

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai - 600 044.

B.Sc.AI - END SEMESTER EXAMINATIONS - NOV'2024

SEMESTER - V

22UAICT5007 - Computer Vision

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. List out and explain the key concepts in computer vision.
2. Describe the applications and challenges of VR and AR.
3. Classify the geometric transformations.
4. Illustrate the types of image restoration techniques.
5. Describe the key techniques in feature extraction.
6. Apply contour retrieval techniques in OpenCV.
7. How are distance metrics used in the KNN algorithm?
8. Organize the techniques for pedestrian detection in computer vision.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Briefly explain the techniques, models, applications, and challenges of medical image analysis and content-based image retrieval.
10. Illustrate the steps to apply convolution and filtering in an image.
11. Describe the mathematical implementation of the Gabor filter.
12. Classify the image classification techniques.
13. How to determine the AAM and 3DMM to improve foreground-background separation?
