

Program: BE Electronics & Telecommunication Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: ECC604 and Course Name: Image Processing & Machine Vision

Time: 1hour

Max. Marks: 50

SAMPLE MCQ

Q1.	The human visual system structures its low-level representations is known as
Option A:	Perceptual organization.
Option B:	Pragmatic modeling
Option C:	Pragmatic matching
Option D:	Visualization.
Q2.	Digitization of spatial co-ordinates (x,y) is called
Option A:	gray level quantization
Option B:	finite sampling
Option C:	image sampling
Option D:	image quantization
Q3.	Digitizing the image coordinate values is called
Option A:	Quantization
Option B:	Sampling
Option C:	Zooming
Option D:	Shrinking
Q4.	A good image is difficult to define because image quality
Option A:	high subjective, weakly dependent
Option B:	lowly subjective, weakly dependent
Option C:	high subjective, strongly dependent
Option D:	lowly subjective, strongly dependent
Q5.	Images quantized with insufficient brightness levels lead to the occurrence of
Option A:	Pixelation
Option B:	Blurring
Option C:	False Contours
Option D:	None of the Mentioned
Q6.	Image subtraction is used for
Option A:	color enhancement
Option B:	frequency enhancement
Option C:	spatial enhancement
Option D:	detection
Q7.	Image transforms are needed for
Option A:	conversion information from spatial to frequency
Option B:	spatial domain

Option C:	time domain
Option D:	both b&c
Q8.	Dark characteristics in an image are better solved using
Option A:	Laplacian Transform
Option B:	Gaussian Transform
Option C:	Histogram Specification
Option D:	Power-law Transformation
Q9.	The nature of walsh and hadamard transforms are
Option A:	sinusoidal
Option B:	cosine
Option C:	non-sinusoidal
Option D:	cosine and sine
Q10.	Which of the following is a second-order derivative operator?
Option A:	Histogram
Option B:	Laplacian
Option C:	Gaussian
Option D:	None of the mentioned
Q11.	Histogram equalization is used to
Option A:	Enhance the contrast of an image
Option B:	Remove the noises present in an image
Option C:	Find the contours present in an image
Option D:	Find the equality present in various regions.
Q12.	Human perception of color closely resembles the _____ color model
Option A:	CMY
Option B:	RGB
Option C:	HSI
Option D:	CMYK
Q13.	Correction is used to correct the intensity variations of phosphor dots
Option A:	Linear Correction
Option B:	Gamma Correction
Option C:	Alpha Correction
Option D:	Wavelength Correction
Q14.	The difference between the original image and the eroded is creates
Option A:	higher level gray levels
Option B:	low lever gray level
Option C:	boundary
Option D:	unfilled regions
Q15.	What role does the segmentation play in image processing?
Option A:	Deals with extracting attributes that result in some quantitative information of interest
Option B:	Deals with techniques for reducing the storage required saving an image, or the bandwidth required transmitting it

Option C:	Deals with partitioning an image into its constituent parts or objects
Option D:	Deals with property in which images are subdivided successively into smaller regions
Q16.	The objective of the sharpening filter is
Option A:	highlight the intensity transitions
Option B:	highlight the low transitions
Option C:	highlight the bright transitions
Option D:	highlight the colour transitions
Q17.	What is the position of sign change of the first derivative among neighboring points
Option A:	edge
Option B:	zero-crossing
Option C:	point
Option D:	line
Q18.	Dilation-Morphological image operation technique is used to
Option A:	Shrinks brighter areas of the image
Option B:	Diminish intensity variation over the image
Option C:	Expands brighter areas of the image
Option D:	Scales pixel intensity uniform
Q19.	Smoothing filters are mostly used in
Option A:	Blurring
Option B:	Noise reduction
Option C:	Contrast
Option D:	Both A & B
Q20.	Log transformation is given by the formula
Option A:	$S = c \log(r)$
Option B:	$S = c \log(1+r)$
Option C:	$S = c \log(2+r)$
Option D:	$S = \log(r)$
Q21.	In Homomorphic filtering which of the following operations is used to convert input image to discrete Fourier transformed function?
Option A:	Logarithmic operation
Option B:	Exponential operation
Option C:	Negative transformation
Option D:	None of the mentioned
Q22.	The response for linear spatial filtering is given by the relationship
Option A:	Sum of filter coefficient's product and corresponding image pixel under filter mask
Option B:	Difference of filter coefficient's product and corresponding image pixel under filter mask
Option C:	Product of filter coefficient's product and corresponding image pixel under filter mask
Option D:	None of the mentioned
Q23.	Which of the following measures are not used to describe a region?
Option A:	Mean and median of grey values

Option B:	Minimum and maximum of grey values
Option C:	Number of pixels alone
Option D:	Number of pixels above and below mean
Q24.	The purpose of restoration is to gain
Option A:	degraded image
Option B:	original image
Option C:	pixels
Option D:	coordinates
Q25.	The approach to restoration is
Option A:	inverse filtering
Option B:	spike filtering
Option C:	black filtering
Option D:	ranking