



Roll No.

**PRESIDENCY UNIVERSITY  
BENGALURU**

**SCHOOL OF ENGINEERING**

**SUMMER TERM/ MAKE UP END TERM EXAMINATION**

**Semester:** Summer Term 2019

**Date:** 24 July 2019

**Course Code:** PET 207

**Time:** 2 Hour

**Course Name:** Oil and Gas Exploration

**Max Marks:** 80

**Program & Sem:** B.Tech (PET) & IV Sem (2016 Batch)

**Weightage:** 40%

**Instructions:**

(i) **Answer all the questions**

**Part A**

Answer **both** the Questions. Each question carries **ten** marks. (3Qx10M=30M)

1. Why is Geophysical survey important for oil and gas exploration? Discuss briefly the Oil and Gas Exploration Scenario with Indian Context. [3 + 7]
2. What are the different types of seismic waves? Which is the wave used for Seismic Survey? Explain reason. [3 + 7]
3. Explain the principles used in Fluxgate magnetometer and Proton magnetometer. [5+5]

**Part B**

Answer **both** Questions. **Each** question carries **fifteen** marks. (2Qx15M=30M)

4. Briefly explain the different components of Petroleum system with neat diagram.
5. What are the different anomalies need to be taken care during magnetic survey for oil and gas exploration? Explain with appropriate diagram.

**Part C**

Answer the Question. **The** question carries **twenty** mark. (1QX20M=20M)

6. (a) List at least four Geophysical exploration methods used in oil industry.  
(b) Which is the method most suitable for oil and gas exploration? Justify your answer.  
(c) Discuss the principles of instruments used for seismic survey? (4 + 8 + 8)

