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



**End Semester Examination – Nov/Dec – 2017**

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| **Code :** | **14MT2002** | **Duration :** | **3hrs** |
| **Sub. Name :** | **DIGITAL COMPOSITING** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain the working process of the following:  i. Keying based on Luminance. ii. Keying based on Chrominance.  iii. Color Difference method iv. Difference matting. | CO2 | 18 |
| b. | Examine critically the compositing techniques used in the film “A Trip to the Moon (1902) by Georges Méliès”. | CO2 | 2 |
| (OR) | | | | |
| 2. | a. | Explain the various techniques of image and video compression with examples. | CO2 | 15 |
| b. | Justify, why judging contrast and brightness is important in perception? | CO2 | 5 |
|  |  |  |  |
| 3. | a. | Describe the detailed working process of rotoscoping. | CO1 | 10 |
|  | b. | List and explain the steps involved in Tracking and stabilising a given shaky footage. | CO3 | 10 |
| (OR) | | | | |
| 4. | a. | List out and explain the various Film and television formats used in the industry. | CO1 | 16 |
|  | b. | Define Proxy Images and give the advantages of using them. | CO1 | 4 |
|  |  |  |  |  |
| 5. | a. | Explain the various 2D and 3D geometric transformations used in digital compositing. | CO2 | 12 |
|  | b. | Elaborate on Keymix and over operations found in compositing. | CO3 | 8 |
| (OR) | | | | |
| 6. | a. | In a given input image,   |  |  |  |  |  | | --- | --- | --- | --- | --- | | .3 | .3 | 1 | 1 | 1 | | .3 | .3 | 1 | 1 | 1 | | .3 | .3 | 1 | 1 | 1 | | .3 | .3 | .3 | 1 | 1 | | .3 | .3 | .3 | .3 | 1 |   Apply basic edge detection on the image to find the value of the pixels marked with “X” in the output Image.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 0 | 0 | 0 | 0 | 0 | | 0 | X | X | X | 0 | | 0 | X | X | X | 0 | | 0 | X | X | X | 0 | | 0 | 0 | 0 | 0 | 0 | | CO2 | 14 |
|  | b. | Describe the workflow of typical compositing and draw its flow chart. | CO3 | 6 |
|  |  |  |  |  |
| 7. | a. | Explain the importance of Keyframes in animation and VFX. | CO1 | 10 |
|  | b. | Give the application of a curve editor. | CO1 | 5 |
|  | c. | How is frame Blending used to retime footage in the post? | CO1 | 5 |
| (OR) | | | | |
| 8. | a. | Define: Depth of Field. | CO2 | 1 |
|  | b. | Expand HDR. | CO1,CO2 | 1 |
|  | c. | Explain Bit Depth and 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 |
|  |  |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Green screen vs blue screen vs Red Screen. Discuss the advantages and disadvantages in compositing, using the particular screen. | CO2 | 10 |
|  | b. | Discuss the parameters to note on location with regard to lighting for doing proper post production work. | CO2 | 10 |

ALL THE BEST