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SUBJECT CODE NO: H-1620
FACULTY OF ENGINEERING AND TECHNOLOGY
ME (Comp.Sci. & Engg.)
Computer Vision
(REVISED)

[Time: Three Hours]

[Max.Marks:80]

- N.B Please check whether you have got the right question paper.
- i) Solve any two questions from each section.
- ii) Assume suitable data, if necessary and state it clearly.

SECTION A

- Q.1 a) What is computer vision? Explain the applications of computer vision. 10
 b) Write difference between Enhancement and Restoration. 05
 c) Explain mean shift image segmentation. 05
- Q.2 a) Explain neural network based pattern recognition approach in detail. 10
 b) Describe the role of pattern recognition for computer vision. Elaborate the steps in design cycle of pattern recognition system. 10
- Q.3 a) Explain graph matching based object recognition process. 10
 b) Elaborate k-nearest neighbor clustering method for growing of objects. 10

SECTION B

- Q.4 a) Explain different images understanding control strategies. 10
 b) Explain the point distribution model. 10
- Q.5 a) Write note on homograph. 05
 b) What is 2.5D Sketch? What are their applications? 05
 c) Explain in detail the concept of scene reconstruction from multiple views. 10
- Q.6 a) What is optical flow? Discuss optical flow in motion analysis. 10
 b) Discuss the concept of video tracking in detail. 10