Exam. Code : 206702
Subject Code : 4620

M.Sc. Computer Science Semester—II
MCS–202 : IMAGE PROCESSING

Time Allowed—3 Hours]   [Maximum Marks—100

Note :– Attempt any **five** questions. Each question carries
equal marks.

1. Define the term Image Processing. Explain different steps
    used in Image Processing. Also discuss different available
    image data formats.   20

2. What do you understand by Visual Phenomena ? Discuss.
                                                           20

3. What do you understand by Image Data Compression ?
    Explain different techniques used for Image Data
    Compression. Discuss Pixel Coding technique in detail.
                                                           20

4. What do you mean by Image Enhancement ? Discuss
    different techniques used for Image Enhancement. Explain
    at least one in detail.   20

5. (a) What are various components of General Purpose
         Image Processing System ? Explain the role of each
         component.   10

    (b) Discuss the process of Image Digitization.   10

6. Discuss Digital Image Restoration System. Enlist Digital Image Restoration models. Explain the concept of Linear Filtering model. 20

7. Write short notes on the following :

   (a) Color Models 10

   (b) Color System Transformation. 10

8. Discuss the applications of Image Processing in the field of Medical Image Processing. 20