EXPERIMENT No.6

AIM: To prepare crystals of Potash alum.

THEORY: Potash alum, a double salt, commonly known as fitkari has the formula K₂SO₄.Al₂(SO₄)₃.24H₂O. It can be prepared by making equimolar solution of potassium sulphate and aluminium sulphate in minimum amount of water. A few ml of dil. H₂SO₄ is added to prevent the hydrolysis of Al₂(SO₄)₃.18H₂O. Cooling of the hot saturated solution yields colourless crystals of Potash alum.

 $K_2SO_4 + Al_2(SO_4)_3.18H_2O + 6H_2O \rightarrow K_2SO_4.Al_2(SO_4)_3.24H_2O$

RESULT- Colour of the crystals: Colourless Shape of the crystals: Octahedral.