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

[Time: Three Hours]

[Max.Marks:80]

N.B Please check whether you have got the right question paper.

- N.B i) Solve any two questions from each section.
 ii) Assume suitable data, if necessary and state it clearly.

SECTION A

- Q.1 a) What are sharpening filters? How derivative are used for generating different sharpening spatial filters? 10
 b) Explain the fundamental steps in digital image processing with block diagram. 10
- 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) Discuss the steps of linear discriminate analysis. 10

SECTION B

- Q.4 a) Describe different contour based shape description methods. 10
 b) Explain the point distribution model. 10
- Q.5 a) Write note on : 10
 i) Points and hyper planes in projective space
 ii) Maximum likelihood estimation
 b) How scene reconstruction is done from multiple views using triangulation projective reconstruction and matching constrains. 10
- Q.6 a) Differentiate between motion detection and moving object detection and location. 10
 b) Discuss the concept of video tracking in detail. 10