STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI-86
(For candidates admitted during the academic year 2011–12 & thereafter)

SUBJECT CODE: 11PH/UI/GP23

B.A./B.Sc./B.Com. / B.V.A. / B.C.A. / B.S.W. DEGREE EXAMINATION
NOVEMBER 2014

COURSE : INDEPENDENT ELECTIVE
PAPER : GEOPHYSICS
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

Answer ALL questions: **(10 x 3 = 30)**

1. State Kepler's law planetary motion.
2. What do you mean by solar system?
3. Define gravitational acceleration and gravitational potential.
4. Comment on Earth's gravity.
5. What do you mean by plastic material give example?
6. Briefly explain surface waves.
7. Define Curie temperature.
8. What is a magnetometer what is it used for.
9. Explain the term thickness and porosity of rocks.
10. Explain with example the term diffraction.

SECTION – B

Answer any SIX questions: **(6x 5= 30)**

11. Comment on the theories of the origin of solar system.
12. Briefly explain Earth's rotation and shape.
13. Explain Huygen's and Fermat's principle.
14. How are seismic waves propagated?
15. Compare elastic and body waves.
16. Give the theory of elastic materials with example.
17. With a neat diagram explain Flux gate magnetometer.
18. How is Reservoir rocks classified?

SECTION – C

Answer any TWO questions: **(2x 20= 40)**

19. With a neat diagram explain solar system and the properties of planets.
20. Write an essay on magnetic properties of materials.
21. Give the principle, construction and working of Proton precession magnetometer.
22. Explain the different types of traps with neat diagram.

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