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

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**End Semester Examination – Nov/Dec – 2018**

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| **Code** | **: 17MT2005** | **Duration :** | **3hrs** |
| **Sub. Name** | **: GRAPHICS AND ANIMATION** | **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. | Describe the evolution of Graphics from its early inception to where it is right now. | CO1 | 10 |
| b. | With diagrams explain the two types of curves available to create organic shapes in Computer graphics. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Differentiate Raster from Vector graphics. | CO2 | 5 |
| b. | Explain how Euclidean Geometry is the basis for computer graphics. | CO2 | 5 |
| c. | Write a processing sketch to generate a chess board pattern. | CO3 | 10 |
|  |  |  |  |  |
| 3. | a. | With examples visualize what the various Boolean Operations do to shapes in computer graphics. | CO1 | 10 |
| b. | Describe with examples the RGB and CMYK Colour Models. | CO2 | 10 |
| (OR) | | | | |
| 4. | a. | Explain the techniques used in filling shapes with colour, texture and patterns. | CO3 | 10 |
| b. | Explain the importance of Backface Culling in Computer Graphics. | CO3 | 10 |
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| 5. | a. | List and explain the various types of interpolation used in graphics API’s to render animation. | CO2 | 10 |
| b. | Describe the working of Cohen Sutherland line Clipping algorithm. | CO3 | 10 |
| (OR) | | | | |
| 6. | a. | Recall the various 2D and 3D transformations and explain them. | CO3 | 12 |
| b. | List and describe the various font parameters used in typing content on pages. | CO2 | 8 |
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| 7. | a. | Define Aliasing and how it is handled on displays. | CO2 | 10 |
| b. | Describe the various depth finding algorithms used in computer graphics to render images. | CO3 | 10 |
| (OR) | | | | |
| 8. | a. | List the various basic Light and Material types available in Graphics libraries to simulate real world objects. | CO2 | 15 |
| b. | Recall the various primitives found graphics API’s used to create complex shapes and forms. | CO2 | 5 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | List all the Blend mode types and explain their basic working. | CO1 | 10 |
| b. | Describe the Stereoscopy principles that help humans perceive depth. | CO2 | 10 |