of illumination, This phenomena is called	Brightness Adaption	Weber ratio	histogram equalization	contrast sensitivity
17	One of the property in image segmentation is that if R is the entire region of the image then union of all segmented parts should be equal to the following:	R'	R	R_i	R_n
18	Which of these is not an example of distance measurements?	City block distance	City board distance	Euclidean distance	Chess board distance
19	An image is a ___ representation of an object present in a 3D space	0D	1D	2D	8D
20	In image restoration and reconstruction which one of the following is the study of properties of a figure that are unaffected by any deformation in an image.	Geography	Statistics	Geography	Topology
21	Find out the Euler number of a region with polygonal network consists of A, B and C as the number of vertices, edges and faces respectively?	$A+B+C$	$A-B+C$	$A+B-C$	$A-B-C$
22	In image morphology removing of the extra tail pixels in an image is a process of:	Hit or Miss Transformation	Erosion	pruning	dilation
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24	In application of displaying of X-ray image which one of operation is used	Thresholding	Digital Negative	Bit plane slicing	Contrast stretching
25	Full -color image is represented by how many bits of RGB color image	8-bit RGB COLOR IMAGE	32-bit RGB COLOR IMAGE	16-bit RGB COLOR IMAGE	24-bit RGB COLOR IMAGE