PART A (10x1= 10)

ANSWER ALL THE QUESTIONS

Q.No.	Question	Marks	CO	BL	PI
1.	Which of the following is the first and foremost step in Image Processing? **a) Image acquisition** b) Segmentation c) Image enhancement d) Image restoration	1	5	1	2.2.3
2.	What is the full form of CDF in histogram equalization? a) Cumulative density function b) Contour derived function **c) Cumulative distribution function** d) Contour density function	1	5	1	1.2.1
3.	What is the thickness of the edges produced by first order derivatives when compared to that of second order derivatives? a) Finer b) Equal **c) Thicker** d) Independent	1	5	2	2.1.2
4.	The ability that rotating the image and applying the filter gives the same result, as applying the filter to the image first, and then rotating it, is called _____ a) Isotropic filtering b) Laplacian **c) Rotation Invariant** d) Masking	1	5	1	4.1.1
5.	Sobel edge detection uses **a) First derivative** b) Second derivative c) third derivative d) fourth derivative	1	5	3	2.2.3
6.	FAR stands for? a) False Acceptance Rule **b) False Acceptance Rate** c) False Authorization Rate d) False Authorization Risk	1	6	1	4.1.1
7.	Which of the following best conveys the definition of Face Recognition? a) The objective of finding the faces in an image and probably extract them b) The process of determining whether someone is who they declare themselves to be **c) The process of identifying people regardless of who they are** d) d) The process of identifying different objects	1	6	2	2.1.2
8.	Which method is used for face detection? a) sobel filtering approach **b) Template-matching approach** c) harris corner approach d) Shi-tomasi approach	1	6	2	2.1.2
9.	What is the standard form of PCA? a) Principle Component Analysis **b) Principal Component Analysis** c) Preserving Component Analysis d) Projection Component Analysis	1	6	1	4.1.1
10.	The key difference between feature selection and feature extraction is best characterised by which of the following a) There is no difference, they are just two different terms for the same dimensionality reduction approach. b) ICA uses feature selection where as PCA uses feature extraction.	1	6	2	1.2.1

| | c) Feature selection algorithms are also clustering algorithms, whereas feature extraction algorithms are also dimensionality reduction algorithms.
d) Feature selection does dimensionality reduction via selecting data-points with specific features from a high-dimensional data-set, whereas feature extraction transforms existing features into composite or representative features that are representative of a larger high-dimensional data-set. | | | | |