

SUBJECT CODE NO:- P-8172
FACULTY OF ENGINEERING AND TECHNOLOGY
M.E.(Comp. Sci.& Engg.) Examination MAY/JUNE-2016
Computer Vision
(Revised)

[Time:Three Hours]

[Max Marks:80]

“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

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| Q.1 | a) What is image segmentation? Explain mean shift segmentation in detail. | 10 |
| | b) What are sharpening filters? How derivative are used for generating different sharpening spatial filters? | 10 |
| Q.2 | a) With the help of typical pattern recognition system explain any one suitable application. | 10 |
| | b) Elaborate the syntactic recognition technique. | 10 |
| Q.3 | a) Explain graph matching based object recognition process. | 10 |
| | b) What is the problem of dimensionality reduction? How principle component analysis is useful for dimensionality reduction. | 10 |

Section B

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| Q.4 | a) Describe different contour based shape description methods. | 10 |
| | b) Explain different images understanding control strategies. | 10 |
| Q.5 | a) Write a note on: i) 3-D vision ii) Maximum likelihood estimation | 10 |
| | b) What is texture? Explain statistical texture description methods. | 10 |
| Q.6 | a) Explain differential motion analysis method. | 10 |
| | b) Discuss the concept of video tracking in detail. | 10 |