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**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**School of Computer** **Science**

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**GRAPHICS AND ANIMATION TOOLS LAB**

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**EXPERIMENT NO 7- Design of Rocket using Blender**

**STEPS :-**

1. Open Blender workspace delete the existing cube and Click on the add option and add cylinder.

2. Then we will make some adjustments in the cylinder like radius and depth, we will set the depth and radius.

3. After making changes in the cylinder we will select the upper face of cylinder and then extrude it to make the main body of the rocket.

4 After the above step we will shape that extruded region like the upper part of the rocket using scale option. Also scale it to reduce the radius of bottom face. Similarly, we will create the fins of rocket.

5. Again extrude the bottom face downwards in z axis nearly twice the height of head part. Again extrude a small portion from bottom face and then extrude it upwards in z direction to give a hollow look at the bottom of the rocket.

6. Go to shading, add new material and give colors to rocket according to your choice.

7. To give fire effect that will be released from rocket we will first add the icosphere at the bottom of the rocket.

8. Then go to the object option and then select quick smoke under quick effects option. After this change the smoke option to smoke+fire option.

9. After this add wind under the force field option. This will give our rocket a realistic effect.