

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For the candidates admitted during the year 2015-2016 & thereafter)

B.A./ B.Com./ B.C.A./ B.S.W./ B.Sc. DEGREE EXAMINATION APRIL 2019

CODE: 15PH/UI/GP23

COURSE : INDEPENDENT ELECTIVE

MAX. MARKS: 100

PAPER : GEOPHYSICS

TIME : 3 HRS.

SECTION A

ANSWER ALL THE QUESTIONS:

(10X3 = 30)

1. Give Fermat's principle for seismic wave propagation.
2. State Bode's law.
3. Give any two types of traps.
4. What is a source rock?
5. Explain Earth's rotation.
6. Draw the Earth's structure.
7. What is Curie temperature?
8. What is diffraction?
9. What is the significance of Newton's law of universal gravitation?
10. What are the different types of magnetic materials?

SECTION B

ANSWER ANY FIVE QUESTIONS:

(5X5 = 25)

1. What are the Characteristics of Planets?
2. Explain Earth's gravity.
3. Write a note on Elastic waves, Body waves and Surface waves.
4. Discuss the discovery of magnetism.
5. State and explain the Kepler's laws of planetary motion.
6. Briefly describe the physical characteristics of reservoir rocks.
7. Discuss the principle and working of a magnetometer.

SECTION C

ANSWER ANY THREE

(3X15 = 45)

1. Explain in detail about the origin and theory of hydrocarbons and its relation to petroleum.
2. Discuss elaborately the origin of the Solar system.
3. What is a seismograph? Explain the various types of seismometers.
4. Give a detail description of the different types of magnetic materials.
