

Semester

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| 5th Semester | RPP5D003 | Integrated Oil & Gas Field Evaluation | L-T-P 3-0-0 | 3 Credits |
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Module-I :

Geological studies—: Structural contour maps and various geological models. Estimation of reserves. Hydrodynamic Study, techno-economic Evaluation for normal and marginal fields. Innovative ways to asset development.

Module-II :

Petroleum project evaluation-mineral project evaluation case studies. The design and evaluation of well drilling systems-Economic appraisal methods for oil field developmental project evaluation including risk analysis, probability and statistics in decision-making and evaluations. Case studies.

Module-III :

An integrated reservoir description in petroleum engineering-usage of geophysical, geological, petro physical and engineering data-emphasis on reservoir and well data analysis and interpretation, reservoir modeling (simulation), reservoir management (production optimization of oil and gas fields) and economic analysis (property evaluation)

Module-IV :

An integrated reservoir development in petroleum engineering-reservoir and well evaluation production optimization-nodal analysis, stimulation, artificial lift facilities-surveillance. Evaluation of well completions-placement of casing, liners and well tubing.Evaluation, performance of horizontal wells.Evaluation of acidization treatments.

Books:

1. Katz D.L.et a1., Natural Gas Engineering (Production & storage), McGraw-Hill, Singapore.
2. Standard Handbook of Petroleum and Natural Gas Engineering. 2nd Edition. William C Lyons, Gat'y C Plisga. Gulf ProfessionalPublishing,
3. Mc.Cray. A. W and Cole.F.W. 'Oil Well Drilling Technology' University of Olclalioma Press, Norman1959.