

Shantilal Shah Engineering College, Bhavnagar

Civil Engineering Department

PAT/MST – October 2021

PDDC Sem-3 Subject: Remote sensing and GIS (2930606)

1. FUNDAMENTAL OF REMOTE SENSING : Definition –Components of Remote Sensing –Active and Passive Remote Sensing – Electro Magnetic Spectrum – Interaction of EMR With the Earth’s Surface – Interactions with the Atmosphere Energy Sources and Radiation. Active and Passive Remote Sensing. Energy Interaction with the Earth Surface Features.
2. GEOGRAPHIC INFORMATION SYSTEM - Introduction to GIS- Definitions of GIS and related terminology - Components of GIS – GIS Data – Georeferenced data – introduction to data input and output in GIS– Fundamentals of data quality and Management.
3. APPLICATIONS - Application of Remote Sensing / GIS– Case studies. GIS and Remote Sensing – Usefulness in Civil Engineering.