

17BPE126: Petroleum Engineering Laboratory

Teaching Scheme					Exam Scheme					
L	T	P	C	Hrs/Week	Theory			Practical		Total Marks
					MS	ES	IA	LW	LE/Viva	
0	0	4	2	4	--	--	--	50	50	100
Week 1										
<ul style="list-style-type: none"> - Determination of Effective porosity of given core sample by saturation method - To determine viscosity of given oil sample by using capillary viscometer 										
Week 2										
<ul style="list-style-type: none"> - To determine the permeability of given sample by using Ruska Liquid Permeameter - Permeability measurement by using Gas Permeameter 										
Week 3										
<ul style="list-style-type: none"> - Productivity Ratio Analysis and Understanding the importance of Interference test - Determine the rheological properties of a given oil sample using Rheometer 										
Week 4										
<ul style="list-style-type: none"> - Draw a ternary phase diagram for solubility of water benzene isopropyl alcohol (IPA) solution. - Water Coning using Resistance Analogy 										
Week 5										
<ul style="list-style-type: none"> - Determine the Formation resistivity of the saturated rock sample - Determine the acid value of the given oil sample. 										
Week 6										
<ul style="list-style-type: none"> - Effect of confining pressures on a core in terms of Conductivity/ permeability using sweet water at Normal temperature by using FDS. 										
Week 7										
<ul style="list-style-type: none"> - Effect of confining pressures on a core in terms of Conductivity/ permeability using sweet water at 70Degree Centigrade temperature by using FDS 										
Week 8										
<ul style="list-style-type: none"> - Effect of confining pressures on a core in terms of Conductivity/ permeability using saline water of 1.05 Sp Gr. water at Normal temperature by using FDS. 										
Week 9										
<ul style="list-style-type: none"> - Evaluation of particle size distribution of proppant in terms of No. of particles and size on each sieve by application of closure stress on it in crush cell by using FCS. 										
Week 10										
<ul style="list-style-type: none"> - Calculate/ depict the trend of production Index of a given proppant by application of closure stress on it in crush cell by using FCS. 										
Week 11										
<ul style="list-style-type: none"> - Calculate and depict the trend of conductivity/ permeability of proppant using normal water at normal temperature using conductivity cell by using FCS 										
Week 12										
<ul style="list-style-type: none"> - Calculate and depict the trend of conductivity/ permeability of proppant using normal water at 70 degree centigrade temperature using conductivity cell by using FCS 										
Week 13										
<ul style="list-style-type: none"> - To make core plug ready for experiment in Core Plugging and Core Trimming and Swabbing 										