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 :** | **14ME3006** | **Duration :** | **3hrs** |
| **Sub. Name :** | **COMPUTER APPLICATIONS IN DESIGN** | **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. | Derive Bresenhem’s Line Algorithm. | CO1 | **10** |
| b. | Derive MIDPOINT Circle algorithm. | CO1 | **10** |
| **(OR)** | | | | |
| 2. | a | Discuss in detail about any one type of Display devices. | CO1 | **10** |
|  | b | Eloborate on random and raster display. |  | **10** |
| 3. |  | What is interactive programming?Explain the various applications of interactive programming. | CO2 | **20** |
| **(OR)** | | | | |
| 4. |  | Explain the following transformations in 2D concept of computer graphics with individual examples. i. Translation ii. Scaling iii. Rotation. | CO2 | **20** |
| 5. | a. | What is hidden line removal? | CO2 | **10** |
|  | b | Explain containment and area oriented algorithm. | CO2 | **10** |
| **(OR)** | | | | |
| 6. | a. | What is diffusive and specular reflection? | CO2 | **10** |
|  | b. | What is shading? Explain any one model of shading. |  | **10** |
| 7. |  | What is assembly modeling? With an example explain bottom up and Top down assembly approach. | CO2 | **20** |
| **(OR)** | | | | |
| 8. |  | Explain the various mating conditions with neat sketches. | CO3 | **20** |
|  | | **Compulsory:** |  |  |
| 9. | a. | Explain any one method of rapid protyping with neat sketches. | CO3 | **10** |
|  | b | What IGES format? | CO3 | **10** |

**ALL THE BEST**