

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



**Karunya 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**

**Code : 14MT2005**  
**Sub. Name : Graphics and Animation**

**Semester : 2016-17 ODD**  
**Duration : 3hrs**  
**Max. marks : 100**

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

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	All 2D object designing and animations are done using basic shapes. Justify the statement using the concept of Geometric transformations in Java 2D (OR)	1	20
2.	a.	Explain in detail about Homogenous coordinates and interpolators for a continuous change with the help of any example of your own choice.	3	20
3.	a.	Explain the concept behind tweening animation with suitable programs. (OR)	2	20
4.	a.	Explain in detail the differences between various types of projections in java 2d/3d.		20
5.	a.	Write a java 2D program to animate any object of your choice . (OR)		20
6.	a.	Define antialiasing. How is it achieved in Java 2D/3D?		
7.	a.	Write in detail about z-buffer algorithm. (OR)		
8.	a.	Explain in detail about ray casting algorithm with suitable examples <b><u>Compulsory:</u></b>		20
9.	a.	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 .	3	(20)

ALL THE BEST