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 – April / May – 2017**

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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 in detail about geometric objects and their implementation in Java 2D. | CO1 | 20 |
| (OR) | | | | |
| 2. |  | All 3D object designing and animations are done using basic shapes. Justify the statement using the concept of Geometric transformations in Java 3D. | CO3 | 20 |
| 3. |  | Explain the concepts behind rendering of an animation without aliasing in Java2D/3D with the help of a Java program. | CO2 | 20 |
| (OR) | | | | |
| 4. |  | How are objects inside an animation/game world are projected? Explain the algorithm of projects using a java program. | CO3 | 20 |
| 5. |  | Write a java 2D program to animate any object of your choice . | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Explain in detail about image precision and object precision algorithms. | CO2 | 20 |
| 7. |  | Explain in detail the algorithms and equations behind the development of Fog and Particle systems and collisions in Java 2D. | CO1 | 20 |
| (OR) | | | | |
| 8. |  | Explain in detail about ray adding sound effects and interactions in java 2D/3D. | CO3 | 20 |
|  | | **Compulsory**: |  |  |
| 9. |  | Write in detail about z-buffer algorithm with suitable examples. | CO3 | 20 |