Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov/Dec – 2018**

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| **Code :** | **18EC3013** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ADVANCED DIGITAL IMAGE PROCESSING** | **Max. marks :** | **100** |

**ANSWER ANY FIVE QUESTIONS (5 x 16 = 80 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Elaborate the fundamental steps involved in digital image processing. | CO1 | 12 |
| b. | Summarize the concept of Digital Image representation. | CO1 | 4 |
|  |  |  |  |  |
| 2. |  | Illustrate the spatial filtering process and mention the advantages of various spatial smoothening filter. | CO5 | 16 |
|  |  |  |  |  |
| 3. |  | Demonstrate the various edge detection and modelling with suitable examples. | CO3 | 16 |
|  |  |  |  |  |
| 4. | a. | Elaborate on the various transformation functions used in Image registration process. | CO4 | 10 |
|  | b. | Appraise on the Wavelet based Segmentation. | CO3 | 6 |
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| 5. |  | Illustrate the concepts of stereo viewing with relevant informations. | CO5 | 16 |
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| 6. |  | Analyze the smoothening image enhancement filtering techniques in frequency domain. | CO2 | 16 |
|  |  |  |  |  |
| 7. |  | Discuss about the pixel and region based fusion techniques adopted in processing the digital images. | CO5 | 16 |
|  | | | | |
| **COMPULSORY QUESTION (1 x 20 = 20 Marks)** | | | | |
| 8. |  | Appraise on “Abnormality detection in medical images”. | CO6 | 20 |