

**COURSE CODE: CIT 771** 

**COURSE TITLE: ADVANCED COMPUTER GRAPHICS AND ANIMATION** 

**TIME ALLOWED: 3 Hours** 

**INSTRUCTION: Answer Any Five Questions** 

- 1. (a.) Define what you understand by BRDF. (4 Marks)
  - (b.) Explain the two properties of BRDFs. (6 Marks)
  - (c.) State two additional physically based BRDFs properties. (4 Marks)
- 2. (a.)What is a Vector? (5 Marks)
  - (b.) State two major difference between a point and a vector (6 Marks)
  - (c.) What is raster graphics? (3 Marks)
- 3. Explain the following colour models (14 Marks)

RGB colour model YIQ colour model CYMK colour model HSV and HSL colour model

- 4. (a.) The applications of computer graphics are many and as such are classified into major areas. List three major area in which they are classified (6 marks)
  - (b.) Illustrate a graphic system using a detailed block diagram (8 marks)
- 5. (a.) What is light? (2 Marks)
  - (b.) Explain the following properties of light: reflection and refraction. (6 Marks)
  - (c.) Briefly explain colour concepts. (6 Marks)
- 6. (a.) Explain what is meant by motion capture. (4 marks)
  - (b.) State five advantages and five disadvantages of motion capture. (10 marks)
- 7. (a.) Discuss/Explain the Cognitive processes hypothesis (4 marks)

(b.) Discuss any 3 Processes of Traditional Animations (10 marks)