

Code No.: CS864PE

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV-B.TECH-II-Semester End Examinations (Regular) – April - 2024
COMPUTER VISION
(CSE)

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(20 Marks)

1. a) Define Thresholding Techniques. [2M]
- b) What are Interest point operators? [2M]
- c) Define boundary descriptor. [2M]
- d) What are chain codes? [2M]
- e) What is line detection? [2M]
- f) Define Foot-of normal method. [2M]
- g) Define volumetric representations. [2M]
- h) Define triangulation. [2M]
- i) What is face detection? [2M]
- j) Define occlusion. [2M]

PART-B

(50 Marks)

2. Explain briefly about digital image processing. [10M]
- OR**
3. Discuss in detail about Corner and interest point detection. [10M]
4. Write a short note on followings:
 - a) Fourier descriptors. [5M]
 - b) Region descriptors [5M]
- OR**
5. Describe the centroidal profile approach to shape analysis. Obtain a general formula expressing the shape a straight line presents in the centroidal profile. [10M]
6. Discuss about the RANSAC for straight line detection. [10M]
- OR**
7. Explain the line detection by using Hough transform (HT)? [10M]
8. Explain about photometric stereo. [10M]
- OR**
9. What is Optical Flow? Obtain the Optical flow equation with necessary equations. [10M]
10. Explain the identifying road signs in vehicle vision system. [10M]
- OR**
11. Discuss in detail about Face Recognition. [10M]
