

LAGOS CITY POLYTECHNIC, IKEJA
SCHOOL OF ENGINEERING AND APPLIED SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
2018/2019 SEMESTER EXAMINATION

COURSE TITLE:	COMPUTER GRAPHICS	NO OF QUESTIONS :	6
COURSE CODE:	COM 422/COM 421	TIME ALLOWED:	2HRS
FOR WHOM:	HND II CE, CS	FT INSTRUCTIONS:	
ANSWER	ANY		FOUR

QUESTIONS.

1. (a) Explain the following with respect to graphics rendering and transformation using appropriate diagram and matrix notation.
 - (i) Translation (2D)
 - (ii) Rotation 2D and
 - (iii) Scaling (2D)
- (b) Given a point cloud, polygon, or sampled parametric curve, state three purposes we can use transformation for in graphics rendering.
2. Highlight five characteristics each of the following types of model in computer graphics illustrating with respective diagrams:
 - (a) Wire frame models
 - (b) Surface models
 - (c) Solid models.
3. (a) Use a well labelled diagram to describe how a Liquid Crystal Display (LCD) works
- (b) Use a well labelled diagram to describe how a Plasma Display works.
4. (a) Briefly explain the following, stating their pros and cons with respect to Animation in graphics.

Keyframing, Motion Capture, Physically-Based Animation,
 Behavioural Animation, Data-Driven Animation.
5. (a) Explain 3 application areas of computer graphics
- (b) Use a well labeled diagram to describe how a CRT works.
6. (a) Explain with an architectural diagram what you know about vector scan system.
- (b) Highlight five advantages and disadvantages of vector scan.