

Seven days add-on course on QGIS, Organised by Dept. of Geography, Siddhinath Mahavidyalaya, S.S Patna, Panskura, Purba Medinipur, collaboration with Geo-solution, from (11 march to 13 march and 18 march to 21 march, 2023)

Session	Theory/Hands on	Day-1	DAY-2	Day-3	Day -4	Day-5	Day-6	Day-7
Session-1	Theory	Defining GIS Why GIS Component of GIS Difference between paper maps and GIS maps Application of GIS Introduction QGIS	Co-ordinate system Introduction Datum and its types What is georeferencing Why georeferencing	Why editing Editing tool and functionalities Types of editing	Concept of spatial analysis Concept Clipping Concept of buffer Types of Buffers	Introduction to DEM Introduction to TIN surface Introduction to contour Introduction to water shade	Introduction to image classification Types of image classification Supervised classification Unsupervised classification	Introduction GEE Basic concept on JAVA script
	Hands on	Installing QGIS Installing Plugins Display and add data	On fly projection Georeferencing the maps using QGIS	Adding required layers for editing Performing spatial data editing Managing edit session Making modification to the existing spatial data Snapping and its significant Editing the attribute data saving the edits	Spatial analysis Clipping Creating buffers Types of buffers Clipping a selected feature merge	Creating DEM data Creating contour from SRTM DEM data Water shade delineation Digital terrain analysis for watershed characterization Geospatial modelling in watershed management	Introduction to supervised image classification Introduction unsupervised classification Map composition	GEE initial set-up Export and import data Working with image collection in GEE Vector data and charts in GEE
Session - 2	Theory	Concept of scan map Concept of toposheet Concept of satellite image Introduction of DEM	Why georeferencing Importance of georeferencing	Map and design objectives Communication in maps Types of map Single symbol Graduated symbol method	Introduction google earth pro Introduction of different tools in google earth Introduction of KML file	Introduction to contour Introduction to water shade	Concept of mobile geotag Concept of geotag photo Concept of mobile GPS	Valedictory session
	Hands on	Download toposheet Download satellite image Download DEM image	Georeferencing from google earth Image to image georeferencing	Creating maps layout in QGIS Adding map elements Setting up page/paper size for print Export map in various format	Installation process of google earth pro Digitizing in GE Convert KML to shape file Convert shape file to KML file Working with KML file in QGIS	Water shade delineation Digital terrain analysis for watershed characterization Geospatial modelling in watershed management	Geotag in QGIS Data collection using Geotag photos Geotag images in QGIS	

