

M.A. Examination, 2015
Semester-IV
Geography
Paper – XX
(Geoinformatics)

Time: 3 Hours

Full Marks: 40

Questions are of value as indicated in the margin.
Answer **three** questions, selecting **one** from each unit.

Unit-I

(Scope, Contents and Purposes of Geoinformatics)

1. Define Geoinformatics. Bring out concepts, contents and application of Geoinformatics.
4+10=14
2. Explain Database Management System (DBMS) and its characteristics. Specify major data models in DBMS and discuss each model in brief.
5+9=14

Unit-II

(Geographical Information System - GIS)

3. What is Geographical Information System? Assess the role of Remote Sensing and GIS in Geographical studies. Make a brief note on *spatial data* and *aspatial data*.
2+6+5=13
4. Write notes on the following: 4+3+3+3=13
 - (a) The design of GIS data base
 - (b) Perception of GIS
 - (c) Raster and Vector data structure
 - (d) Hardware components of GIS

Unit-III

(Global Positioning System and Graphics)

5. Discuss the various segments of GPS. Narrate briefly each component of GPS. 7+6=13
 6. Explain GPS Constellation design. Comment on the *merits* and *demerits* of the GPS Survey. 7+6=13
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