

The University of Burdwan



Syllabus for B.A/B.Sc.(General)

in

Geography

Under Choice Based Credit System

w.e.f. 2017-2018 onward

COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR B.A. GENERAL IN
GEOGRAPHY

Semester-wise course structure

SEMESTER	COURSE OPTED	COURSE NAME	CREDIT	MARKS			No. of hours L-T-P (Per week)
				IA	ESE	TOTAL	
I	Ability Enhancement: compulsory course - I	Environmental Studies	4		100	100	
	DISCIPLINE 1 (Geography)	Core Course – 1(CC1) Geotectonics and Geomorphology	4	15	40	75	4-0-0
		Practical Scale and Cartography	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	Core Course – 1(CC1) As to be offered by other departments	6	15	60	75	5-1-0
	DISCIPLINE 3 (English Language)	Core Lang 1-1	6	15	60	75	5-1-0
Total			22		325		
II	Ability Enhancement: compulsory course - II	Communicative English/ MIL	2		50	50	
	DISCIPLINE 1 (Geography)	Core Course – 2 (CC-2) Climatology, soil and Biogeography	4	15	40	75	4-0-0
		Practical Surveying and Levelling	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	Core Course – 2 (CC-2) As to be offered by other departments	6	15	60	75	5-1-0
	DISCIPLINE 3 Hindi / MIL	Core Lang-2-1	6	15	60	75	5-1-0
Total			20		275		
III	DISCIPLINE 1 (Geography)	Core Course – 3(CC-3) Human Geography	4	15	40	75	4-0-0
		Practical Map Projection and Map Interpretation	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	Core Course – 3(CC-3) As to be offered by other departments	6	15	60	75	5-1-0
	DISCIPLINE 3 (English Language)	Core Lang 1-2	6	15	60	75	5-1-0
	Skill Enhancement Course	SEC- 1(Computer Basics and Computer Applications or Remote Sensing)	2	10	40	50	0-0-4
Total			20		275		
IV	DISCIPLINE 1 (Geography)	Core Course – 4(CC4) Environmental Geography	4	15	40	75	4-0-0
		Practical (Field work)	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	Core Course – 4(CC4) As to be offered by other departments	6	15	60	75	5-1-0
	DISCIPLINE 3 Hindi / MIL	Core Lang2-2	6	15	60	75	5-1-0
	Skill Enhancement Course	SEC- 2 (Regional Planning and Development or GIS based Project Report (Practical))	2	10	40	50	0-0-4
Total			20		275		

SEMESTER	COURSE OPTED	COURSE NAME	CREDIT	MARKS			No. of hours L-T-P (Per week)
				IA	ESE	TOTAL	
V	DISCIPLINE 1 (Geography)	DSE – 1(Geography of India or Economic Geography)	4	15	40	75	4-0-0
		Practical (Field work)	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	DSE – 1 As to be offered by other departments	6	15	60	75	5-1-0
	Generic Elective	GE-1 Any discipline other than discipline 1 and 2	6	15	60	75	5-1-0
	Skill Enhancement Course	SEC- 3Field Techniques and Survey based Project Report (Practical) or Collection, Mapping and Interpretation of Climatic Data	2	10	40	50	0-0-4
Total			20		275		
VI	DISCIPLINE 1 (Geography)	DSE- 2(Disaster Management or Geography of Tourism)	4	15	40	75	4-0-0
		Practical (Field work)	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	DSE – 2 As to be offered by other departments	6	15	60	75	5-1-0
	Generic Elective	GE-2 Any discipline other than discipline 1 and 2	6	15	60	75	5-1-0
	Skill Enhancement Course	SEC- 4 Collection, Mapping and Interpretation of Pedological Data Or Rocks and Minerals and their megascopic identification	2	10	40	50	0-0-4
Total			20		275		
TOTAL OF ALL SEMESTERS			122		1700		

COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM FOR B.Sc GENERAL IN
GEOGRAPHY

Semester-wise course structure

SEMESTER	COURSE OPTED	COURSE NAME	CREDIT	MARKS			No. of hours L-T-P (Per week)	
				IA	ESE	TOTAL		
I	Ability Enhancement: compulsory course - I	Environmental Studies	4		100	100		
	DISCIPLINE 1 (Geography)	Core Course – 1(CC1) Geotectonics and Geomorphology	4	15	40	75	4-0-0	
		Practical Scale and Cartography	2		20		0-0-4	
	DISCIPLINE 2 (Other Subject)	Core Course – 1(CC1) As to be offered by other departments	4	15	40	75	4-0-0	
		Practical As to be offered by other departments	2		20		0-0-4	
	DISCIPLINE 3 (Other Subject)	Core Course – 1(CC1) As to be offered by other departments	4	15	40	75	4-0-0	
		Practical As to be offered by other departments	2		20		0-0-4	
	Total			22		325		
	II	Ability Enhancement: compulsory course - II	Communicative English/ MIL	2		50	50	
		DISCIPLINE 1 (Geography)	Core Course – 2 (CC2) Climatology, soil and Biogeography	4	15	40	75	4-0-0
Practical Surveying and Levelling			2	20		0-0-4		
DISCIPLINE 2 (Other Subject)		Core Course – 2(CC2) As to be offered by other departments	4	15	40	75	4-0-0	
		Practical As to be offered by other departments	2		20		0-0-4	
DISCIPLINE 3 (Other Subject)		Core Course – 2(CC2) As to be offered by other departments	4	15	40	75	4-0-0	
		Practical As to be offered by other departments	2		20		0-0-4	
Total			20		275			
III		DISCIPLINE 1 (Geography)	Core Course – 3(CC3) Human Geography	4	15	40	75	4-0-0
			Practical Map Projection and Map Interpretation	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	Core Course – 3(CC3) As to be offered by other departments	4	15	40	75	4-0-0	
		Practical As to be offered by other departments	2		20		0-0-4	
	DISCIPLINE 3 (Other Subject)	Core Course – 3(CC3) As to be offered by other departments	4	15	40	75	4-0-0	
		Practical As to be offered by other departments	2		20		0-0-4	
	Skill Enhancement Course	SEC- 1(Computer Basics and Computer Applications or Remote Sensing)	2	10	40	50	0-0-4	
	Total			20		275		

IV	DISCIPLINE 1 (Geography)	Core Course – 4(CC4) Environmental Geography	4	15	40	75	4-0-0
		Practical (Field work)	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	Core Course – 4(CC4) As to be offered by other departments	4	15	40	75	4-0-0
		Practical As to be offered by other departments	2		20		0-0-4
	DISCIPLINE 3 (Other Subject)	Core Course – 4(CC4) As to be offered by other departments	4	15	40	75	4-0-0
		Practical As to be offered by other departments	2		20		0-0-4
Skill Enhancement Course	SEC- 2 (Regional Planning and Development or GIS based Project Report (Practical))	2	10	40	50		
Total		20			275		
V	DISCIPLINE 1 (Geography)	DSE – 1(Geography of India or Economic Geography)	4	15	40	75	4-0-0
		Practical (Field work)	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	DSE – 1 As to be offered by other departments	4	15	40	75	4-0-0
		Practical As to be offered by other departments	2		20		0-0-4
	DISCIPLINE 3 (Other Subject)	DSE – 1 As to be offered by other departments	4	15	40	75	4-0-0
		Practical As to be offered by other departments	2		20		0-0-4
Skill Enhancement Course	SEC- 3 Field Techniques and Survey based Project Report (Practical) or Collection, Mapping and Interpretation of Climatic Data	2	10	40	50		
Total		20			275		
VI	DISCIPLINE 1 (Geography)	DSE- 2(Disaster Management or Geography of Tourism)	4	15	40	75	4-0-0
		Practical (Field work)	2		20		0-0-4
	DISCIPLINE 2 (Other Subject)	DSE – 2 As to be offered by other departments	4	15	40	75	4-0-0
		Practical As to be offered by other departments	2		20		0-0-4
	DISCIPLINE 3 (Other Subject)	DSE – 2 As to be offered by other departments	4	15	40	75	4-0-0
		Practical As to be offered by other departments	2		20		0-0-4
Skill Enhancement Course	SEC- 4 Collection, Mapping and Interpretation of Pedological Data Or Rocks and Minerals and their Megascopic Identification	2	10	40	50		
Total		20			275		
TOTAL OF ALL SEMESTERS		122			1700		

B.A./B.Sc. (General) in Geography

CC1 Geomorphology and Cartography

Unit I: Geotectonics and Geomorphology (Theory)

Credits 4

1. Weathering: Types and related landforms.
2. Lithosphere – Internal Structure of Earth based on Seismic Evidence,
3. Plate Tectonics and its associated landforms
4. Landform development in arid regions
5. Landform development in glaciated regions.
6. Development of fluvial landforms
7. Fluvial Cycle of Erosion – Davis and Penck
8. Hydrological Cycle and ground water.

Reading List

1. Conserva H. T., 2004: Illustrated Dictionary of Physical Geography, Author House, USA.
2. Gabler R. E., Petersen J. F. and Trapasso, L. M., 2007: Essentials of Physical Geography (8th Edition), Thompson, Brooks/Cole, USA.
3. Garrett N., 2000: Advanced Geography, Oxford University Press.
4. Goudie, A., 1984: The Nature of the Environment: An Advanced Physical Geography, Basil Blackwell Publishers, Oxford.
5. Hamblin, W. K., 1995: Earth's Dynamic System, Prentice Hall, N.J.
6. Husain M., 2002: Fundamentals of Physical Geography, Rawat Publications, and Jaipur.
7. Monkhouse, F. J. 2009: Principles of Physical Geography, Platinum Publishers, Kolkata.
8. Strahler A. N. and Strahler A. H., 2008: Modern Physical Geography, John Wiley & Sons, New York.

Unit II: Scale and Cartography (Practical)

Credits 2

1. Linear and Comparative scale
2. Proportional diagrams: Circles and squares
3. Composite bar diagram and age-sex pyramid.
4. Taylor's Climograph and Hythergraph

Reading List

1. Dent B. D., 1999: Cartography: Thematic Map Design, (Vol. 1), McGraw Hill.
2. Gupta K. K and Tyagi V. C., 1992: Working with Maps, Survey of India, DST, New Delhi.
3. Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept Publishing.
4. Robinson A., 1953: Elements of Cartography, John Wiley.
5. Sharma J. P., 2010: PrayogicBhugol, Rastogi Publishers.
6. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers
7. Singh R. L., 1998: PrayogicBhoogolRooprekha, Kalyani Publications.
8. Steers J. A., 1965: An Introduction to the Study of Map Projections, University of London.

CC 2 Physical Environment and Surveying

Unit I: Climatology, Soil and Biogeography (Theory)Credits 4

1. Elements of weather and climate. Thermal and chemical composition and layering of the atmosphere.
2. Horizontal and vertical distribution of temperature
3. Forms of precipitation and types of rainfall
4. Tropical and Temperate Cyclones, Climatic Classification (Koppen)
5. Definition of soil. Physical and chemical properties of soil (soil texture, colour and pH)
6. Soil forming factors. Soil formation (Podzol and Laterite)
7. Definition of Biosphere and Biogeography. Meaning of Ecology, Ecosystem.Environment, Ecotone, Communities, Habitats and Biotopes.
8. Biomes: Rainforest and Temperate Grassland.

Reference Books

- Barry R. G. and Carleton A. M., 2001: Synoptic and Dynamic Climatology, Routledge, UK.
Barry R. G. and Chorley R. J., 1998: Atmosphere, Weather and Climate, Routledge, New York.
Critchfield H. J., 1987: General Climatology, Prentice-Hall of India, New Delhi
Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: The Atmosphere: An Introduction to Meteorology, Prentice-Hall, Englewood Cliffs, New Jersey.
Oliver J. E. and Hidore J. J., 2002: Climatology: An Atmospheric Science, Pearson Education, New Delhi.
Trewartha G. T. and Horne L. H., 1980: An Introduction to Climate, McGraw

Unit II: Surveying and Levelling (Practical)

Credits 2

1. Definition and classification of surveying
2. Plane table survey by radiation method.
3. Open and close traversing by Prismatic Compass
4. Drawing of longitudinal profile by Dumpy level

CC3 Human Geography and Map Study

Unit I: Human Geography (Theory)

Credit4

1. Definition, Nature, Major Subfields, Contemporary Relevance
2. Space and Society: Cultural Regions; Race; Religion and Language
3. Eskimos: Adjustment to the environment and recent development
4. Population: Population Growth and Demographic Transition Theory
5. Types of population migration with reference to India
6. World Population Distribution and Composition (Age, Gender and Literacy)
7. Settlements: Types and Patterns of Rural Settlements;
8. Classification of Urban Settlements; Functional classification of towns

Reading List

1. Chandna, R.C. (2010) Population Geography, Kalyani Publisher.
2. Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London.
3. Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication.
4. Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman and Company, New York.
5. Kaushik, S.D. (2010) ManavBhugol, Rastogi Publication, Meerut.
6. Maurya, S.D. (2012) ManavBhugol, ShardaPustakBhawan. Allahabad.
7. Ghosh, S. (2015) Introduction to settlement geography. Orient Black Swan Private Ltd., Kolkata
8. Hussain, Majid (2012) ManavBhugol. Rawat Publications, Jaipur

Unit II: Map Projection and Map interpretation (Practical)

Credits 2

1. Simple Conical projection with one standard parallel
2. Cylindrical Equal Area projection
3. Interpretation of Topographical maps: Relation between Physiography, drainage and settlement
4. Interpretation of weather maps

Reading List

1. Dent B. D., 1999: Cartography: Thematic Map Design, (Vol. 1), McGraw Hill.
2. Gupta K. K and Tyagi V. C., 1992: Working with Maps, Survey of India, DST, New Delhi.
3. Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept Publishing.
4. Robinson A., 1953: Elements of Cartography, John Wiley.
5. Sharma J. P., 2010: PrayogicBhugol, Rastogi Publishers.
6. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers
7. Steers J. A., 1965: An Introduction to the Study of Map Projections, University of London.

Skill Enhancement Course (2 Compulsory Papers)

SEC 1 – Computer Basics and Computer Applications

2 Credits

1. Numbering Systems; Binary Arithmetic
2. Data Computation, Storing and Formatting in Spreadsheets: Computation of Rank, Mean, Median, Mode, Standard Deviation, Moving Averages, Derivation of Correlation, Covariance and regression; Selection of technique and interpretation.
3. Preparation of Annotated Diagrams and its interpretation: Scatter diagram and Histogram
4. Internet Surfing: Generation and extraction of information

Reading List

- Bartee, Thomas C. (1977): Digital Computer Fundamental; McGraw Hill.
- Chauhan, S.; Chauhan, A. and Gupta, K. (2006): Fundamental of Computer; Firewall Media.
- Flake, L.J.; McClintock, C.E. and Turner, S. (1989): Fundamental of Computer Education; Wordsworth Pub. Co.
- Leon, A .and Leon,M.(1999): Introduction to Computer, USB Publishers' Distributors Ltd.
- Malvino, A.P. and Leach, D.P. (1981): Digital Principles and Applications; Tata McGraw Hill. ► Mano, Moris M. and Kime, Charles R. (2004): Logic and Computer Design Fundamental; Prentice Hall. ► Rajaraman, V. (2003): Fundamentals of Computer, Prentice Hall Publisher
- Sarkar, A. and Gupta, S.K (2002) Elements of computer Science, S Chand and Company, New Delhi
- Blissmer (1996): Working with MS Word; Houghton Mifflin Co.
- Johnson, Steve (2007): Microsoft Power Point 2007; Pearson Paravia Bruno.
- Leon, A .and Leon,M.(1999): Introduction to Computer, USB Publishers' Distributors Ltd.
- Leon, A. and Leon, M.(1999): A beginners Guide to Computers, Vikas
- Rajaraman, V. (2008): Computer Primer; Prentice Hall of India Pvt. Ltd.
- Sarkar, A. and Gupta, S.K (2002) Elements of computer Science, S Chand and Company, New Delhi
- Shepard, Aaron (2007): Perfect Pages; Shepard Publications.
- Tyson, Herbert L. (2007): Microsoft Word 2007 bible; John Wiley.
- Walkenbach, John (2007): Excel 2007 Bible; John Wiley.

OR

Remote Sensing

Credit2

1. Remote Sensing: Definition, Development, Platforms and Types.
2. Aerial Photography: Principles, Types and Geometry.
3. Satellite Remote Sensing: Principles, EMR Interaction with Atmosphere and Earth Surface; Satellites (Landsat and IRS) and Sensors.
4. Interpretation and Application of Remote Sensing: Land use/ Land Cover.

Reading List

1. Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press.
2. Jensen J. R., 2004: Introductory Digital Image Processing: A Remote Sensing Perspective, Prentice Hall. 3.
- Joseph, G. 2005: Fundamentals of Remote Sensing, United Press India.
4. Lillesand T. M., Kiefer R. W. and Chipman J. W., 2004: Remote Sensing and Image Interpretation, Wiley. (Wiley Student Edition).
5. Nag P. and Kudra, M., 1998: Digital Remote Sensing, Concept, New Delhi.
6. Rees W. G., 2001: Physical Principles of Remote Sensing, Cambridge University Press.
7. Singh R. B. and Murai S., 1998: Space-informatics for Sustainable Development, Oxford and IBH Pub. 8. Wolf P. R. and Dewitt B. A., 2000: Elements of Photogrammetry: With Applications in GIS, McGraw-Hill.