B. Sc. Semester II

GEOLOGY - THEORY and PRACTICALS

Course-wise detail syllabus

GEMDC 124

Geographic Information System

Unit	Course details
Unit –1	**Introduction to GIS:** Meaning and Usefulness of GIS. Components of GIS - Computer hardware, Software modules and Organisational context of GIS.
Unit –2	**Data Structure in GIS:** Data structure in GIS, Types of Data (Point, Line and Polygon). Data Base structures - Raster Data structure and Vector data structure - Data conversion (Vector to Raster and Raster to Vector).

Reference Books:

1) Ian Heywood, Sarah Cornelius and Steve Carver, (2003): An Introduction to Geographical Information Systems, Pearson Education.

2) Pandey, S.N. (1987): Principles and Applications of Photogeology. John Willey.

3) Reddy, M. A. (2008), Textbook of Remote Sensing and Geographical Information System. BS Publications.

GEMDC 124 P

Geographic Information System Laboratory

Course details
Create shape files and plotting of point, line, and polygon features in Q-GIS computer software.
Preparation of basic map in Q-GIS computer software.