# University of Kerala

# Ph.D. (Geology) Entrance Examination, Dec.2016

Time: Three Hours

Max. Marks: 100

### PART A Research Methodology

#### I. Write short notes on ANY TEN of the following:

- 1. Reasons for sampling of data
- 2. Measures of dispersion
- 3. Null hypothesis
- 4. Binary and ternary diagrams
- 5. Systematic and random errors
- 6. Use of internet for research
- 7. Concept and variable
- 8. Primary and secondary references
- 9. Importance of literature review in research
- 10. Sources of data in geological research
- 11. Categories of data
- 12. Structure of a report
- 13. Selection of a research problem
- 14. Use of photographs and figures in geological reports
- 15. Role of statistics in research

(10x5=50 marks)

#### PART B GEOLOGY

## II. Write short notes on ANY TEN of the following:

- 1. Ordering of streams
- 2. DEM
- 3. Chemical composition of the crust of the Earth
- 4. Pyroxene group of minerals
- 5. Reasons for mass extinction in earth history
- 6. Structural controls of ore localization
- 7. Beach placers of Kerala
- 8. Shale Gas
- 9. Effects of fluoride contamination in groundwater
- 10. Shear Zones
- 11. Mineral composition of Meteorites
- 12. Foraminifers as ecological indicators
- 13. Southern Granulite Terrain
- 14. Significance of igneous textures in petrogenetic studies
- 15. Optical properties of feldspars

(10x5=50 marks)

Dr. S. N. Kumar Chairman, P. G (Geslogy) Board.