

17MPE122 : Integrated Reservoir Management

Teaching Scheme					Examination Scheme					
L	T	P	C	Hrs/Week	Theory			Practical		Total Marks
					MS	ES	IA	LW	LE/Viva	
3	1	0	4	4	25	50	25			100

Unit - 1: **Hrs-9**

Reservoirmanagement Concept & Process

Definition, history & fundamentals of reservoir management, synergic team approach; Integration of geosciences and engineering for reservoir extension, dynamic communication. Development plan of reservoir, surveillance & monitoring,revision of plans & strategies.

Unit - 2: **Hrs- 10**

Reservor Data & Model& Performance Analysis

Reservoir Data types: Geology, seismic, geophysical well log, core and well testing and production data, Integration of all data for Reservoir Model building, Reservoir Performance analysis by various methods: volumetric, decline curve, material balance & simulation.

Unit – 3: **Hrs –12**

Development Plans & Technoeconomic Evaluation

Developmental plans for Oil fields-depletion drive, mixed drives and water drive, Development plan for Gas fields. Importance of improved recovery processes in development plans and their screening criteria. Production Economics and Techno economic Evaluation.

Unit – 4: **Hrs -8**

Reservoirmanagement With Case Studies

Various activities of Reservoir Management: initial stage, intermediate stage and late stage, Synergetic approach for reservoir monitoring in different stage, Few case studies for various types of fields from both onshore and offshore.

Total Hrs - 39

Texts and References:

1. Integrated Petroleum Reservoir Management- A team approach: AbdusSatter& Ganesh C. Thakur; Penwell Publishing Company, Tulsa, Oklahoma.
2. Development of oil and gas fields: Dr. Sant Kumar; Allied Printers, DehraDun, 248001, India.