SUBJECT NO-MI40039, SUBJECT NAME- ELEMENTS OF PETROLEUM ENGINEERING

LTP- 3-0-0,CRD- 3

SYLLABUS :-

Introduction to oil fields, flow of fluid through rocks, Petroleum reservoir types, characteristics, Performances and calculations. Genesis of hydrocarbon and migration into reservoir rock, reservoir rock properties (porosity and permeability), Hydrocarbon traps and seals, oil sands and estimation of oil and gas reserves, oil field water, formation evaluation, well logging, sedimentary environment and well log interpretation. Drilling for oil and gas exploratory and production drilling m mud technology, drill bits, Drill rigs and structure, Off shoe drilling, directional drilling, Casing and cementing, well completion and stimulation. Petroleum production methods, traditional and artificial lift, sucker rod pumping systems and gas lifting, secondary and enhanced recovery, Crude transportation, pumping and pipeline components-operation and maintenance, International oil market and oil economics