

The cube primitive was already provided when we created a new file in Blender. We then added a Subdivision Surface modifier to transform the cube into a circular type mesh, so that it matches the round shape of a virus. We set the number of subdivision levels (Level Viewport value) to be shown in final render to be 3. The model was then scaled up for better visibility. Next, we went to the face select view and randomly selected 20% of the total faces of the circular model. Once the faces were selected, we extruded these individual faces outwards by a factor of 0.3 m. Once extruding the faces, we scaled individual Origins of these randomly selected faces. Once again added a Subdivision Surface modifier to transform the extruded faces into something circular. After this we added a Material with Surface being the Principal BSDF and set the color of the model to reddish. We also added texture by going into the Shading Workspace and adding the voronoi texture. Finally, we made another mesh of a cylinder as a virus stand. This will allow us to place the virus on a rod fixed to a stand. We added 2 materials to the stand and changed its color. Then we used a Boolean modifier on the virus mesh and joined the cylindrical rod and the virus together. The final model was made thereafter. We did run into difficulties as this was one of the first few models that we were making on blender. It did take extra time, but we learned a lot during the process.