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



**End Semester Examination – Nov / Dec – 2019**

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| --- | --- | --- | --- |
| **Code :** | **14MT2005** | **Duration :** | **3hrs** |
| **Sub. Name :** | **GRAPHICS AND ANIMATION** | **Max. Marks :** | **100** |

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

|  |  |  |  |  |
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| **Q. No.** |  | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Explain the basic geometric objects available in Java 2D with required codes and examples. | CO1 | 20 |
| **(OR)** | | | | |
| 2. |  | Articulate the 2D geometric transformations available in Java 2D with suitable code. | CO1 | 20 |
|  |  |  |  |  |
| 3. |  | Evaluate the interpolators for continuous changes in Java. | CO1 | 20 |
| **(OR)** | | | | |
| 4. |  | Intervene the geometric transformations available in Java 3D and the efficiency of implementing the same. | CO1 | 20 |
|  |  |  |  |  |
| 5. |  | Analyze the concept of line clipping and the various conditions involved in implementing the same. | CO2 | 20 |
| **(OR)** | | | | |
| 6. |  | Create a scene graph for a motor bike and explain the concept involved in making the animation pipeline easier through scenegraph. | CO2 | 20 |
|  |  |  |  |  |
| 7. |  | Illustrate the following modelling techniques:   1. Voxels 2. Octtrees. 3. Quadtrees 4. Sweep representation | CO3 | 20 |
| **(OR)** | | | | |
| 8. |  | Comprehend the various light sources available in Java for illuminating the objects. | CO3 | 20 |
|  | | **Compulsory**: |  |  |
| 9. |  | Compare and contrast the different types of Fog with suitable codes for implementing the same. | CO3 | 20 |