



**NATIONAL OPEN UNIVERSITY OF  
NIGERIA  
14-16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS  
SCHOOL OF SCIENCE & TECHNOLOGY  
JANUARY/FEBRUARY 2013 EXAMINATION**

**CIT 371 - INTRODUCTION TO COMPUTER GRAPHICS AND  
ANIMATION**

**Instruction: Answer Any Five Questions**

**Time Allowed: 3 Hours**

- |     |  |         |
|-----|--|---------|
| 1a. | What do you understand by computer graphics?                         | 4marks  |
| b.  | List the six major elements of a graphic system.                     |         |
|     | 6 marks  |         |
| c.  | List four major areas of computer graphics.                          | 4 marks |
| 2a. | What do you understand by BRDF?                                      | 4 marks |
| b.  | Explain the two classes and two properties of BRDFs.                 |         |
|     | 10 marks   |         |
| 3a. | Explain the term transformations.                                    | 3 marks |
| b.  | Outline, with an example each, the three classes of transformations. |         |
|     | 9 marks  |         |
| c.  | What are homogeneous coordinates?                                    | 2 marks |
| 4a. | Explain the thin lens Camera Model.                                  | 5       |
|     | marks  |         |
| b.  | Define focal length.   | 3 marks |
| c.  | Outline two important properties of perspective projection.          |         |
|     | 6 marks  |         |
| 5a. | What do you understand by rasterization?                             | 4 marks |
| b.  | Explain Z-buffering and state one of its uses.                       | 4 marks |
| c.  | Outline the three major techniques of mapping methods.               | 6 marks |
| 6a. | What are models?   | 5 marks |
| b.. | State two advantages and three disadvantages of hierarchies.         |         |
|     | 5 marks  |         |
| c.  | State two applications of models.                                    | 4 marks |
| 7a. | What do you understand by keyframing?                                | 3       |
|     | marks  |         |

- b. State two advantages and two disadvantages of keyframing. 4 marks
- c. What is motion capture? 3 marks
- d. Enumerate two advantages and two disadvantages of motion capture. 4 marks