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 :** | **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.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | All 2D object designing and animations are done using basic shapes. Justify the statement using the concept of Geometric transformations in Java 2D | CO2 | 20 |
| (OR) | | | | |
| 2. |  | Explain in detail about Homogenous coordinates and interpolators for a continuous change with the help of any example of your own choice. | CO1 | 20 |
| 3. |  | Explain the concept behind tweening animation with suitable programs. | CO3 | 20 |
| (OR) | | | | |
| 4. |  | Explain in detail the differences between various types of projections in java 2d/3d. | CO3 | 20 |
| 5. |  | Write a java 2D program to animate any object of your choice . | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Define antialiasing. How is it achieved in Java 2D/3D? | CO1 | 20 |
| 7. |  | Write in detail about z-buffer algorithm. | CO2 | 20 |
| (OR) | | | | |
| 8. |  | Explain in detail about ray casting algorithm with suitable examples. | CO2 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | Imagine a game scenario having a certain level in a virtual world of Fog and scattered fire particle systems. Explain in detail the algorithms and equations behind the development of this game scene . | CO3 | 20 |

ALL THE BEST