

INSTITUTE OF ACCOUNTANCY ARUSHA (IAA)

MAIN CAMPUS



INFORMATICS DEPARTMENT

GROUP ASSIGNMENT

MODULE NAME: COMPUTER GRAPHICS DESIGN

MODULE CODE: ITU 07201

PROGRAMS: BCS I/BIT I/BECS I

ACADEMIC YEAR: 2021/2022 (October Intake): SEM II

FACILITATOR: GODFREY MUNGUATOSHA (MR.)

General Instructions

1. There are TWO Questions in this Assignment. Attempt All
2. It should be done in groups of not more than **TEN** Members Inclusively
3. Any concept borrowed/adapted should acknowledged (*i.e. Cite and Produce Reference List at the end of the document*)
4. The submission should be **printed** and **staple/spiral** binded
5. Group president have got mandate to **include/omit** group member in the list based on his/her participation behavior (*i.e. Avoid Dodging to be in safe side*)
6. In your submissions, clearly present your official Names and Registration Numbers in the same format as they appear in your Institute ID (*i.e. Student Identity Card*)
7. The Work Should be submitted on my desk (@LT Building Office# 2) on or before Friday, May 6, 2022 @ 1600HRS exclusively

QUESTION ONE

MGM Plc is a public limited company based in Tanzania. It deals with tour operations across East Africa. Their major clients/customers are from different regions around the world and they are mainly from Europe, USA, Germany, France and Australia. To achieve their marketing strategies, MGM Management have set aside a budget for developing well informing website for advertising their services. Among the contents that are likely to be included in that website shall include but not limited to Company Logo, operation sites (pictures and captions), some of the available attractions including animals and birds (pictures and captions), some existing lodges and tents formation (Pictures and captions), transport facilities including vehicles/war buses (pictures and captions), and alike (e.g. *Maasai Look & Life Style*). In addition, the website should be stable in terms of platform compatibility and loading time. To accomplish this project, MGM Management has signed a contract with you/your company to serve the purpose. As part of this project, clearly describe how you will apply the following techniques (*i.e. Math for graphics*) in designing, shaping and setting up the web pages in relation to the required designs.

- a) Scaling
- b) Algebra
- c) Ratios & Proportions
- d) Geometry
- e) The Fibonacci Sequence

QUESTION TWO

Rasterization is the rendering/interpretation/translation method used by current graphics cards. Speaking with the words of other authors, “Rasterization is the process of converting vector images (shapes) to a raster images (dots)” – “Rasterization aims at transforming/projecting 3D Objects views into 2D Images by means of real cameras” OR Just an art of assuring that vectors are replaced with raster images which makes ALMOST all display today to have RASTER touch. All in all **rasterization** is the **rendering method** which is used by all current graphic cards.

Using real world example (*i.e. environment/object*), explain the term rendering and Describe all stages involved in **rendering process** by explaining action (s) in each step/stage.