Goa University Department of Computer Science and Technology

EL 600 – Computer Graphics & Animation

Date: 15/Mar/2019 Duration: 3:30pm – 5:00pm Marks (Min=0, Max=15)

Instructions:

- Strict action will be taken against those not adhering to the instructions.
- Use of Internet is not allowed. Flash/Pen drives are not allowed. Mobiles devices are not allowed. Copying from your classmate(s) is not allowed.
- Implementation in C++. As far as possible adhere to the colors (approx. values).
- Comment your code wherever necessary.
- Upload a .DOC/.DOCX/.ODT. Should contain atleast 2 screenshots and the source code onto moodle submission link in the course.
- Name your submission as "<rollno>_isa2.<file_extension>". For example, if rollno is 1601 then, your submission will be "1601_isa2.doc".
- 15min will be given to create your document file and upload it onto moodle. After that submission link will be disabled.

Program and model a 3D perspective world. In the world there exists a cube (polygon of 6 equal sides) with its center at (0, 0, 0). Have different colors for each side. Using 'w', 's', 'a', 'd' (up, down, left, right) user should be able to view the cube at a distance of a constant unit in a spherical manner.

(**Hint:** As a programmer one can think of planet earth. The user focuses his/her gaze onto the core. The user can change his/her position via change in latitude/longitude. You could keep boundary conditions at Polar Regions as you change latitude/longitude.)