1. What is openGIS? Why its is necessary?

open source application by definition is s/w that you can freely access and modify the source code for. openGis is the full integration of geospatial data into mainstream information technology. openGIS is the ability to share heterogenous geodata and geoprocessing resources transparently in a N/w environment.

It is necessary to use because of following:-

(I) Extend open system benefits to GIS

(II) Achieve interoperability between system, data and functionality.

(III) Establish common language and unfied model for geographic information

iv) It allows integration with computing standards

v) It avoids data transfer redundancies

vi) It provides quickand efficient development cycles.

2. List out different open source s/w for spatial data analysis.

(I) clustpy

It is non GUI opensource s/w for spatial analysis. The field of interest is spatial clustering and provides libraries to aggregate areas into regions.

(II) Google earth

The field of interest is 3D visualization. It provides easy to use dynamic graphics and historical maps with which user can create dynamic tours.

iii) QGis:-
The field of interest is visualization. It provides easy to use interface and geoprocessing functions.

iv) Grass:-
The field of interest is GIS. It provides extensive set of GIS tools for both raster and vector data, sql.

v) Flowmap:-
It is designed to analyze and ~~deploy~~ display flow data.

3. What is web based GIS system and write its advantages.
Web based GIS system is the system that allows dissemination sharing, displaying and processing spatial information on Internet. It provides a low cost and efficient way to deliver map products to the users. It is a way to access spatial data easily and efficiently for various GIS operations such as advanced mapping and spatial analysis over Internet.

Advantages:-
(I) planning and design support
(II) Export of existing base map data to CAD system
(III) performance analysis
IV) Adequate mngt of materials
V) efficient operation
VI) quick response to customer's ~~enquiry~~ inquiry.

PHYSICS PRACTICAL SHEETS

Date: .... CAMPUS
Class: .....
Roll No.: .....
Shift: .....
Object of the Experiment (Block Letter)

Experiment No.: .....
Group: .....
Sub.: .....
Set: .....

4. List out different opensource GIS data

(I) Natural Earth:- public domain vector and raster dataset

(II) Global map:- provides consistent coverage of all earth's land cover area. It includes thematic maps such transportations, land cover, population and landuse

(III) Open Topography:- It facilitates community access to high resolution, earth science-oriented, topography data and related tools.

iv) IRL/LDEO climate data library:-
collections of more than 300 datasets for various climate models and dataset

v) UNEP Environmental Data Explorer:-
includes forest covers, watersheds boundaries and much more.