

Program: **BE Electronics & Telecommunication Engineering**

Curriculum Scheme: **Revised 2012**

Examination: **BE Semester VII**

Course Code: **ETC 701** and Course Name: **Image & Video Processing**

Time: 1 hour

Max. Marks: 50

=====

Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	Smallest element of an image is called
Option A:	pixel
Option B:	dot
Option C:	coordinate
Option D:	digits
Q2.	1024 x 1024 images has resolution of
Option A:	1048576
Option B:	1148576
Option C:	1248576
Option D:	1348576
Q3.	CMY Colour model is a _____ colour model.
Option A:	Subtractive
Option B:	Multiplicative
Option C:	Additive
Option D:	division
Q4.	Process of highlighting specific range of intensities is called
Option A:	pixels slicing
Option B:	color slicing
Option C:	Intensity level slicing
Option D:	contrast stretching
Q5.	High pass filters are used for image
Option A:	contrast
Option B:	sharpening
Option C:	blurring
Option D:	resizing
Q6.	For shifting origin function is multiplied with
Option A:	$(-1)^{(x+y)}$
Option B:	(-1)
Option C:	$1^{(x+y)}$
Option D:	1

Q7.	Sum of elements of high pass filter mask is
Option A:	0
Option B:	1
Option C:	INFINITY
Option D:	(-1)
Q8.	Gradient magnitude images are more useful in
Option A:	point detection
Option B:	line detection
Option C:	area detection
Option D:	edge detection
Q9.	For finding horizontal lines we use mask of values
Option A:	[-1 -1 -1; 2 2 2; -1 -1 -1]
Option B:	[2 -1 -1; -1 2 -1; -1 -1 2]
Option C:	[-1 2 -1; -1 2 -1; -1 2 -1]
Option D:	[-1 -1 2; -1 2 -1; 2 -1 -1]
Q10.	Pixels where intensity changes abruptly are called
Option A:	area pixels
Option B:	line pixels
Option C:	point pixels
Option D:	edge pixels
Q11.	Segmentation algorithms depends on intensity values of
Option A:	discontinuity
Option B:	similarity
Option C:	continuity
Option D:	discontinuity and similarity
Q12.	Hit-or-miss transformation is used for shape
Option A:	removal
Option B:	detection
Option C:	compression
Option D:	decompression
Q13.	Advantage ofis finding the brightest points in an image.
Option A:	max filter
Option B:	min filter
Option C:	median filter
Option D:	Average filter

Q14.	Which type of noise reduced by median filter
Option A:	salt and pepper noise
Option B:	salt noise
Option C:	pepper noise
Option D:	Gaussian noise
Q15.	HSI color Model is
Option A:	Height, Saturation, Intensity
Option B:	Hue, symmetric, Intensity
Option C:	Hue, Saturation, Intensity
Option D:	Height, Symmetric, Intensity
Q16.	Blurred edges tend to be and sharp edges tend to be.....
Option A:	thick, thin
Option B:	thick, thick
Option C:	thin, thin
Option D:	thin, thick
Q17.	What is the sum of all components of a normalized histogram?
Option A:	1
Option B:	(-1)
Option C:	0
Option D:	∞
Q18.	If the histogram of same images, with different contrast, are different, then what is the relation between the histogram equalized images?
Option A:	They look visually very different from one another
Option B:	They look visually very similar to one another
Option C:	They look visually different from one another just like the input images
Option D:	They look visually similar from one another just like the input images
Q19.	For what value of A this high boost filtering becomes the standard Laplacian sharpening filter?
Option A:	1
Option B:	(-1)
Option C:	0
Option D:	∞
Q20.	Which means the assigning meaning to a recognized object.
Option A:	Interpretation

Option B:	Recognition
Option C:	Acquisition
Option D:	Segmentation
Q21.	Progressive scan patterns are used for
Option A:	high resolution displays
Option B:	low resolution displays
Option C:	high and low resolution displays
Option D:	only low resolution displays
Q22.	In video frames 'B' stands for
Option A:	Bidirectional frame
Option B:	Box frame
Option C:	Black frame
Option D:	Bidirectional predictive frame
Q23.	Which of the following transform has poor energy compaction property?
Option A:	Discrete Fourier Transform
Option B:	Haar Transform
Option C:	Hadamard Transform
Option D:	Walsh Transform
Q24.	What is the Sequency order of a 2x2 Hadamard Transform Matrix
Option A:	[1, 0, 3, 2]
Option B:	[0, 3, 1, 2]
Option C:	[0, 1, 2, 3]
Option D:	[0, 2, 1, 3]
Q25.	A 4x4 transformation matrix will have _____ basis images.
Option A:	10
Option B:	4
Option C:	8
Option D:	16