# Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)

## II SEMESTER M.TECH (PRINTING AND MEDIA TECHNOLOGY)

### END SEMESTER EXAMINATIONS, MAY 2016

SUBJECT: PROGRAMME ELECTIVE III

ADVANCED TECHNIQUES IN COMPUTER GRAPHICS [CSE 584]

**REVISED CREDIT SYSTEM**

Time: 3 Hours                                                                 MAX. MARKS: 50

**Instructions to Candidates:**
- ❖ Answer **ANY FIVE FULL** questions.
- ❖ Missing data may be suitable assumed.

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| **1A.** | What are colour models? Explain any two of them in detail. | **05** |
| **1B.** | What is tweening?  What is its significance in animation? | **03** |
| **1C.** | Why do you use a DTD? Explain with an internal DTD to describe a message to be sent to the students regarding an examination to be held in the department. | **02** |
| | | |
| **2A.** | Explain any FIVE advantages of digital printing. | **05** |
| **2B.** | Differentiate between ray tracing and radiosity techniques. | **03** |
| **2C.** | What are web-servers? Specify three basic functions of web-servers. | **02** |
| | | |
| **3A.** | Explain the basic 3D modeling techniques with applications. | **05** |
| **3B.** | Explain peculiar problems faced due to animation. | **03** |
| **3C.** | Write html tags for the following in **single html file**: | **02** |

    **i.** Display the web page having the background in blue and heading - name of the tourist place in RED color.

    **ii.** Describe any two places of attraction within 2 – 3 paragraphs by specifying the content in different color, font and size.

    **iii.** Display the details about the hotels in and around in the form of a table.

    **iv.** Create a link to the image gallery.

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|---|---|---|
| **4A.** | Briefly explain con-tones, half-tones and dithers. | **05** |
| **4B.** | Specify the three different types of using style sheets with examples for each. | **03** |
| **4C.** | Discuss any two rules of animation. | **02** |
| **5A.** | What is an illumination model? Why is it used? Differentiate between ambient, diffuse and specular reflections. | **05** |
| **5B.** | What are splines? Name some splines and their features. | **03** |
| **5C.** | Differentiate between off-set printing and digital printing. | **02** |
| **6A.** | Explain various shading models used in 3D modeling. | **05** |
| **6B.** | Write XML code for a book store. | **03** |
| **6C.** | List out differences between raster images and vector images. | **02** |