

BA

GEOGRAPHY



**Maharashtra Education Societies
Abasaheb Garware College
(Autonomous)**

(Affiliated to Savitribai Phule Pune University)

**Structure of B.A Degree Program in Geography
(Faculties of Humanities)**

**S.Y.B.A. Geography Choice Based Credit System Syllabus
To be implemented from Academic Year 2023-2024**

SYBA-Geography Course Structure

Year	Sem	Courses	Course Code	Course Title	Total Lecture	Credit
SYBA	3	Geography CC-1C	UAGG233	Environmental Geography-I	48	3
		Geography DSE-1A	UAGG231	Population Geography-I	48	3
		Geography DSE-2A	UAGGP232	Practical Geography-I (Scale and Map Projection)	60	4
		SEC-2A	UAGGSEC234	Watershed Management	30	2
	4	Geography CC-1D	UAGG243	Environmental geography-II	48	3
		Geography DSE-1B	UAGG241	Population Geography-II	48	3
		Geography DSE-2B	UAGGP242	Practical Geography-II (Cartographic Techniques and Surveying)	60	4
		SEC-2B	UAGGSEC244	Fundamentals of Global Positioning System (GPS)	30	2

MES' ABASAHEB GARWARE COLLEGE (AUTONOMOUS), PUNE-04

S.Y.B.A. Syllabus in Geography (Credit system)

Semester III (Revised from June 2023)

Course Title: Environmental Geography-I

Code No- UAGG233

No of Credits:03

No of Periods-48

Objectives:

1. To help the students to understand the inter relationship between the human and environment.
2. To develop necessary skills and expertise to address the environmental challenges.

Sr. No	Unit	Sub-unit	Teaching hours	Credits
1.	Introduction to Environmental Geography	1. Definition, nature and scope of Environmental Geography 2. Importance of environmental Geography 3. Components of environment 4. Types of Environment	12	3
2	Ecosystem	1. Definition and characteristics of ecosystem 2. Structure (biotic and abiotic factors) and food chain, trophic level, food web, energy flow 3. Types of ecosystems a. Equatorial Forest ecosystem b. Marine Ecosystem	12	
3	Biodiversity and its conservation	1. Concept of biodiversity 2. Biodiversity hotspots in India 3. Conservation of biodiversity 4. Legislation on National Environment, Forests and wildlife	12	
4	Environmental pollution	1. Causes, effects and control measures on pollution a. Air pollution- b. Water Pollution- c. Noise pollution- d. Land pollution-	12	

References

1. अहिरराव वा. र., अलिझाड सु. सु., वराट तू. मा., धापटे. चं. सा. आणि भोस. रा. शा. (२००२) *पर्यावरण विज्ञान*, निराली प्रकाशन
2. सप्तर्षी, पी.जी., मोरे, जे.सी., उगले, वी.र., (२००९), *भूगोल आणि नैसर्गिक आपत्ती*, डायमंड पब्लिकेशन, पुणे.
3. चौधर, ए.एच. आणि इतर (२०१४) *आपत्ती व्यवस्थापन*, अथर्व प्रकाशन, पुणे.
4. घोलप, टी.एन., (२०००), *पर्यावरण विज्ञान, निशिकांत पब्लिकेशन्स, पुणे*
5. मुसमाडे, ए. एच., मोरे, जे. सी., (२०१४) *आपत्ती व्यवस्थापनाचा भूगोल* डायमंड पब्लिकेशन, पुणे.
6. घारे, एम. (२०१०), *नैसर्गिक संसाधनांची परिस्थितीकी*, प्रफुल्लता प्रकाशन, पुणे.
7. Goudie A, 2001, *The Nature of The Environment*, Blackwell, Oxford. Deshpande C.D., *Maharashtra*, National Book Trust, Delhi
8. Singh, Savindra. (2000), *Environmental Geography*, Prayag Pustak Bhavan, Allahabad.

MES' ABASAHEB GARWARE COLLEGE (AUTONOMOUS), PUNE-04

S.Y.B.A. Syllabus in Geography (Credit system)

Semester III (Revised from June 2023)

Course Title: Population Geography-I

Code No- UAGG231

No of Credits: 03

No of Periods- 48

Objectives:

- 1) To introduce the basic concepts in Population Geography.
- 2) To understand the types of Population data.

Sr. No.	Unit	Sub-unit	Teaching hours	Credits
1.	Introduction	1. Definition, Nature and Scope of Population Geography 2. Contextual significance of Population Geography 3. Relation between Population Geography and other social sciences	12	3
2	Population Data	1.Census of India 2.National Sample Survey, Sample Registration Survey, NFHS, DLHS	12	
3	Population Growth and Demographic Attributes	1. Factors affecting Growth of Population 2. Fertility, Mortality – Concept, Measurement 3. Migration – Concept, Causes and Types of Migration	12	
4	Composition of Population	1. Age-sex Pyramid, Age Structure 2. Occupational Structure, Dependency Ratio 3. Longevity, Life Expectancy (with reference to India)	12	

References

- 1) Bhende, A. and Kanitkar, T. (2000). *Principles of Population Studies*, Himalaya Publishing House.
- 2) Chandna R.C. and Sidhu M.S. (1980). *An Introduction to Population Geography*, Kalyani Publishers.
- 3) Husain, M. (1999). *Human Geography*, Rawat Publications, Jaipur.
- 4) कुंभारे, ए.आर. (२०००). लोकसंख्या भूगोल, मुरलीधर प्रकाशन, पुणे.
- 5) कुंभारे, ए.आर. (२००३). मानवी भूगोल, पायल पब्लिकेशन्स, पुणे.
- 6) घोलप, टी.एन. (१९९७). लोकसंख्या भूगोल, निशिकांत प्रकाशन, पुणे.
- 7) मुसमाडे, ए.एच., सोनावणे, ए.ई., आणि मोरे, जे.सी. (२०१५). लोकसंख्या आणि वस्ती भूगोल, डायमंड प्रकाशन, पुणे.
- 8) मोरे, जे.सी., पगार, एस.डी. आणि थोरात, ए.एम. (२०१९). मानवी भूगोल, निरालीप्रकाशन, पुणे.
- 9) सावंत, आठवले, आणि मुसमाडे, ए.एच. लोकसंख्या भूगोल, मेहता प्रकाशन, पुणे.

MES' ABASAHEB GARWARE COLLEGE (AUTONOMOUS), PUNE-04

S.Y.B.A. Syllabus in Geography (Credit system)

Semester III (Revised from June 2023)

Course Title: Practical Geography-I-Scale and Map Projection

Code No- UAGGP232

No of Credits: 04

No of Periods- 60

Workload- Six periods per week of per batch consisting 12 students. Last batch should have more than six students. Practical examination for this course will be conducted at the end of semester

Objectives of the Course-

1. To Introduce the basic concepts in Practical Geography
2. To acquaint students with the utility of various projections
3. To explain the elementary and essential principals of practical work in Geography

Course outcome- after the successful completion of the course students will be able to –

1. To apply practical skill and use of map scale and projection
2. Students will aware of the new techniques and skill of map making

NO	Topic	Sub Topic and Learning Points	No of Practical's	Credits
1	Maps and Basic concepts of map projection	1. Definition of Map 2. Elements and Classification of Map 3. Basic Concepts of Projection: - Latitude, Longitude, parallel of Latitudes and Meridians of Longitudes, Prime meridian, Equator, Tropic of Cancer and Tropic of Capricorn, Arctic and Antarctic circle, Direction	04	04
2	Map Scale	1. Definition of Map Scale 2. Types of Map Scale a) Verbal Scale b) Numerical Scale c) Graphical Scale 3. Conversion of map scale (British and Metric System) a) Verbal scale to Representative fraction b) Representative fraction into Verbal scale 4. Construction of Simple Graphical scale	05	
3	Construction, properties and use of map projections	1. Definition and types of Map Projection 2. Construction of Map Projection a) Zenithal Projection- Zenithal Polar Gnomonic Projection b) Conical Projection- Simple conical projection c) Mercator Projection- (At least two examples from each projection)	06	
4	Cartographic techniques I	1. Introduction to Cartographic Diagrams 2. Presentation of Geographic Data i) Simple Bar Graph ii) Line Graph iii) Line and Bar Graph iv) Compound bar graph v) Divided bar graph vi) Pie diagram (At least 01 example of each manually and using computer)	05	

Note:

1. Use of Map stencils, log tables, calculator, computer, statistical tables is allowed at the time of Examination.

2. Students should check the practical's regularly and Journal should be certified by practical in-charge and Head of the Department before the examination.
3. Students without a certified journal should not be allowed for the practical examination.
4. Each of the practical batches needs a separate question paper.

Reference Books:

1. Sharma J. P., 2010, Prayogic Bhugol, Rastogi Publishers, Meerut
2. Singh R. L. and Singh R. P. B., 1999, Elements of Practical Geography, Kalyani Publishers
3. Tyner J. A., 2010, Principles of Map Design, The Guilford Press
4. Sarkar A., 2015, Practical Geography: A Systematic Approach, Orient Black Swan Private Ltd., New Delhi
5. Singh R. L. and Duttta P. K., 2012, Prayogatama Bhugol, Central Book Depot, Allahabad
6. AHIRRAO Y., KARANJKHELE E. K., 2002, Practical Geography, Sudarshan Publication, Nashik
7. Karlekar S and Shitole T., 2022, Practical Geography, Diamond Publication
8. Kumbhare A., Practical Geography

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S.Y.B.A. Syllabus in Geography (Credit system)

Semester III (Revised from June 2023)

Skill Enhancement Course (SEC-2A)

Title –Watershed Management

Code No- UAGGSEC234

No of Credits: 02

No of Periods- 30

Objectives of the Course-

1. To acquaint students with the water scarcity, soil degradation and its implications
2. To provide comprehensive conserving knowledge about watershed management

Course outcome- after the successful completion of the course students will be able to –

1. To get thorough knowledge of watershed management
2. Students will aware of the new techniques of watershed management and planning

NO	Topic	Sub Topic and Learning Points	Teaching hours	Credits
1	Watershed Management	1. Watershed: Concept and Characteristics 2. Types of watersheds 3. Concept of Hydrological Cycle 4. Need of watershed management in Maharashtra	08	02
2	Basics of Watershed management	1. Objectives and Principals of watershed management 2. Water conservation Practices 3. Soil erosion and soil conservation Practices	10	
3	Watershed Development Program	1. River Valley Project 2. Integrated Wasteland Development Program (IWDP) 3. Western Ghat Development Program (WGDP) 4. Hill Area Development Program (HADP)	12	

Reference Books:

1. Tripathi R.P. and H.P.Singh 2002, Soil erosion and conservation, Willey Eastern Ltd., New Delhi
2. Tideman, E.M., “Watershed Management”, Omega Scientific Publishers, New Delhi, 1996
3. Musmade A. H., More J. C. 2014, Geography of Disaster Management, Diamond Publication, Pune. (Marathi)
4. Gholap T. N., 2000, Environment Science, Nishikant Publications, Pune. (Marathi)
5. Saptarshi P. G., More J. C., Ugale V. R., 2009, Geography and Natural Hazards, Diamond Publishing, Pune. (Marathi)
6. आयरे बी.एल., माने एम. एस. २०११, पाणलोट क्षेत्र विकास व जलसंधारण, गोडवा प्रकाशन पुणे

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S.Y.B.A. Syllabus in Geography (Credit system)
Semester IV (Revised from June 2023)
Course Title: Environmental Geography-II

Code No- UAGG243

No of Credits: 03
No of Periods- 48

Objectives:

- 1) To acquaint students with the fundamental concepts of environmental geography.
- 2) To make aware students about the problems of environment, industrialization and conservation in the view of sustainable development.

Sr. No.	Unit	Sub-unit	Teaching hours	Credits
1.	Environmental Disasters	1. Definition and Classification of Disaster a. Natural disasters- i) Landslide ii) drought b. Biological Disasters- i) Swine Flu ii) Novel Corona (COVID-19) 2. National Disaster Management Authority (NDMA)	12	3
2	Environmental problems	1.Global warming and climate change 2.Ozone depletion 3.Solid waste 4.Population Explosion	12	
3	Environmental Planning and Management	1.Need of Planning and Management 2.Micro, macro and meso level Planning 3.Environmental Impact Assessment (EIA)	12	
4	Environmental Policies	1.Introduction of environmental policies a. Kyoto Protocol b. Montreal Protocol c. Basel Convention d. Ramsar Convection	12	

References

1. अहिरराव वा. र., अलिझाड सु. सु., वराट तू. मा., धापटे. चं. सा. आणि भोस. रा. शा. (२००२) *पर्यावरण विज्ञान*, निराली प्रकाशन
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3. चौधर, ए.एच. आणि इतर (२०१४) *आपत्ती व्यवस्थापन*, अथर्व प्रकाशन, पुणे.
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5. मुसमाडे, ए. एच., मोरे, जे. सी., (२०१४) *आपत्ती व्यवस्थापनाचा भूगोल* डायमंड पब्लिकेशन, पुणे.
6. घारे, एम. (२०१०), *नैसर्गिक संसाधनांची परिस्थितीकी*, प्रफुल्लता प्रकाशन, पुणे.
7. Goudie A, 2001, *The Nature of The Environment*, Blackwell ,Oxford. Deshpande C.D., *Maharashtra*, National Book Trust, Delhi
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S.Y.B.A. Syllabus in Geography (Credit system)

Semester IV (Revised from June 2023)

Course Title: Population Geography-II

Code No- UAGG241

No of Credits: 03

No of Periods- 48

Objectives:

- 1) To introduce students to the Population Policy of India.
- 2) To understand the health indicator in India.

Sr. No.	Unit	Sub-unit	Teaching hours	Credits
1.	Concept and Theories of Population	1. Population and Resource: Over Population, Optimum Population and Under Population Theories of Population- a. Malthusian Theory b. Marxian Theory	12	3
2	Problems and Population Policies	1. Population problem in India 2. Population problem in Developed Countries- Japan, Scandinavian Countries 3. Population Policies in India	12	
3	Population - Contemporary Issues	1. Ageing of Population 2. Declining Sex Ratio 3. Malnutrition	12	
4	Urbanization	1. Concept of Urbanization 2. Trends of Urbanization in India 3. Problems of Urbanization in India	12	

References

- 1) Bhende, A. and Kanitkar, T. (2000). *Principles of Population Studies*, Himalaya Publishing House.
- 2) Chandna R.C. and Sidhu M.S. (1980). *An Introduction to Population Geography*, Kalyani Publishers.
- 3) Husain, M. (1999). *Human Geography*, Rawat Publications, Jaipur.
- 4) कुंभारे, ए.आर. (२०००). लोकसंख्या भूगोल, मुरलीधर प्रकाशन, पुणे.
- 5) कुंभारे, ए.आर. (२००३). मानवी भूगोल, पायल पब्लिकेशन्स, पुणे.
- 6) घोलप, टी.एन. (१९९७). लोकसंख्या भूगोल, निशिकांत प्रकाशन, पुणे.
- 7) मुसमाडे, ए.एच., सोनावणे, ए.ई., आणि मोरे, जे.सी. (२०१५). लोकसंख्या आणि वस्तीभूगोल, डायमंड प्रकाशन, पुणे.
- 8) मोरे, जे.सी., पगार, एस.डी. आणि थोरात, ए.एम. (२०१९). मानवी भूगोल, निराली प्रकाशन, पुणे.
- 9) सावंत, आठवले, आणि मुसमाडे, ए.एच. लोकसंख्या भूगोल, मेहता प्रकाशन, पुणे.

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S.Y.B.A. Syllabus in Geography (Credit system)

Semester IV (Revised from June 2023)

Course Title: Practical Geography-II Cartographic Techniques and Surveying

Code No- UAGGP242

No of Credits: 04

No of Periods- 60

Workload- Six periods per week of per batch consisting 12 students. Last batch should have more than six students. Practical examination for this course will be conducted at the end of semester

Objectives of the Course-

1. To introduce the students to the basic and contemporary concepts in Cartography and surveying.
2. To acquaint the students with the utility and applications of field excursion and surveying.

Course outcome- after the successful completion of the course students will be able to –

1. Develop practical knowledge and application of cartographic techniques and surveying.
2. Aware of the new techniques, accuracy and skills of Map Making

NO	Topic	Sub Topic and Learning Points	No of Practical's	Credits
1	Cartographic techniques II	1. Distribution Maps a) Dot Method b) Choropleth Map c) Flow diagram	04	04
2	Surveying-I	1. Definition of Surveying- 2. Types of North Direction (True, Magnetic and Grid North) 3. Types of Survey a. Plane Table Survey (Radiation and Intersection Method) b. Prismatic Compass Survey (Open Traverse)	06	
3	Surveying-II	1. Dumpy level Survey a) Rise and Fall Method b) Collimation Method 2. GPS Survey and Plotting 3. Measurement and conversion of land (hector to Acre, Square km to square meter, square meter to square feet)	06	
4	Excursion / village/city survey and report writing	Short study tour of two days OR one long study tour of more than five days duration anywhere in the country and preparation of tour report OR- Village survey and preparation of report	04	

Note:

1. Use of Map stencils, log tables, calculator, computer, statistical table is allowed at the time of Examination.
2. Students should check the practicals regularly and Journal should be certified by practical in-charge and Head of the Department before the final examination.
3. Students without a certified journal should not be allowed for the practical examination.
4. Each of the practical batches needs a separate question paper.

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2. Singh R. L. and Singh R. P. B., 1999, Elements of Practical Geography, Kalyani Publishers
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7. Karlekar S and Shitole T., 2022, Practical Geography, Diamond Publication
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Kanetkar T. P., Kulkarni S. V., 1986, Surveying and Leveling, Pune Vidyarthi Griha Publication, Pune

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S.Y.B.A. Syllabus in Geography (Credit system)

Semester IV (Revised from June 2023)

Skill Enhancement Course (SEC-2B)

Title – Fundamentals of Global Positioning System (GPS)

Code No- UAGGSEC244

No of Credits:02

No of Periods-30

Objectives of the Course-

1. To acquaint students with the Global Positioning System (GPS) Technology
2. To provide comprehensive application knowledge of GPS Technique

Course outcome- after the successful completion of the course students will be able to –

1. Get thorough knowledge of Global Positioning System (GPS) Technology
2. Students will aware of the advanced techniques remote sensing

NO	Topic	Sub Topic and Learning Points	Teaching hours	Credits
1	Global Positioning system (GPS)	1. Introduction to GPS 2. History of GPS 3. Development of NAVSAR & GLONAS a) Global Navigation Satellite System (GNSS) b) Indian Regional Navigation Satellite System (IRNSS)	12	02
2	GPS Satellite constellation and orbits	1. GPS Segments- a. Space Segment b. Control Segment c. User Segment 2. GPS orbital parameters	12	
3	Applications of GPS	1.Collection of Ground Control Points (GCPs) 2. Applications of GPS	06	

Reference Books:

1. Elliott K., and Christopher H. (1996), Understanding GPS: Principles and Applications, UK: Artech House Publication
2. Giuseppe, A. F. (2013), High Frequency Over-the-Horizon Radar: Fundamental Principles, Signal Processing, and Practical Applications, USA: McGraw Hill Education Publication.
3. Hofmann, B. Wellenhof, H. L., and Collins J., (1992), GPS: Theory and Practice, New York: Springer Publication
4. Paul, R. W., and Bon A. D., (2014), Elements of Photogrammetry with Application in GIS, USA: McGraw Hill Education Publication.