17PEM128 : Well Test Analysis										
Teaching Scheme					**Theory**			**Practical**		**Total**
L	**T**	**P**	**C**	**Hrs/Week**	**MS**	**ES**	**IA**	**LW**	**LE/Viva**	
2	**0**	**0**	**2**	**2**	**25**	**50**	**25**	**-**	**-**	**100**

Unit-1:   **Hours: 6**

Mathematical preliminaries of Well Testing: Point source solution, Line source solution, Floe regime identification Pressure transient test type,

Unit 2:   **Hours: 12**

Convolution and Deconvolution and Nonlinear Parameter Estimation

Convolution Integral, discrete Convolution, Discrete Convolution,Logarithmic Convolution, Rate-Pressure, Pressure-Pressure Convolution, Analytical deconvolution, Pressure-rate deconvolution, Pressure-Pressure deconvolution, Parameter estimation methods, problem for pressure-transient test interpretation

Unit 3:   **Hours: 8**

Pressure Transient Test Design and Interpretation

Introduction, Pressure transient test design and interpretation workflow, Multi well interference test example, Horizontal well test interpretation

Total Hours: 26

Text Books and References :

1. Pressure Transient Formation and Well Testing: Convolution, Deconvolution and Nonlinear Estimation- F. J.
    Kuchuk, M, Onur, F. Hollaender, Elsevier, 2010