| 20PEB230P       |   |   |   |          | Earth Science and Hydrocarbon Exploration Field Work |    |    |           |         |       |
|-----------------|---|---|---|----------|--|----|----|-----------|---------|-------|
| Teaching Scheme |   |   |   |          | Examination Scheme                                   |    |    |           |         |       |
| L               | т | Р | с | Hrs/Week | Theory   |    |    | Practical |         | Total |
|                 |   |   |   |          | MS   | ES | IA | LW        | LE/Viva | Marks |
| 0               | 0 | 6 | 3 |          |  |    |    | 50        | 50      | 100   |

#### **COURSE OBJECTIVES**

- > 1 To prepare students for the field of Petroleum Exploration
- > 2 To imply ability of reading maps, planning exploration and taking risk and decision
- > 3 To help students in identifying sedimentary rocks and its relation to petroleum system
- > 4 To able to help students in identifying and interpreting structural aspects in field.

#### **Laboratory Courses**

Practical classes/Field trips shall be based on theory course content of Earth science, Sedimentary geology, Petroleum Geology and Petroleum Exploration courses

Aim : Field familiarization of exploration in sedimentary basin and petroleum System

### **COURSE OUTCOMES**

On completion of the course, student will be able to

- CO1 Analyse, Identify and sample different minerals, rocks and fossils for detailed study
- CO2 Evaluate the structural aspects of an area
- CO3 Differentiate between Source, Reservoir and Trap rocks
- CO4 Perform the geological/Geophysical Mapping of a petroliferous basin
- CO5 Construct the geological and Geophysical maps of the area for exploration and exploitation
- CO6 Integrate and Evaluate the G&G data for predicting hydrocarbon resources

# **TEXT/REFERENCE BOOKS**

- 1. Coe, A. L. (2011) Geological field techniques, Wiley Blackwell Publication,
- 2. Compton, R. R. (1962) Manual of Field Geology

## END SEMESTER EXAMINATION QUESTION PAPER PATTERN

Max. Marks: 100 PART A: Evaluation Based on the class performance and Laboratory book PART B: Viva Examination based conducted experiments Exam Duration: 3 Hrs 50Marks 50 Marks