NATIONAL OPEN UNIVERSITY OF NIGERIA
14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
JUNE/JULY EXAMINATION

COURSE CODE: CIT371
COURSE TITLE: INTRODUCTION TO COMPUTER GRAPHICS AND ANIMATION
TIME ALLOWED: Answer Any Five Questions
INSTRUCTION: 3 Hours

1a. Explain what is meant by vector.
5marks
b. List two differences between a point and a vector.
6marks
c. Enumerate three uses of Vectors in computer graphics.
3 marks

2a. Explain the bump mapping concept. 4 marks
b. List two methods used to perform bump mapping. 6 marks
c.State he primary limitation of bump mapping.
4 marks

3a. What is computer animation? 5 marks
b. Explain in details computer animation technique. 5marks
c. Give one open challenge in computer animation 4 marks

4a. Explain what is meant by computer simulation. 5 marks
b. State two merits and two demerits of physically-based animation.4 marks
c. List five application areas of simulation in various fields. 5 marks

5. Explain the following colour models
i. RGB colour model
ii. YIQ colour space
iii. CYMK colour Model
iv. HSV and HSL colour models 14 marks

6a. Explain the human perception of colour. 4 marks
b. Give the two sources of HDR imagery. 4 marks
c. List the three main types of optical illusion with concrete examples. 6 marks

7a. Explainraytracing. 3 marks
b. Why is ray tracing so named? 3 marks
b. What makes raytracing different from other scanline rendering methods? 4 marks

c. State four advantages of Monte-Carlo raytracing. 4 marks