## Lesson Plan for Even Semester, 2020

# M.Sc. 2<sup>nd</sup> Semester, Geography, Ajay Chauhan, Associate Professor in Geography

Month s	Topics to be Covered- Paper- GEOG-201 Geomorphology	Other Activities
Januar y, 2020	<ol> <li>Introduction to geomorphology as a science: definition, nature, scope and recent developments.</li> <li>Fundamental concepts: (i) Geological structure and landforms (ii) Uniformitarianism (iii) Multicycle and polygenetic evolution of landscape (iv) Frequency concept of geomorphic processes (v) Climatogenetic geomorphology</li> </ol>	Activities Assignment s, Class Tests, Class Discussions , Topical Presentatio ns, Debates, Quiz Contests, etc
Februa ry, 2020	<ol> <li>Continental drift theory and its basic considerations; Plate tectonics-meaning and concept, margins and boundaries, plate motion and cycle; Tectonic activities along boundaries and distribution of plates.</li> <li>Hill slope-definition and forms of slope, geomorphic processes and slope forms, slope evolution: down wearing, parallel retreat and slope replacement models.</li> </ol>	
March, 2020	<ul> <li>5. Weathering : Causes; types of weathering: physical, chemical and biological. 6. Mass movement, causes, classifications and types of mass movements- slow and rapid mass movements.</li> <li>7. Geomorphic processes and resulting land forms: (i) Fluvial (ii) Glacial (iii) Aeolian (iv) Karst</li> </ul>	
April, 2020	8. Applied geomorphology: Meaning and concept, role of geomorphology in environmental management of the following: (i) Accelerated erosion and sedimentation (ii) Construction of large dams (iii) Urban geomorphology	

### Lesson Plan for Even Semester, 2020

## M.Sc. 4<sup>th</sup> Semester, Geography, Ajay Chauhan, Associate Professor in Geography

Month	Topics to be Covered- Paper -GEOG- 405 (A) Fundamental of	Other
S	Geographical Information Systems (Theory)	Activities
Januar	1. GIS: concept, definition and development. 2. Hardware and	Assignment
y, 2020	software requirements for GIS environment	S,
Februa	3. Data for GIS : (i) Spatial data and their sources (ii) Non –spatial	Class
ry,	data and their sources; (iii) data structure: vector and raster	Tests,
2020	<ol><li>Data Base Management System; Sources of errors in GIS</li></ol>	Class
	database.	Discussions
March,	5. Map, scale and map projection: Need of projection, spherical co-	,
2020	ordinate system and properties.	Topical
	6. Integration of Remote Sensing data into GIS and its application	Presentatio
	in resource mapping, urban management and real time mapping.	ns,
April,	7. Current issues in GIS.	Debates,
2020		Quiz
		Contests,
		etc

Month s	Topics to be Covered- Paper- GEOG- 405 (B) Fundamental of Geographical Information Systems (Practical)	Other Activities	
3		Activities	
Januar	1. Georeferencing	Class	
y, 2020		Discussions	
Februa	2. Creation of Geo-data base and shape file. 3. On screen	,	
ry,	digitization/vectorisation of spatial data in the form of 3 layers:	Topical	
2020	polygon, polyline and point	Presentatio	
March,	4. Adding attributes to these layers and statistical calculations. 5.	ns,	
2020	Displaying attribute data on map by various methods.		
April,	6. Preparing layout and printing of theme map		
2020			

# Lesson Plan for Even Semester, 2020 M.Sc. 4<sup>th</sup> Semester, Ajay Chauhan, Associate Professor in Geography