

# VIDYASAGAR UNIVERSITY

## B Sc (Honours) in Geography

[Choice Based Credit System]

Sr	Semester	Course Type	Course Code	Course Title	Credit	L-T-P	Marks		
							CA	ESE	TOTAL
<b>Semester-I</b>									
	I	Core-1		CT1: Geotectonics and Geomorphology	6	5-1-0	15	60	75
		Core-2		CT2: Cartographic Techniques	6	4-0-4	15	60	75
				CP2: Cartographic Techniques - lab	6	4/5	15	60	75
		GE-1		TBD		2/1			
				TBD					
		AEOC-1		English/MIL	2	1-1-0	10	40	50
<b>Semester-I: total</b>									275
<b>Semester-II</b>									
	II	Core-3		CT3: Human Geography	6	5-1-0	15	60	75
		Core-4		CT4: Cartograms and Thematic Mapping	6	4-0-4	15	60	75
				CP4: Cartography - Lab	6	4/5	15	60	75
		GE-2		TBD		2/1			
				TBD					
		AEOC-2		ENVS	4		20	80	100
<b>Semester-II: total</b>									325

Sr	Semester	Course Type	Course Code	Course Title	Credit	L-T-P	Marks		
							CA	ESE	TOTAL
<b>Semester-III</b>									
	III	Core-5		CT5: Climatology	6	5-1-0	15	60	75
		Core-6		CT6: Statistical methods in Geography	6	4-0-4	15	60	75
				OP6: Statistical methods in Geography					
		Core-7		CT7: Geography of India	6	5-1-0	15	60	75
		GE-3		TBD	6	4/5	15	60	75
	SEC-1		TBD	2	1-1-0	10	40	50	
	Semester - III : total				26				350
<b>Semester-IV</b>									
	IV	Core-8		CT8: Regional Planning and development	6	5-1-0	15	60	75
		Core-9		CT9: Economic Geography	6	5-1-0	15	60	75
		Core-10		CT10: Environmental Geography	6	4-0-4	15	60	75
				OP10: Environmental Geography- Lab					
		GE-4		TBD	6	4/5	15	60	75
	SEC-2		TBD	2	1-1-0	10	40	50	
	Semester - IV : total				26				350

Sr	Semester	Course Type	Course Code	Course Title	Credit	L-T-P	Marks		
							CA	ESE	TOTAL
<b>Semester-V</b>									
	V	Core-11		CT11: Field work and Research Methodology	6	4-0-4	15	60	75
				CP11: Field work and Research Methodology-Lab					
		Core-12		CT12: Remote sensing and GIS	6	4-0-4	15	60	75
				CP12: Remote sensing and GIS-Lab					
		DSE-1		TBD	6	5-1-0	15	60	75
		DSE-2		TBD	6	5-1-0	15	60	75
	Semester -V : total				24				300
<b>Semester-VI</b>									
	VI	Core-13		CT13: Evolution of Geographical thought	6	5-1-0	15	60	75
				CT14: Disaster Management					
		Core-14		CP14: Disaster Management based Project Work	6	4-0-4	15	60	75
		DSE-3		TBD	6	5-1-0	15	60	75
		DSE-4		TBD	6	5-1-0	15	60	75
	Semester - VI : total				24				300
	<b>Total in all semester:</b>				<b>142</b>				<b>1900</b>

\* Core Course , AECC = Ability Enhancement Compulsory Course , GE = Generic Elective , SEC = Skill Enhancement Course , DSE = Discipline Specific Elective , CA= Continuous Assessment , ESE= End Semester Examination , TBD=To be decided , CT = Core Theory , CP=Core Practical , L = Lecture , T = Tutorial , P = Practical , MIL = Modern Indian Language , ENVS = Environmental Studies ,

## Core Course

CC-T: Geotectonics and Geomorphology

Credits 06

CIT: Geotectonics and Geomorphology

Unit I: Geotectonics

2 Credits

1. Earth's tectonic and structural evolution with reference to geological time scale - CK
2. Earth's interior with special reference to seismology-Isostasy: Models of Airy and Pratt - KD
3. Plate Tectonics: Processes at constructive, conservative, destructive margins and hotspots; resulting landforms - PS
4. Folds and Faults—origin and types - AG

Unit II: Geomorphology

4 Credits

1. Degradational processes: Weathering, mass wasting and resultant landforms ✓ SP
2. Processes of entrainment, transportation and deposition by different geomorphic agents. Role of humans in landform development. river KD
3. Development of river network and landforms on uniclinal and folded structures PS
4. Landforms on igneous rocks with special reference to Granite and Basalt ✓ AP
5. Karst landforms: Surface and sub-surface. Coastal processes and landforms. SP
6. Glacial and fluvio-glacial processes and landforms; fluvio-glacial landforms CK
7. Aeolian and fluvio-aeolian processes and landforms; fluvio-aeolian processes AG
8. Models on landscape evolution: Views of Davis, Penck, King and Hack PS

### Reference Books

- Bloom A. L., 2001: Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, Prentice-Hall of India, Third edition, New Delhi.
- Bridges E. M., 1990: World Geomorphology, Cambridge University Press, Cambridge.
- Christopherson, Robert W., (2011), Geosystems: An Introduction to Physical Geography, 8 Ed., Macmillan Publishing Company
- Kale V. S. and Gupta A., 2001: Introduction to Geomorphology, Orient Longman, Hyderabad.
- Knighton A. D., 1984: Fluvial Forms and Processes, Edward Arnold Publishers, London.
- Selby, M.J., (2005), Earth's Changing Surface, Indian Edition, OUP
- Skinner, Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to physical Geology, 4th Edition, John Wiley and Sons
- Thornbury W. D., 1969: Principles of Geomorphology, Wiley.

## CC-2: Cartographic Techniques

Credits 06

### C2T: Cartographic Techniques

Credits 04

1. Maps: Classification and types. Components of a map. CK
2. Concept and application of scales: Plain, comparative, diagonal and vernier X AS
3. Coordinate systems: Polar and rectangular. Concept of geoid and spheroid ✓ SP
4. Concept of generating globe. Grids: angular and linear systems of measurement SP
5. Bearing: Magnetic and true, whole-circle and reduced.
6. Map projections: Classification, properties and uses. (Concept and significance of UTM projection. 1 PS
7. Basic concepts of surveying and survey equipment: Prismatic compass, dumpy level, theodolite, Abney level, clinometer. NO SP
8. Survey of India topographical maps: Reference scheme of old and open series. Information on the margin of maps. KD

### Reference Books

- Anson R. and Ormelling F. J., 1994: International Cartographic Association: Basic Cartographic Vol. Pregmen Press.
- Gupta K.K. and Tyagi, V. C., 1992: Working with Map, Survey of India, DST, New Delhi.
- Mishra R.P. and Ramesh, A., 1989: Fundamentals of Cartography, Concept, New Delhi.
- Monkhouse F. J. and Wilkinson H. R., 1973: Maps and Diagrams, Methuen, London.
- Rhind D. W. and Taylor D. R. F., (eds.), 1989: Cartography: Past, Present and Future, Elsevier, International Cartographic Association.
- Robinson A. H., 2009: Elements of Cartography, John Wiley and Sons, New York.
- Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers.
- Sarkar, A. (2015) Practical Geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi

## C2P : Cartographic Techniques Lab

Credits 02

*A Project File, comprising one exercise each is to be submitted*

1. Graphical construction of scales: Plain, comparative, diagonal and vernier AG
2. Construction of projections: Polar Zenithal Stereographic, Simple conic with two standard parallels, Bonne's, Cylindrical Equal Area, and Mercator's. PSS NO S
3. Delineation of drainage basin from Survey of India topographical map. Construction and interpretation of relief profiles (superimposed, projected and composite), relative relief map, slope map (Wentworth), and stream ordering (Strahler) on a drainage basin. KD
4. Correlation between physical and cultural features from Survey of India topographical maps. using transect chart CK