

1. Classify the crude petroleum based on the residue obtained after distillation. How do you refine the petroleum?.
2. A XV seam Jharia coal from the Bararee colliery gave the following proximate analysis: moisture 1.6%, ash 15.7%, volatile matter 27.8%, and FC 54.9%. Calculate its ash on a dry basis and volatile matter on a dry and ash-free and dry and mineral matter-free basis..
3. A sample of coal has the following composition by mass, carbon 76%, Hydrogen 5%, Oxygen 8.5%, Nitrogen 2%, Sulphur 1.5% and Ash 7% calculate higher and lower calorific value of fuel per Kg.