Course name: Applications of Geoinformatics Part-I

Course code: GIS-508/DGIS-508

Unit Schedule

Block 1 Applications of Geoinformatics in soils

Unit 1: Fundamentals concept of soils, spectral characteristics of soils

1.1 Objective
1.2 Introduction
1.3 Fundamentals concepts of soil, spectral characteristics of soils
1.4 Summary
1.5 Glossary
1.6 Answer to check the progress
1.7 Reference
1.8 Terminal questions

Unit 2 Remote sensing application in soil survey and mapping, soil moisture estimation using Geoinformatics

2.1 Objective
2.2 Introduction
2.3 Remote sensing application in soil survey and mapping moisture estimation use geoinformatics
2.4 Summary
2.5 Glossary
2.6 Answer to check your progress
2.7 References
2.8 Terminal questions

Unit: 3 Soil erosion types and their processes, RS in characterization of land degradation types and their processes, soil erosion modeling using geo informatics

3.1 Objectives
3.2 Introduction
3.3 Soil erosion types and their processes, R.S. in the characterization of land degradation types and their functions, soil erosion modelling using geo-informatics
3.4 Summary
3.5 Glossary
3.6 Answer to check the progress
3.7 References
3.8 Terminal questions

Block2: Applications of geoinformatics in Geomorphology

Unit 4: Conceptual framework-interfaces geo informatics with geosciences, basic geomorphic process, and features

4.1 Objective
4.2 Introduction
4.3Conceptual framework –interface of geoinformatics with geosciences, basic geomorphic process, and features, application of geoinformation in geomorphology
4.4 Summary
4.5 Glossary
4.6 Answer to check your progress
4.7 References
4.8 Terminal questions

Unit 5: Geomorphic applications: principles of recognition elements for terrain evaluation, mapping of terrain, and classification of landforms, interpretation of erosional and depositional landforms, and interpretation of drainage systems

5.1Objectives
5.2Interpretation
5.3 Geomorphic application: principles of recognition elements for terrain evaluation, mapping of terrain, classification of landforms, interpretation of erosional and depositional landforms, interpretation of drainage systems
5.4 Summary
5.5 Glossary
5.6 Answer to check your progress
5.7 Reference
5.8 Terminal questions

Unit 6: Hydro Geomorphological applications-hydrologic features and their elements, surface water and ground studies, interpretation techniques for targeting groundwater potential zones, delineation of watershed, watershed prioritization and management

6.1 Objective
6.2 Introduction
6.3 Hydro Geomorphological applications-hydrologic features and their elements, surface water and ground studies, interpretation techniques for targeting potential groundwater zones, delineation of the watershed, watershed prioritization and management
6.4 Summary
6.5 Glossary
6.6 Answer to check your progress