

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – PHYSICS

FIFTH SEMESTER – NOVEMBER 2018

16UPH5ES03 – GEO PHYSICS

Date: 30-10-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART A

Answer ALL Questions

(10×2=20)

1. List out the major elements of Earth's atmosphere.
2. What is Hydrology?
3. Write a short note on Key components of GIS.
4. Differentiate Spatial and Attribute data types with an example.
5. Give an account on the role of control points on RASTER dataset.
6. Neatly draw and name the parts of horizontal seismograph.
7. Write down Laplace's and Poisson's equation on gravitational potential.
8. Name the various methods of Geochronology.
9. Tsunami warning systems plays a vital role.-Give reason.
10. How do you prove Earth has strong magnetic field?

PART B

Answer ANY FOUR Questions

(4×7.5=30)

11. Neatly draw and discuss Earth's interior?
12. With suitable examples explain the Mercalli scale of Intensity analysis?
13. Discuss in detail dynamo theory of earth magnetism?
14. Briefly explain the application of GIS in day to day life?
15. Describe in detail ionization process and ionospheric layers.
16. Discuss Ground water quality analysis methods .

PART C

Answer ANY FOUR Questions

(4×12.5=50)

17. With a neat diagram explain Geographical feature in Raster data format with its merits?
18. List out potential harmful components of common household products in water contamination.
19. Give the physical significance of Vertical Electrical sounding of resistivity analysis?
20. How acceleration of gravity measurement is done by Worden gravimeter?
21. Elucidate the significance of Rb-Sr geochronology method with the help of isochron plot.
22. Using Elastic rebound theory explain mechanism of Earthquake.

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