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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec – 2016**

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|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **14MT2002** | **Duration :** | **3hrs** |
| **Sub. Name :** | **Digital Compositing** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Define: Depth of Field. | CO2 | 1 |
| b. | Expand HDR. | CO1,CO2 | 1 |
| c. | What is Bit Depth? Discuss its importance. | CO3 | 5 |
| d. | Explain about Normalization. Give its application. | CO2 | 5 |
| e. | Explain the working of RGB colour model with Diagram. | CO2 | 8 |
| (OR) | | | | |
| 2. | a. | What are lossy compression formats? Explain about Chroma Subsampling in Detail. | CO2 | 12 |
| b. | Give the Applications of LUT’s. | CO3 | 2 |
| c. | Write short notes on Invert and Contrast operators. | CO2 | 6 |
| 3. | a. | Explain the various types of Geometric transformations. | CO2 | 12 |
|  | b. | Write short notes on Keymix operation. | CO3 | 5 |
|  | c. | Explain how Over operator is different from Keymix. | CO3 | 3 |
| (OR) | | | | |
| 4. | a. | Give one way to avoid blue spill. | CO2 | 2 |
|  | b. | Explain the Stages involved when you are trying to Morph from one image to another. | CO1,CO2 | 6 |
|  | c. | What is rotoscoping? | CO3 | 2 |
|  | d. | Explain the process involved in keying based on chroma and Difference Matting techniques. | CO3 | 10 |
| 5. | a. | What is a garbage matte? | CO3 | 2 |
|  | b. | Define:Persistence of Vision. | CO2 | 2 |
|  | c. | Explain the importance of Keyframes in animation and VFX. | CO2 | 4 |
|  | d. | What is Optical flow analysis? How is it better for retiming sequence of footages compred to other techniques? | CO1 | 12 |
| (OR) | | | | |
| 6. | a. | What is the procedure to track an element into a plate? How does one choose the tracking point? | CO2 | 12 |
|  | b. | List and explain the various types of User Interfaces found in compositing softwares. | CO2,CO3 | 8 |
| 7. | a. | What are the functionalities of a proxy image? | CO2 | 2 |
|  | b. | Differentiate Aspect ratio from Pixel aspect ratio. Give an example for both. | CO2,CO3 | 4 |
|  | c. | Give the application of DPX format. | CO2 | 2 |
|  | d. | List and explain all the Television Video formats and their parameters. | CO2 | 12 |
| (OR) | | | | |
| 8. | a. | What is an anamorphic Format? | CO2 | 2 |
|  | b. | Explain the 2:3 Pulldown and Pull up process with respective applications. | CO2 | 8 |
|  | c. | With a neat flow chart explain the General Format conversion pipeline. | CO1,CO2 | 10 |
|  | | **Compulsory:** |  |  |
| 9. | a. | What are the parameters based on which the colour of the Background matte is chosen when doing keying? | CO2,CO3 | 10 |
|  | b. | What is a Digital Intermediate? Give its importance in the vfx industry. | CO1,CO2 | 10 |

ALL THE BEST