

THE FEDERAL POLYTECHNIC BIDA  
COMPUTER SCIENCE DEPARTMENT  
SECOND SEMESTER EXAMINATION 2020/2021 SESSION

TITLE: COMPUTER GRAPHICS AND ANIMATION CODE: COM 422 UNIT: 3  
DATE: 30<sup>th</sup>-08-2021 TIME: 11.30-2.30PM DURATION: 3 HRS  
CLASS: HND II COMPUTER SCIENCE EXAMINERS: ALAO, K. A.

**INSTRUCTION: ANSWER QUESTIONS (1, 2, 3) AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE**

- (a) Discuss to authenticate the assertion that Computer Graphics is said to be useful in all aspects of human endeavors.
- (b) The work of Ivan Sutherland was affirmed to be the origin of Computer Graphics, briefly elucidate. Hence, discuss the current and the very near future technological advancement of Computer Graphics.

**QUESTION TWO**

- (a) Explain the formation of images/pictures with respect to computer graphics.
- (b) Discuss the classification of computer graphics taking into cognizance their images/pictures characteristics. Hence, what are the major causes of Pixelation?

**QUESTION THREE**

- (a) With the aid of a suitable diagram, describe a Two-Dimensional (2D) and three-dimensional (3D) Cartesian Coordinates.
- (b) Describe how to determine the coordinates of a point and find the position/location of a point on the Cartesian coordinate. Hence, with the aid of the diagram below, determine the coordinates of points A and B.

