Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (CSE) (2012 to 2017 E-III) (Sem.–7)

DIGITAL IMAGE PROCESSING

Subject Code : BTCS-915

M.Code : 71907

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Explain briefly :

1. What are monochromatic images?
2. What is discretization of an image?
3. What is the difference between low pass filter and high pass filter?
4. Define Histogram.
5. State cause of degradation of image.
6. List down the limitations of Huffman coding.
7. What is inverse filtering?
8. What is psycho visual redundancy?
9. What are chain codes?
10. What is zooming and shrinking of digital image?

SECTION-B

11. Explain the components of digital image processing.

12. Explain gray level transforms :

    a) Image Negatives

    b) Log Transform

13. Describe basic formulation for noise model.

14. Explain CMY and CMYK color model.

15. Explain region splitting and merging in image segmentation.

SECTION-C

16. Explain DWT. Also discuss its applications.

17. What is coding system in JPEG? Explain it.

18. Discuss boundary descriptors.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.