

Anekant Education Society's

Tuljaram Chaturchand College, Baramati

(Autonomous)

Three years degree programme in Geography

(Faculty of Science and Technology)

Revised Syllabus for

S.Y.B.A. Geography (Semester III)

For Tuljaram Chaturchand College, Baramati

Choice Based Credit System Syllabus (2022 Pattern)

To be implemented from Academic Year 2023-2024

Title of the Course: B.A. (Geography)

Preamble

Introduction:

SYBA

Tuljaram Chaturchand College has decided to change the syllabus of various faculties from June, 2022. Taking into consideration the rapid changes in science and technology and new approaches in different areas of Geography and related subjects, Board of Studies in Geography of Tuljaram Chaturchand College, Baramati - Pune has prepared the syllabus of B. A. Geography Semester - III under the Choice Based Credit System (CBCS). The model curriculum as developed by U.G.C. is used as a guideline for the present syllabus.

A bachelor degree in geography will provide you the knowledge and skills you need to begin a variety of rewarding careers. Geographers work as urban planners, GIS technicians and analysts, disaster preparedness planners, teachers, environmental scientists, remote sensing analysts, transportation planners, demographers, hydrologists and in a variety of other areas. Students who complete bachelor degree in Geography, courses will examine the spatial organization of physical features and human activities at a variety of spatial scales from local to global. Students will be able to locate features on the surface of the earth, explain why they are located where they are, and describe how places are similar and/or different. Students will also examine human interactions with the environment and describe how physical and cultural landscapes change through time. Students completing physical geography courses will be able to describe the processes that drive earth's climate, create landforms, and govern the distribution of plants and animals. Students completing human geography will analyze and describe cultural phenomenon such as population, development, agriculture, language, and religion.

Aims and Objectives of the new curriculum of the SYBA:

- 1. To maintain updated curriculum.
- 2. To take care of fast development in the knowledge of Geography.
- 3. To enhance the quality and standards of Geography Education.
- 4. To provide a broad common frame work, for exchange, mobility and free dialogue across the Indian Geography and associated community.
- 5. To create and aptitude for Geography in those students who show a promise for higher studies and creative work in Geography.
- 6. To create confidence in others, for equipping themselves with that part of

Programme outcomes (Pos) (B.A. Geography):

- 1. Student will learn a basic narrative of geographical features in a various region of the world.
- 2. Students are enhancing the ability to use Geographical instruments for the advanced study of geography.
- 3. Student will understand & evaluate different geographical theories, principles, various arguments and point of view.
- 4. Development of observation and survey skills through study tours, field visits and village survey among students.
- Students enhance the basic skill about advanced Geo-spatial techniques regarding GIS,
 RS, GPS, DGPS, Total Station and Drone Survey.
- 6. Student will be able to correlate the knowledge of physical geography with the human geography. They will be able to acquire the knowledge of Human Geography and will correlate it with their practical life.
- 7. Student will be able to analyze the problems of physical as well as cultural environments of both rural and urban areas. Along with they will try to find out the possible measures to solve those problems.
- 8. They will be able for conducting social survey project which is needed for measuring the status of development of a particular area or section of the society.
- 9. Students will be able to handling and application of various modern instruments so that they can be collect data.
- 10. They will learn preparation of map based on Geo-spatial technology by using the modern geographical map making techniques, such as Satellite images of different bands, Google Maps, Google Earth etc.
- 11. As a student of Geography, they will be able to develop their observation power through field experience and in future they will be able to identify the socioenvironmental and socioeconomic problems of society.
- 12. After the completion of the project, they will be efficient in their communication skill as well as skill to interact with society.
- 13. This syllabus design according to competitive exam like MPSC and UPSC.

14. Anekant Education Society's

Tuljaram Chaturchand College, Baramati

(Autonomous)

Board of Studies in Geography

From 2022-23 To 2024-25

Sr. No.	Name	Designation	
1.	Dr. Arun S. Magar	Chairman	
2.	Dr. Asaram S. Jadhav	Member	
3.	Mr. Vinayak D. Chavan	Member	
4.	Mr. Sachin C. Memane	Member	
5.	Ms Akshata S. Raje	Member	
6.	Dr. Santosh Lagad	Vice-Chancellor Nominee	
7.	Dr. Pravin Kokane	Expert from other University	
8.	Dr. T. P. Shinde	Expert from other University	
9.	Dr. Babaji Maskare	Industry Expert	
10.	Mr. Ganesh Ghanawat	Meritorious Alumni	
11.	Kadam Radhika	Student	
12.	Saste Harshada	Student	

Choice Based Credit System Syllabus (2022 Pattern)

To be implemented from Academic Year 2022-2023

GEOGRAPHY

Course Structure

Class	Semester Paper Code Subject		Subject
		•	
FYBA	I	UAGG111	Physical Geography
TIDA	II	UAGG121	Human Geography
		UAGG231	Geography of Disaster Management-I
	III	UAGG232	Physical Geography of Maharashtra
	111	UAGG233	Practical in Elements of Map and Surveying
SYBA		UAGGSEC-1	Fundamentals of Google Earth
SIDA		UAGG241	Geography of Disaster Management-II
	IV	UAGG242	Human Geography of Maharashtra
	1 V	UAGG243	Statistical Techniques in Geography
		UAGGSEC-2	Research Methodology in Geography
		UAGG351	Physical Geography of India
	V	UAGG352	Introduction to Remote Sensing
		UAGG353	Practical in Remote Sensing
TYBA		UAGGSEC-3	Fundamentals of Google map
IIDA		UAGG361	Human Geography of India
	VI	UAGG362	Introduction to GIS
	ļ	UAGG363	Practical In GIS
		UAGGSEC-4	Application of Google Map

Department of Geography **B.A. PROGRAMME CREDIT DISTRIBUTION PATTERN (128 Credit)**

Class	Semester	Core Course		Elective Course	е	Ability Enhancement Compulsory Courses (AECC)		Total Credit
		Course	Discipline Specific Elective	Dissertation Project	Generic Elective Course	Ability Enhancement Compulsory Courses	Skill Enhancement Courses	Credit
FYBA	I	4 papers 4 x 3 = 12 Credits	-	-		Comp.English 3 Credits Mar/Hin/Sanskrit = 3 Credits		18
	П	4 papers 4 x 3 = 12 Credits	-	-	Democracy 2 Credit Phy.Edu. 2 Credit	Comp.English 3 Credits Mar/Hin/Sanskrit = 3 Credits		22
SYBA	III	3 papers 3 x 3= 9 Credits	2 Special papers 2 x 3= 6 Credits	-	Env.Sci. 2 Credit	Comp.English 3 Credits	Special papers 1 x 2= 2 Credits	22
	IV	3 papers 3 x 3= 9 Credits	2 Special papers 2 x 3= 6 Credits	-		Certificate Course Not Related to subject 2 Credit	Special papers 1 x 2= 2 Credits	22
TYBA	V	3 papers 3 x 3= 9 Credits	2 Special papers 2 x 3= 6 Credits Certificate Course Related to subject 2 Credit	-	-	Comp.English 3 Credits	Special papers 1 x 2= 2 Credits	22
	VI	3 papers 3 x 3= 9 Credits	2 Special papers 2 x 3= 6 Credits	1 Project related to subject 2 Credit	-	Comp.English 3 Credits	Special papers 1 x 2= 2 Credits	22
	•	60	26	2	6	26	8	128

Mandatory 8 additional / add on credits for Undergraduate Programmes

Note: 1. 6 credits from Group-1 are compulsory

2. Choose minimum 2 credits from Group-2 to Group-7

	(a)	Physical Education (at F.Y.B.A. Sem. II)	02 credits
Group-1	(b)	Democracy Course (FYBA Sem. II)	02 credit
	(c)	Environmental Awareness (S.Y.B.A. Sem. III)	02 Credit
Group-2	(a)	Certificate Course Not Related to Subject (S.Y. B.A. Sem. IV)	02 Credit
	(a)	Representation in Sports at University Level	02 credits
Group-3	(b)	Representation in Sports at State Level / National level	02 credits
	(c)	Representation in Sports at International (overseas) Level	04 credits
	(a)	National Social Service Scheme (participation in college camp)	02 credits
Group-4	(b)	National Social Service Scheme (participation in university camp)	02 credits
	(c)	NCC (participation in annual camp)	02 credits
	(d)	NCC (with B certificate/ C certificate award)	02 credits
	(e)	NSS / NCC participation in Republic day parade	04 credits
	(f)	Selection in AVISHKAR at University Level	02 credits
Group-5	(a)	Research paper publication at National level	02 credits
	(b)	Research paper publication at International (overseas) level	02 credits
Group-6	(a)	Participation in Summer School/ Internship programme / Short term course (not less than 2 weeks duration)	02 credits
	(b)	Participation in cultural and co curricular activities/ extracurricular activities/competitions at University level / State Level	02 credit
Group-7	(a)	Participation in cultural and co curricular activities/ extracurricular activities/competitions at University level / State Level	02 credit
	(b)	Participation in cultural and cocurricular activities / extracurricular activities/	02 credits
		competitions at International (overseas) level	

Note: 1) One Credit = 15/16 Lectures.

- 2) The Project should be initiated at on the onset of V Semester and submitted during VI Semester.
- 3) FY/SY/TY --> 4 Lectures per week.
- 4) Theory paper be covered with 70% actual teaching (3 actual lectures per week) and 30% component (1 lecture per week) of self studyshould be further evaluated through Group discussion / Seminar / Open Book Test / MCQ / Essay writing / Assignment etc.

S.Y.B.A. Geography, Syllabus for Semester III

Paper: UAGG231: Geography of Disaster Management

No. of Credits: 03 No. of Periods: 48

Learning Objectives:

- 1. To introduce students to the fundamental concepts of geography in relation to disaster management.
- 2. Students will learn about the nature of disasters, their causes, and impacts.
- 3. The course will also explore the role of geography in disaster management, including hazard mapping, risk assessment, and emergency response planning.
- 4. Students will learn about the impacts of disasters on people and the environment, and how geospatial technologies can be used to mitigate these impacts.
- 5. The course will also cover the role of government agencies, NGOs, and communities in disaster management.

Learning Outcomes:

- 1. Understand the basic concepts of geography related to disaster management.
- 2. Analyze the relationship between physical geography and natural disasters.
- 3. Explore the impact of human activities on natural disasters.
- 4. Learn about local disaster and risk assessment.
- 5. Understand the role of geospatial technologies in disaster management.
- 6. Understand the role of government agencies, NGOs, and communities in disaster management.

Topics and Learning points

Unit 1: Introduction to Disaster Management and Geography	Lectures
1.1. Definition of hazard and disaster, Types of Disasters	12
1.2. Introduction to Disaster Management Cycle	
1.3. Role of geography in disaster management	
1.4. Global and regional trends in disasters	
Unit 2: Natural and Manmade Disasters	12
1.1. Tectonic hazards: earthquake	
1.2. Climatic hazards: Cyclone, floods and droughts	
1.3. Geomorphic hazards: landslides and avalanches	
1.4. Human-induced hazards: industrial accidents, oil spills, and nuclear	
disasters	
1.5. Global warming and Climate change	
Unit 3: Government Agencies, NGOs, and Communities in Disaster	12
Management	
1.1. Role of government agencies in disaster management	
1.2. Role of NGOs in disaster management	
1.3. Role of communities in disaster management	
1.4. Role of Students in Disaster management	
Unit 4: Disaster Management using Geospatial Technologies	12
1.1. Remote sensing and GIS in disaster management	
1.2. Disaster monitoring and early warning systems: Cyclone and Flood	
1.3. Geospatial analysis of any recent disaster	
1.4. A case study of any local disaster event from the area of students	

Reference:

- 1. "Geography and Disasters" by Susan L. Cutter, David A. Johnston, and Christopher T. Emrich.
- 2. "Disaster Management: Enabling Resilience" by Anne K. Zerger and Edward A. Thomas.
- 3. "Disaster Risk Reduction: Cases from Urban Africa" edited by Kennedy Mbekeani and Eunice M. M. Musvoto.
- 4. "Disaster Risk Management in Asia and the Pacific" edited by Rajib Shaw, Fuad Mallick, and Anshu Sharma.
- 5. "Geography, Environment and Disaster Risk Reduction" edited by Susan L. Cutter, Isabelle Ruin, and Jörn Birkmann.
- 6. Saptarshi P. G., More J. C., Ugale V. R. (2009), "Geography and Natural Hazard" Diamond, Pune.
- 7. Savindra Singh, (2000): Environmental Geography. Prayag Pustak Bhavan, Allahabad
- 8. Singh, S., 1998. Geomorphology, Prayag Pustak Bhavan, Allahabad.
- 9. A.H.Choudhar, P.N.Salve, S.M.Kadam.R.H.Choudhar, V.C.Ithape (2010),

[&]quot;Contemporary Issues and Geography", Atharva, Pune.

S.Y.B.A. Geography, Syllabus for Semester III

Paper: UAGG232: Physical Geography of Maharashtra

No. of Credits: 03

No. of Periods: 48

Learning Objectives:

- 1. This course is designed to provide students with an in-depth understanding of the physical geography of Maharashtra.
- 2. Students will be introduced to the various physical features of the state, including its landforms, climate and water resources.
- 3. The course will also cover the impact of human activities on the physical environment and the ways in which they can be managed sustainably.

Learning Outcomes:

- 1. To understand the physical geography of Maharashtra.
- 2. To identify and describe the landforms, climate, and water resources of Maharashtra.
- 3. To identify and describe the flood and drought prone areas of Maharashtra.
- 4. To examine the impact of human activities on the physical environment of Maharashtra.
- 5. To explore strategies for sustainable management of natural resources in Maharashtra.

Topics and Learning points

Unit 1: Introduction:	Lectures
Historical and Political Background of the state	12
2. Geographical location of State	
3. Adjoining States	
4. Physical and Administrative Divisions	
Unit 2: Physical Setting of Maharashtra	12
1. Geological Structure of Maharashtra.	
2. Physical Structure (Mountain, plateau, Plains)	
3. Drainage Pattern (East and West flowing rivers)	
4. Major Soil Types and Distribution	
Unit 3: Climate of Maharashtra	12
1. Climatic Regions of Maharashtra	
2. Distribution of Rainfall	
3. Draught prone areas- Problems and Management	
4. Flood areas - Problems and Management	
Unit 4: Resources of Maharashtra	12
Water: Problems in utilization and conservation	
2. Forest: Types and Conservation	
3. Mineral; Iron ore, Manganese and Bauxite	
4. Power: Hydraulic, Thermal, Atomic, Wind.	

Reference:

- 1. Dikshit K.R., Maharashtra in Maps,
- 2. Deshpande C. D., Maharashtra
- 3. Sadhu Arun, Maharashtra, National Book Trust
- 4. Savadi A. B., Geography of Maharashtra: Nirali Prakashan, Pune.
- 5. Dastane S., Maharashtra, Ramchandra and company, Pune
- 6. Sawadi A. B., The Mega State Series: Nirali Publication, Pune.
- 7. Maharashtra state Agricultural Atlas
- 8. Karve I., Maharashtra its Land and people,
- 9. More J. C., 2014, Geography & Agriculture For MPSC Examination, Atharv Publication, Pune (Marathi)

S.Y.B.A. Geography, Syllabus for Semester III

Paper: UAGG233: Elements of Map and Surveying

No. of Credits: 04 No. of Periods: 64

Learning Objectives:

- 1. Students will understand definitions, elements, classification and use of maps.
- 2. Students will well aware about types of map scale.
- 3. Students will able to convert a map scale from one scale to another in metric and British measurement systems.
- 4. To enable the students to use various Projections and Cartographic Techniques.
- 5. To acquaint the students with basic of Statistical data.
- 6. To acquaint the students with the principles of surveying, its importance and utility in the geographical study.

Learning Outcomes:

After study this paper

- 1. students can able to identify any map scale and projection.
- 2. They can also know which projection is suitable for given region.
- 3. Learn about scale conversion.
- 4. Students can able to survey in the actual field. Ex. Elevation of land, area, height from the sea level and coordinates of the fields etc.

Notes:

- ➤ 12 students per batch. Each batch has 6 periods in a week.
- > Use of stencils, log tables, computer and calculator is allowed.
- Journal should be completed and duly certified by practical in-charge and Head of the Department.
- Int. and Ext examiner should set jointly the question paper for each batch

Topics and Learning points

Unit – 1: Maps and Scales	Lectures
1. Map: Meaning, Definition and Types.	12
2. Map Scale: Definition and Types	
3. Conversion of Verbal scale to numeric and vice- versa (in British	
and Metric Systems)	
i) Construction of simple graphical scale (Two examples)	
ii) Construction of comparative scale (Two examples)	
Unit – 2: Map Projection	12
1. Mercator's Projection	
2. Mollweide's Projection	
3. UTM Projection	
Unit – 3: Data Representation techniques using MS Office	12
1. Simple Line Graph	
2. Polygraph	
3. Simple Bar Diagram	
4. Compound Bar Diagram	
5. Pie Diagram (Chart)	
Unit – 4: Surveying (without coordinate system)	12
1. Dumpy Level Survey Plotting	
i. Rise and Fall Method ii. Collimation Plane Method	
2. Total Station Survey	
Unit – 5: Surveying (with coordinate system)	16
1. GPS Survey & Plotting	
2. GNSS (using of DGPS) Survey	
3. Drone Survey	

Reference Books & Websites:

Singh Lehraj, (1973): Map Work and Practical Geography, Central Book Depot Allahabad

- D. Y. Ahirrao and E. K. Karanjkhele, (2002): Pratyakshik Bhugol, Sudarshan Nashik
- P. G. Saptarshi and S. R. Jog, Statistical Methods
- S. N. Karlekar, (2008): Statistical Methods, Diamond Pune
- **T. P. Kanetkar and S. V. Kulkarni, (1986) :** Surveying and Leveling, Pune Vidyrthi Griha Prakashan– Pune

Arjun Kumbhare, Practical Geography

Pijushkanti Saha & Partha Basu. (2007), 'Advanced Practical Geography', Books and Allied (P) Ltd, Kolkata