Multidisciplinary/Interdisciplinary Courses

CourseName: **Climate Change Vulnerability and Adaptation**

TotalCredits:3

Courseoutcomes

- Understandthe foundationalconceptsofclimatechange anditsimpacts.
- Assessthehumanandenvironmentalvulnerabilitytoclimatechange.
- Learnthevariousadaptationandmitigationforreducing theimpactsofclimatechangeandnational action plan.

Theory **Credits 3**

1. ClimateChange:UnderstandingClimateChange;GreenhouseGasesandGlobalWarming; Global Climatic Assessment-IPCC
2. ClimateChangeandVulnerability:PhysicalVulnerability;EconomicVulnerability;Social Vulnerability
3. ImpactofClimateChange:AgricultureandWater;FloraandFauna;HumanHealth
4. AdaptationandMitigation:Global Initiativeswith ParticularReferenceto SouthAsia.
5. NationalActionPlanonClimateChange;LocalInstitutions(UrbanLocalBodies,Panchayat s)

References:

1. IPCC(2014):ClimateChange2014:Impacts,Adaptation,andVulnerability.PartA:Globala ndSectoralAspects.ContributionofWorkingGroupIItotheFifthAssessment Report of the Intergovernmental Panel on Climate Change CambridgeUniversityPress, Cambridge,United Kingdom andNew York, NY, USA.
2. IPCC(2007):ClimateChange2007:Impacts,AdaptationandVulnerability.Contributionof WorkingGroupIItotheFourthAssessmentReportoftheIntergovernmentalPanelon ClimateChange.
3. OECD (2008): Climate Change Mitigation: “What do we do?”(Organisation andEconomicCo-operation and Development).
4. Sen, Roy, S., and Singh, R.B., (2002): Climate Variability, Extreme Events andAgriculturalProductivityin MountainRegions, Oxford& IBHPub., New Delhi.
5. Joseph,G.(2005): FundamentalsofRemoteSensing,UnitedPressIndia.
6. Kumar,Dilip,Singh,R.B.andKaur,Ranjeet(2019):SpatialInformationTechnologyfor SustainableDevelopment Goals,Springer.
7. Nag,P.and Kudra,M., (1998):DigitalRemoteSensing,Concept, NewDelhi.
8. Sarkar,A.(2015):Practicalgeography:Asystematicapproach.OrientBlackSwanPrivate Ltd., New Delhi
9. Singh,R.B.andMurai,S.,(1998):Space-informaticsforSustainableDevelopment,OxfordandIBH Pub