



UNIVERSITY OF PETROLEUM & ENERGY STUDIES

SCHOOL OF COMPUTER SCIENCE

Department of Cybernetics

GRAPHICS AND ANIMATIONS TOOLS

LAB FILE

SESSION (2020-21)

Course: B.Tech with specialization in Open Source & Open Standards

Submitted to:

Dr. Durgansh Sharma

Associate Professor

Department of Cybernetics

Submitted by:

Rahul Kumar

SAP: 500063112

Roll no: R100217056

Experiment-10

Experiment –10 Design of 3D Building using Blender

Link : https://drive.google.com/drive/folders/191gd9nhV67jE90Cft9Th7mZO0E_dkile

Step 1: Open Blender, Create a blank file

Step 3: Add a plane and scale it to an average area of a building, using Shift+A>S.

Step 4: Switch to edit mode using TAB.

Step 5: Add some loop cuts using CTRL+R, to create a division of rooms inside the hut. Loop cuts are needed to be added with respect to the X and Y axis.

Step 6: Now delete any one face on any level to bring the plane in L shape and extrude (E) it with respect to the z-axis such that it is equal to the six floors.

Step 7: To make a dome on the roof, extrude from a corner from one of the ends of the building block. Add a similar plane in between both floors to differentiate between them.

Step 8: Now add some pillars to the building by adding a plane first and then by scaling it with respect to the z-axis. Now add the same pillar to every corner by just duplicating it. (shift+D)

Step 9: To create the windows, add a frame apart from the frame for the building. Extrude the window according to how much depth you want. Now duplicate it using (shift+D). Now add an array modifier (x-axis) and increase the number according to the length of the roof. Add a second array modifier (y-axis) and increase the number according to the breadth of the roof.

Step 10: Add the stairs to the building by using add-on and then use any of the textures to provide a brick layout for the building.

Step 11: Now add a camera and a light source to it. And arrange the camera to the best fit view.

