

As per NEP 2020



UNIVERSITY OF MUMBAI

S. Z. S. P. Mandal's

SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA

SAWANTWADI (Autonomous)

DIST: SINDHUDURG- 416 510, MAHARASHTRA



Syllabus for Approval

Certificate Course in Arts

B.A. (Geography)

Syllabus for

Sem-I & II

Reference: GR dated 16th May 2023 for Credit structure

As per NEP 2020



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B.A. (Geography)

Syllabus for

Sem-I

Reference: GR dated 16th May 2023 for Credit structure

UNIVERSITY OF MUMBAI



(As per NEP 2020)

Sr. No.	Heading	Particulars
1	Title of the Program	Certificate Course in Arts B.A. (Geography)
2	Eligibility for Admission	HSC
3	Duration of Program	4 Years
4	Intake Capacity	120
	Scheme of Examination	Theory: 60 Marks Internal : 40 Marks
5	Standard of Passing	40 %
6	Program Academic Level	4.5
7	Pattern	Semester
8	Status	New
9	To be implemented from Academic Year	2023 -2024

Sign of HOD / Co-ordinator

Sign of Dean

Dr. Sudhir M. Buva

Faculty of Arts

Department of Geography

PREAMBLE

Introduction:

S. P. K. Mahavidyalaya, Sawantwadi (Autonomous) believes in implementing several measures to bring equity, efficiency and excellence in higher education system in conformity to the guidelines laid down by the University Grants Commission (UGC). In order to achieve these goals, all efforts are made to ensure high standards of education by implementing several steps to enhance the teaching- learning process, examination and evaluation techniques and ensuring the all-round development of learners.

The Three-year course in B.A. Geography has been designed to have a progressive and innovative curriculum in order to equip our learners to face the future challenges in the field of higher education. In semesters I and II learners are introduced to the basic areas of Geography such as Human Geography, Map Scale, Thematic Maps and SOI maps

In semesters III and IV the course content is made more rigorous by introducing the details of each of the above area. In semesters V and VI, course are designed to help in specialization in the core areas of Geography such as Geomorphology, Climatology, Rural and Urban Settlement, Environmental Geography, Geography of Resources, Climatology Oceanography, Map Projection, Population Theories, Geographical Information System and Remote Sensing.

OBJECTIVES:

- To introduce the students' basic concepts in Geography.
- To develop practical skill in Geography using range of activities such as Weather Station Visit and Study tour.
- To inculcate a research attitude by involving learners in simple research project, review of research articles.
- To enhance knowledge of Geography through problem solving, tutorials and seminars
- To acquaint the students with various branches of Geography
- To help learners to plan a progressive and successful career in Geography

Program Outcome:

After successful completion of this programme learners will be able to

- Understand, coherently and effectively about various genres of Geography.
- Understanding the diverse concepts in the field of Geography.
- Understand global and regional patterns of cultural, political and economic institutions, and their effects on exploitation of natural resources and landscapes.
- Understand need for protection and conservation of natural resources.
- Develop basic skills in practical Geography and its industrial applications.

Program Specific Outcome: After successful completion of this programme (Geography)

learners are able to

- Develop the knowledge of basic concepts in Geography.
- They will have a general understanding about the geomorphologic and geotectonic process and formation.
- Get a hold on higher educational opportunities like post-graduation in Geography.
- They will gather knowledge about the fundamental concepts of Geography
- Explore research areas in Geography and related fields.

SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA SAWANTWADI (Autonomous)

DEPARTMENT OF GEOGRAPHY

Proposed List of Major, Minor, Open Elective, Skill Enhancement Course, Ability Enhancement Compulsory Course, Indian Knowledge System Course, Vocational Skill Course, Details of Semesters

(To be implemented from Academic Year 2023-24)

Program: Certificate Course

Class: BA

Semester: I

Sr. No .	Course Code	Title of the Course	Category of Course	No. of Lecture Hours	No. of Lectures per Unit	Teaching Hours per week (L+P)	SEE	CIE	Total Marks	No. of Credits
1	MJA101GET	Introduction to Human Geography	Major	60	15	04+00	60	40	100	4
2	MNA101GET	Introduction to Human Geography	Minor	60	15	04+00	60	40	100	4
3	GEOE101	Basic Concept in Geography for Competitive Exam-I	OE	30	15	02+00	30	20	50	2
4	GESE101	Thematic Mapping Skills	SEC	60	30	00+04	30	20	50	2
5	GEVS101	Tools and Techniques in Geography -I	VSC	60	30	00+04	30	20	50	2
6	GEVE101	Environmental Education-I	VECC	30	15	02+00	30	20	50	2
7	GEIK101	Contribution of Ancient Indian in Development of geography	IKS	30	15	02+00	30	20	50	2
		Sub - Total		330	123	14 +08	270	180	450	18

Notes:

One Hour of Lecture is equal to 1 Credit
One Hour of Tutorial is equal to I Credit
One Hour of Practical is equal to 1 Credit

Acronyms Expanded

MJ : Major
MN : Minor
OE : Open Elective Course
SEC : Skill Enhancement Course
VECC : Value Education Compulsory Course
IKS : Indian Knowledge System
VSC : Vocational Skill Course
SEE : Semester End examination
CIE : Continuous Internal Evaluation
L+P : Lecture + Practical(s)

Credit Structure of the Program Arts Faculty

Level	Class	Sem	Major (Mandatory)		Major (Elective)		Minor		Open Elective		Vocational Skill Courses / Skill Enhancement Courses		Ability Enhancement Courses/Value Education Courses/Indian Knowledge System		Field Project/Internship/Community Engagement/Co-curricular Courses		TOTAL CREDITS	Degree
			MAJOR SUBJECTS	TOTAL CREDITS	MAJOR SUBJECTS	TOTAL CREDITS	MINOR COURSES	TOTAL CREDIT	OPEN ELECTIVE COURSES	TOTAL CREDITS	VSEC COURSES	TOTAL CREDITS	AEC,VEC, IKS COURSES	TOTAL CREDITS	DETAILS OF FP/CE/CC	TOTAL CREDITS		
4.5	FYBA	I	MJ-01	4	-	0	MN-01	4	OE-1	2	SEC	2	AEC(CS)	2	CC /NSS/NCC Studies/DLLE	2	22	Exit Option : Award of UG Certificate in Major with 44 Credits and an additional 4 credits Core NSQF course/ Internship or Continue with Major and Minor
											VSC	2	VEC(EVS)	2				
				IKS	2													
		II	MJ-02	4	-	0	MN-02	4	OE-2	4	SEC	2	AEC(CS)	2	CC /NSS/NCC Studies/DLLE	2		
OE-3	VSC								2		VEC(EVS)	2						
5	SYBA	III	MJ-03	8	-	0	MN-03	4	OE-4	2	VSC	2	AEC(BC)	2	CC /NSS/NCC Studies/DLLE	2	22	Exit Option : Award of UG Diploma in Major with 88 Credits and an additional 4 credits Core NSQF course/ Internship or Continue with Major and Minor
			MJ-04										VEC(EVS)	2				
		IV	MJ-05	8	-	0	MN-04	4	OE-5	2	SEC	2	AEC(BC)	2	CC /NSS/NCC Studies/DLLE	2		
			MJ-06								VSC	2						
5.5	TYBA	V	MJ-07	16	MJE-01	4	MN-05	2									22	Exit Option : Award of UG Degree in Major with 132 Credits or Continue with Major for Honours/ Research
			MJ-08															
			MJ-09															
			MJ-10															
		VI	MJ-11	16	MJE-02	4									RP-1	2		
			MJ-12															
		MJ-13																
		MJ-14																
Total Credits			Major 56+8=64				Minor	18	OE	10	VSEC	14	AEC.VES,IKS	16		10	132	
6	Fourth Year of BA	VII	MJ-15	12	MJE-03	4	MN-06	4									22	Award of Bachelor of Arts Degree with Honours (with the completion of Courses equal to a minimum of 176 credits)
			MJ-16															
			MJ-17															
			MJ-18															
		VIII	MJ-19	12	MJE-04	4									RP-2	4		
			MJ-20															
		MJ-21																
		MJ-22																
Total Credits			Major 84+16=100				Minor	22	OE	10	VSEC	14	AEC.VES,IKS	16		14	176	

Title of the Programme

Certificate Course in Arts (B.A. Geography)

Committee for Creation of Syllabus

Sr. No.	Name of the Faculty	Qualification	Area of specialization	Name of the College	Nomination
01	Dr. Sudhir Murlidhar.Buva	M.A, SET, M. Phil, Ph.D.	Medical Geography	HOD, Dept. of Geography, SPK College, Sawantwadi,	Chairman
02	Miss. Harshda Sanjay Parab	M.A		(CHB) Dept. of Geography, SPK College, Sawantwadi,	Faculty Member
03	Prof.Dr. Sambhaji Dnyaneshwar Shinde	M.A, Ph. D.	Environmental Geography, Agricultural Geography & Remote Sensing	Dept. of Geography, Shivaji University,Kolhapur	Subject Expert from outside the Parent University Nominated by Academic Council
04	Dr.Prabir Kumar Rath	M.A., C.P.S., M.Phil., Ph.D.	Regional Planning & Tourism Geography	HOD, Dept. of Geography, Government College, Khandola,Marcela,Goa	Subject Expert from outside the Parent University nominated by Academic Council
05	Dr.Sameer Arun Butala	M.A, Ph.D.	Geoinformatics	HOD, Dept. of Geography, Sundharrao More College,Poladpur,Dist-Raigadh	Subject Expert nominated by Vice Chancellor
06	Mr. Pranav Chintaman Raut	M.A (Geog.) SOI Course	Geoinformatics	Director, Mahi Geoinformatics Consultancy (OPC)Pvt. Ltd.& UAV Academy Pvt.Ltd.	Representative from Industry/Corporate sector/ allied area relating to placement nominated by the Principal
07	Mrs. Poonam Ninad Naik	M.A, B.Ed.		R.S.B. Jr. College, Sawantwadi	College Alumni nominated by Principal
08	Mr.Sudhir Shrikant Risbud	B.E. (Electrical Engineering)	Researcher of Petroglyphs in Sindhudurg	President of Nisarg Yatri Sanstha,Ratnagiri	Expert from the outside the college nominated by the Principal

Sign of HOD / Co-ordinator

Dr. Sudhir M. Buva
Department of Geography

Sign of Dean

Faculty of Arts

Letter Grades and Grade Points:

Semester GPA / Programme CGPA Semester/ Programme	% of Marks	Alpha-Sign/ Letter Grade Result
9.00 - 10.00	90.0 - 100	O (Outstanding)
8.00 - < 9.00	80.0 - < 90.0	A+ (Excellent)
7.00 - < 8.00	70.0 - < 80.0	A (Very Good)
6.00 - < 7.00	60.0 - < 70.0	B+ (Good)
5.50 - < 6.00	55.0 - < 60.0	B (Above Average)
5.00 - < 5.50	50.0 - < 55.0	C (Average)
4.00 - < 5.00	40.0 - < 50.0	P (Pass)
Below 4.00	Below 40.0	F (Fail)
Ab (Absent)	-	Absent

Sign of HOD / Co-ordinator

Sign of Dean

Dr. Sudhir M. Buva

Faculty of Arts

Department of Geography

Appendix B
Justification for (Title of the new course)

1.	Necessity for starting the course:	As per the provisions of NEP 2020 accepted by Maharashtra Government, It is necessary to start this course.
2.	Whether the UGC has recommended the course:	Yes
3.	Whether all the courses have commenced from the academic year 2023-24	Yes
4.	The courses started by the University are self-financed, whether adequate number of eligible permanent faculties are available?	It is aided and grantable. Yes, adequate number of teachers are available for this course.
5.	To give details regarding the duration of the Course and is it possible to compress the course?	
6.	The intake capacity of each course and no. of admissions given in the current academic year:	Admission is under process
7.	Opportunities of Employability / Employment available after undertaking these courses:	Lots of opportunities are available in both Government and Private sectors. The course is also useful for self-employments and startups creation

Sign of HOD / Co-ordinator

Sign of Dean

Dr. Sudhir M. Buva
Department of Geography

Faculty of Arts

**Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24**

(Major/Minor Course) MJ/MNA101GET: GEOGRAPHY

Introduction to Human Geography

1. Syllabus as per NEP 2020:		
i)	Name of the Programme	: Certificate Course in Arts
ii)	Course Code	: (Major/Minor Course) MJ/MNA101GET
iii)	Course Titles	: Introduction to Human Geography (Semester I)
iv)	Credit Structure	: No. of Credits per Semester – 04
v)	No. of lectures per Unit	: 15
vi)	No. of lectures per week	: 04
2.	Scheme of Examination	: <ul style="list-style-type: none">• Written Exam: 4 Questions of 15 Marks each : 60 Marks • Internal Assessment: 40 marksTotal : 60 + 40 =100

**Syllabus as per NEP 2020 for Certificate Course in Arts
(Major/Minor Course) MJ/MNA101GET: GEOGRAPHY**

To be implemented from the Academic year 2023-24

**Course Title: Introduction to Human Geography
SEMESTER-I**

Objectives:

1. To introduce the students' basic concepts in Human Geography.
2. To provide an understanding of spatial and structural dimensions of human Geography.
3. To acquaint the students with various branches of human Geography

Programme Outcomes:

1. Understand, coherently and effectively about various genres of Geography.
2. Understanding the diverse concepts in the field of Geography.
3. Understand global and regional patterns of cultural, political and economic institutions, and their effects on exploitation of natural resources and landscapes.
4. Understand need for protection and conservation of natural resources.
5. Develop basic skills in practical Geography and its industrial applications.

Course Outcomes:

1. Understand comprehensively the nature, scope, approaches, branches and concepts in Human Geography
2. Understanding the concept, types and patterns of rural and urban settlements.
3. Understand the determinants on growth, distribution and problems of population.
4. Understand the concept, causes, types, trends and consequences of migration.

Syllabus as per NEP 2020 for Certificate Course in Arts

(Major/Minor Course) MJ/MNA101GET: GEOGRAPHY

Course Title: Introduction to Human Geography

SEMESTER-I

No. of Credits - 04

COURSE CODE: MJ/MNA101GET

Course code	Unit	Topics	Credits	Lecture
MJ/MNA101GET (Major /Minor Course)	I	Human Geography: An Introduction <ul style="list-style-type: none"> • Human Geography-Meaning, Definition, Nature, Scope • Branches of Human Geography • Different Approaches of Human Geography • Man Environment relation, Determinism • Possibilism, Probabilism 	04	15
	II	Population <ul style="list-style-type: none"> • Trends and Patterns of World Population change • Demographic Transition Model • Population Density, its distribution and its growth • Concept and Problems of Under-population, over-population and optimum population 		15
	III	Settlement <ul style="list-style-type: none"> • Concept of Urban and Rural Settlements • Types and Pattern of settlement • Site and Situation • Functional classification of Urban settlement 		15
	IV	Migration <ul style="list-style-type: none"> • Concept and Types of Migration • Causes of migration – pull and push; Consequences /effects of migration • Patterns and processes of migration • Emerging trends of migrations or Issues of legal and illegal international migration. Migrant refugee crisis 		15
		Total	04	60

Reference Books:

1. Johnson R. J. & Others (1983): The Dictionary of Human Geography, Blackwell England
2. Dikshit, R.D. (1997): "Geographical Thought: A Contextual History of Ideas", PHI Learning Private Limited, Delhi
3. Singh, R. Y. (2002): "Geography of Settlements", Rawat Publications, Jaipur
4. Koser, K. (2007): "International Migration: A Very Short Introduction", Oxford University Press, UK

5. Singh, L. R. (2009): "Fundamentals of Human Geography", Sharda Pustak Bhavan, Allahabad
6. Castles, S., Haas, H., and Miller, M. (2013): "The Age of Migration: International Movements in the Modern World", Guilford Pr.
7. Chandna, R. C. (2016): "Geography of Population: Concepts, Determinants and Patterns", Kalyani hende, A. and Kanitkar, T. (2015): "Principles of Population Studies",
8. Siddhartha, K. and Mukherjee, S. (2016): "Cities, Urbanisation and Urban Systems", Kitab Mahal, Delhi
9. Hussian ,M (2022): human Geography, Rastogi Publications, Jaipur
10. डॉ. सुभाषचंद्र सारंग, (२०१०): मानवी भूविज्ञान, विद्या प्रकाशन
11. प्रा. डॉ. अ.रा.कुंभारे, (२०१२): मानवी भूगोलाची मुलतत्वे, प्राची प्रकाशन
12. डॉ. विठ्ठल घारपुरे, (२०१७): मानवी भूगोल, पिंपळापुरे प्रकाशन, नागपूर
13. सवदी ए.बी .व कोळेकर, पी.एस. (२०१९) मानवी भूगोल, नीराली प्रकाशन, पुणे

Question Paper Pattern of Major & Minor Subject
University of Mumbai
SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA SAWANTWADI
(Autonomous) Revised Syllabus w.e.f. Academic Year, 2023-24
F.Y.B.A. Geography, Semester-I

Scheme of Examination for Each Semester:

Continuous Internal Evaluation (CIE): 40 Marks

Sr. No.	Particulars	Marks
01	One Unit Tests	20 Marks
02	Home Assignment/ Book Review/Skit/ Presentation/Poster/Chart /Model Making	15 Marks
03	Attendance	05 Marks
	Total	40 Marks

Semester End Examination (SEE): 60 Marks

Duration: 2 hours		Marks: 60
N.B. 1. All questions are compulsory and carry equal marks. 2. Use of Map Stencils and simple Calculator is allowed. 3. Attach appendix along with answer paper.		
Q. 1	Unit-I	15 Marks
<i>OR</i>		
Q.1	Unit-I (Question may be divided in to A and B)	15 Marks
Q. 2	Unit-II	15 Marks
<i>OR</i>		
Q. 2	Unit-II (Question may be divided in to A and B)	15 Marks
Q. 3	Unit-III	15 Marks
<i>OR</i>		
Q. 3	Unit-III (Question may be divided in to A and B)	15 Marks
Q. 4	Unit-IV	15 Marks
<i>OR</i>		
Q. 4	Unit-IV (Question may be divided in to A and B)	15 Marks

Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24

**Course Title: Basic Concept in Geography for
Competitive Exam-I
(Open Elective)**

1. Syllabus as per NEP 2020:			
i)	Name of the Programme	:	Certificate Course in Arts
ii)	Course Code	:	GEOE101 – (Open Elective)
iii)	Course Titles	:	Basic Concept in Geography for Competitive Exam-I Semester I
iv)	Credit Structure	:	No. of Credits per Semester – 02
v)	No. of lectures per Unit	:	15
vi)	No. of lectures per week	:	02
2.	Scheme of Examination	:	<ul style="list-style-type: none">• Written Exam: 3 Questions of 10 Marks each= 30 Marks• Internal Assessment: 20 marksTotal : 30 + 20 =50

Revised Syllabus for FYBA

Course Title: Basic Concept in Geography for Competitive Exam-I

(Open Elective)

To be implemented from 2023-24

Objectives:

This course is designed exclusively for the students preparing for the different competitive examinations including civil services, banking, railways, eligibility tests, and all other competitive examinations.

Course Outcomes:

After completion of the course the students will be able to:-

1. Understand the geographical features of India.
2. Introduce students with geographical aspects of India.

Students will be able to:-

1. Understand the basic concepts in Geography.
2. Familiarize with the basics of maps, Projection, Sign & symbols.

No. of Credits - 02

COURSE CODE: GEOE101

Course code	Unit No	Topics	Sub Topics	Credits	No. of Periods
GEOE101 (Open Elective)	I	Basic Concepts in Geography	i. Definition and branches of Geography ii. Concepts of location iii. Basic concepts of earth- Earth size and shapes, directions, Radius, Latitudes and Longitudes, Circumference, iii. Time: Local time and standard time	02	15
	II	Map basics	i. Definition of map ii. Types of maps -Physical and Cultural iii. Definition of Map scale and types		15
				Total	02

Reference Books:

1. Monmonier, Mark, 1997, Cartographies of Danger, Mapping Hazards in America, Chicago: University of Chicago Press.
2. MacEachren, Alan, M., 1995, How Maps Work, Representation, Visualization, and Design, Guilford Press
3. Monkhouse, F., (1967). Principle of Physical Geography. Philosophical Library Publishers: New York.
4. Pitty, A. (1971). Introduction to Geomorphology. Methuen & Co. Ltd: London. • Singh, S. (2000). Physical Geography. Prayag Pustak Bhavan: Allahabad.
5. Clyton, K. (1986). Earth Crust. Adus Book: London.
6. Dayal, P. (1996). Geomorphology. Shukla Book Depot: Patna.
7. Kale, V., & Gupta, A. (2001). Elements of Geomorphology. Oxford University Press: London.
8. Kale, V., & Gupta, A. (2015). Introduction of Geomorphology. University Press PVT: Kolkata.
9. More, J., & Devne, M. (2019). Physical Geography. Nirali Prakashan: Pune.

**Course Title: Contribution of Ancient Indian in
Development of Geography
Indian Knowledge System Course (IKS)**

1. Syllabus as per NEP 2020:		
i)	Name of the Programme	: Certificate Course in Arts
ii)	Course Code	: GEIK101 – (Indian Knowledge System Course)
iii)	Course Titles	: Contribution of Ancient Indian in Development of Geography Semester I
iv)	Credit Structure	: No. of Credits per Semester – 02
v)	No. of lectures per Unit	: 15
vi)	No. of lectures per week	: 02
2.	Scheme of Examination	: <ul style="list-style-type: none"> • Written Exam: 3 Questions of 10 Marks each= 30 Marks • Internal Assessment: 20 marks Total : 30 + 20 =50

Revised Syllabus for FYBA

Course Title: Contribution of Ancient Indian Scholars in Development of Geography Indian Knowledge System Course (IKS) To be implemented from 2023-24

Objectives:

1. To understand contribution of Ancient Indian Scholars in development of Geography
2. To acquaint the students with idea of evolution of Indian geographical thinking and Information.

Course Outcomes:

1. Understand the contributions of Ancient Indian Scholars in development of Geography
2. Acquaint with the idea of evolution of Indian geographical thinking and Information.

No. of Credits - 02

COURSE CODE: GEIK101

Course Code	Unit No.	Topics	Sub Topics and Learning Points	No. of periods
GEIK101 (Indian Knowledge System)	I	Ancient Geographical Concepts	Fundamental concepts in Geography a. The Universe and its Origin b. Earth: Size of Earth c. Continents (Dwipas) and oceans d. Latitudes and Longitudes	15
	II	Contribution of Indian Philosophers in development of Geography	i) Aryabhata, Bhaskaracharya ii) Varahmihira, Brahmagupta	15

Reference Books:

1. Iyengar, C.N. Srinivas, (1967), *History of Indian Mathematics*, the World Press, Calcutta.
2. Datta, B. and Singh, A.N., (2004), *History of Hindu Mathematics*, (2 Volumes), Reprint, Bharatiya Kala Prakashan, Delhi.
3. Dikshit, R.D., (2018), *Geographical Thought: A Contextual History of Ideas* (2nd Edition), PHI Learning.
4. सावदी ए .बी. भोगोलिक विचार प्रणालीचा विकास,निराळी प्रकाशन ,पुणे
5. वेळापूरकर बी.जी.,कणकुरे के.बी.,रथोड एच.बी.,उगाडे व्ही.आर.,विभूते एस.जे.(२०००),भोगोलिक विचारधारांचा विकास

Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24

Course Title: Environmental Education -I
(Value Education Course)

1. Syllabus as per NEP 2020:			
i)	Name of the Programme	:	Certificate Course in Arts
ii)	Course Code	:	GEVE101 – (Value Education Course)
iii)	Course Titles	:	Environmental Education -I (Semester I)
iv)	Credit Structure	:	No. of Credits per Semester – 02
v)	No. of lectures per Unit	:	15
vi)	No. of lectures per week	:	02
2.	Scheme of Examination	:	<ul style="list-style-type: none">• Written Exam: 3 Questions of 10 Marks each= 30 Marks• Internal Assessment: 20 marksTotal : 30 + 20 =50

Revised Syllabus for FYBA
Course Title: Environmental Education -I
(Value Education Course)

To be implemented from 2023-24

Objectives:

1. To introduce the students about the nature of Environment.
2. To acquaint the students with fundamental knowledge of ecosystem.

Course Outcomes:

1. Understand the basic components of Environment.
2. Familiarize with different processes associated with ecosystem.
3. Understand the basic concept of resources and biodiversity.
- 4.

No. of Credits - 02

COURSE CODE: GEVE101

SEMESTER-I

COURSE CONTENT				
Course Code	Unit No.	Content	No. of Credits	No. of Periods
GEVE101 (Value Education Course)	I	Environment and Ecosystem i. Definition, meaning and concept of Environment ii. Types of Environments iii. Importance of Environmental Studies iv. Definition & Concept of Ecosystem. v. Types of Ecosystems vi. Biotic and Abiotic factor vii. Energy flow ,Food chain, Food web, trophic level	02	15
	II	Resources and Biodiversity i. Resources Concept ,definitions, Classification and types ii. Resource conservation- meaning and methods- conventional and non-conventional resources iii Concept of Biodiversity a. Hotspots in India b. Biodiversity loss c. Conservation of biodiversity		15
		Total	2	30

References:

1. Singh, S., Prayag. (1997). Environment Geography, Allahabad: Pustak Bhawan.
2. Gholap, T. N. (2000). Environment Science (Marathi), Pune: Nishikant Publications.
3. Goudie, A. (2001). The Nature of the Environment, Blackwell: Oxford Publication.
4. Chandana, R.C. (2002). Environmental Geography, Ludhiana: Kalyani Publication.

5. Miller, G.T. (2004). Environmental Science: Working with the Earth. Singapore: Thomson Books.
6. Odum, E.P. (2005). Fundamentals of Ecology, India: Ceneage Learning.
6. Saxena, H.M. (2004). Environmental Geography, Jaipur: Rawat Publications.
7. Saxena, H.M. (2007). Environmental Geography, Jaipur: Rawat Publications.
8. Singh, R.B. (2009). Biogeography and Biodiversity, Jaipur: Rawat Publications.
9. Kormondy, E. J. (2012). Concept of Ecology, PHI Learning Pvt. Ltd.
10. Sharma, P.D. (2015). Ecology and Environment, Meerut, New Delhi: Rastogi Publications.

Question Paper Pattern of OE, IKS & VEC
University of Mumbai
SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA SAWANTWADI
(Autonomous) Revised Syllabus w.e.f. Academic Year, 2023-24
Revised Syllabus for FYBA
Semester- I

Scheme of Examination for Each Semester:

Continuous Internal Evaluation (CIE): 20 Marks

Sr. No.	Particulars	Marks
01	Presentation/Seminar/Home Assignment	15Marks
02	Attendance	05 Marks
	Total	20 Marks

Semester End Examination (SEE): 30 Marks

Duration: 1.15	hours	Marks: 30
N.B. 1. All questions are compulsory and carry equal marks. 4. Use of Map Stencils and simple Calculator is allowed. 5. Attach appendix along with answer paper.		
Q. 1	Unit-I	10 Marks
<i>OR</i>		
	Unit-I	10 Marks
Q. 2	Unit-II	10 Marks
<i>OR</i>		
	Unit-II	10 Marks
Q. 3	Unit-I & II	10 Marks
Short Notes (Any Two)		

Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24

Course Title: Thematic Mapping Skills
(Skill Enhancement Course)

1. Syllabus as per NEP 2020:			
i)	Name of the Programme	:	Certificate Course in Arts
ii)	Course Code	:	GESE101 – (Skill Enhancement Course)
iii)	Course Titles	:	Thematic Mapping Skills (Semester I)
iv)	Credit Structure	:	No. of Credits per Semester – 02
v)	No. of lectures per Unit	:	30
vi)	No. of lectures per week	:	02
2.	Scheme of Examination	:	Practical Exam: 3 Questions of 10 Marks each & 1 Questions of 20 Marks= 50 Marks

Revised Syllabus for FYBA
Course Title: Thematic Mapping Skills
(Skill Enhancement Course)
To be implemented from 2023-24

Objectives:

- 1) To introduce the students about the mapping skill
- 2) To acquaint the students with fundamental knowledge of thematic maps.

Course Outcomes:

1. Remember the fundamentals of Maps and Thematic Maps.
2. Understand the elements of maps.
3. Apply Spatial Statistical Techniques in Thematic Mapping.
4. Analyze the different types of thematic maps.
5. Evaluate the infographics provided through thematic maps.
6. Create his/her thematic map using spatial-statistical techniques.

No. of Credits - 02

COURSE CODE: GESE101

SEMESTER-I

COURSE CONTENT				
Couse Code	Unit No.	Content	No. of Credits	No. of Periods
GESE101 (Skill Enhancement Courses)	I	Fundamentals of Maps and Spatial Thematic Maps-I <ul style="list-style-type: none"> ○ Map: Definition, Elements, and types ○ Thematic Maps: Concept and types ○ Choropleth Map ○ Dot Map: ○ Isopleth Map ○ 	02	30
	II	Fundamentals of Maps and Spatial Thematic Maps-II <ul style="list-style-type: none"> ○ Proportionate Symbols: ○ Located Proportional Circles, located proportionate Divided Circles, Located Bars, ○ Located Square Map 		30
		Total	2	60

References:

1. Negi. , Dr. Balbir Singh: Practical Geography, Kedar Nath Ram Nath, Meerut, Delhi.
2. Singh, (1996) Gopal : Map work and Practical Geography Vikas Publishing House Pvt. Ltd. New Delhi.
3. Sarkar, Ashis (1997): Practical Geography: A systematic Approach, Orient Longman limited, Calcutta.
4. Singh, R and Kanaujia, L.R.S.: Map Work and Practical Geography, Central Book Depot, Allahabad.
5. Singh, R. L. and Rana P.B.(1998) : Elements of Practical Geography, Kalyani Publishers, New

Delhi – Ludhiana.

6. Khan Za (1998): Text Book of Practical Geography
7. Mishra, R.P. and Ramesh A. (2000) : Fundamentals of Cartography, Concept Publishing Company, New Delhi.
8. 16. P. Saha and P. Basu (2006): Advanced Practical Geography, Books and Allied Publication, Kolkata, India.
9. Khullar, Essentials of Practical Geography, New Academic Publishing Co, India.
10. Robinson Rep. (2010): Elements of Cartography 6/e
11. Singh L R (2011): Fundamentals of Practical Geography
12. Saha, Pijushkanti and Basu Partha (2010) : Advanced Practical Geography – A Laboratory Manual Books and Allied (P) Ltd, Kolkata.
13. Aher A. B., Chodhari A. P. & Bharambe S. N. (2015): Techniques of Spatial Analysis Prashant Publication Jalgaon

Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24

**Course Title: Tools and Techniques in
Geography -I
(Vocational Skill Course)**

1. Syllabus as per NEP 2020:		
i)	Name of the Programme	: Certificate Course in Arts
ii)	Course Code	: GEVS101 – (Vocational Skill Course)
iii)	Course Titles	: Tools and Techniques in Geography -I (Semester I)
iv)	Credit Structure	: No. of Credits per Semester – 02
v)	No. of lectures per Unit	: 30
vi)	No. of lectures per week	: 02
2.	Scheme of Examination	: Practical Exam: 3 Questions of 10 Marks each & 1 Questions of 20 Marks= 50 Marks

Revised Syllabus for FYBA
Course Title: Tools and Techniques in Geography -I
(Vocational Skill Course)
To be implemented from 2023-24

Objectives:

- 3) To introduce the students about the Tools and Techniques in Geography
- 4) To acquaint the students with fundamental knowledge of Tools and Techniques in Geography

Course Outcomes:

1. Remember the fundamentals of Geographical Data.
2. Understand the Meaning and types of data and its presentation.
3. Understand and able to solve the examples of measures of central tendency,
4. Understand and able to solve the examples of measures of dispersion

No. of Credits - 02

COURSE CODE: GEVS101

SEMESTER-I

COURSE CONTENT

Couse Code	Unit No.	Content	No. of Credits	No. of Periods
GEVS101 (Vocational Skill Course)	I	Geographical Data & its Analysis a. Introduction and Types of Geographical Data: I ii) Discrete and Continuous series iii) Grouped and Ungrouped data b. Basic Analysis : i) Tally marks and frequency table ii) Frequency distribution (histogram & polygon) iii) Cumulative Frequency & Ogive curve	02	30
	II	Measures of Central Tendency, a. Meaning and description of central tendencies- Mean, Mode, Median b. Calculation of Mean, Mode, Median for ungrouped and grouped data		30
		Total	2	60

References:

1. Singh R. L. and Dutt, P.K., 1968. Elements of Practical Geography, Students Friends, Allahabad.
2. Jog. S. R. and Saptarshi, P. G., 1980. Sankhikhi Bhugol, Narendra Publication, Pune.
3. Creswell J., 1994. Research Design: Qualitative and Quantitative Approaches, Sage Publications.
4. Kumbhar, A., 2000. Pratyakshik Bhugol, Sumeru Publications, Mumbai.
5. Ahirrao, D. Y. and Karanjkehele, E.K., 2002. Pratyakshik Bhugol, Sudarshan Publication, Nashik.
6. Dikshit, R. D., 2003. The Art and Science of Geography: Integrated Readings. Prentice Hall of India, New Delhi.

7. Singh R. L., 2005. Elements of Practical Geography. Kalyani Publishers, New Delhi.
8. Karlekar, S. N. and Kale, M., 2006. Statistical Analysis of Geographical Data, Diamond Publication, Pune.
9. Acevedo, M. F., 2012. Data Analysis and Statistics for Geography, Environmental Science and Engineering, CRC Press.
10. डॉ. प्रवीण सप्तर्षी, संख्याकी भूगोल, निराली प्रकाशन, पुणे
11. डॉ. अर्जुन कुंभार, प्रात्यक्षिक भूगोल, सुमेरु प्रकाशन, डोंबिवली (पूर्व)

Practical Question Paper Pattern of SEC & VSC
University of Mumbai
SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA
SAWANTWADI (Autonomous) Revised Syllabus w.e.f. Academic
Year, 2023-24
Revised Syllabus for FYBA
Semester- I

Scheme of Examination for Each Semester:

Semester End Examination (SEE): 50 Marks

Duration: 2 hours		Marks: 50
N.B. 1. All questions are compulsory and carry equal marks. 2. Use of Map Stencils and simple Calculator is allowed. 3. Attach appendix along with answer paper.		
Q. 1	Unit-I	10 Marks
<i>OR</i>		
	Unit-I	10 Marks
Q. 2	Unit-II	10 Marks
<i>OR</i>		
	Unit-II	10 Marks
Q. 3	Unit-I & II	10 Marks
Short Notes (Any Two)		
Q. 3	Unit-I & II	10 Marks
Q. 4	Journal & Viva	20 Marks

As per NEP 2020



UNIVERSITY OF MUMBAI

S. Z. S. P. Mandal's

SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA

SAWANTWADI (Autonomous)

DIST: SINDHUDURG- 416 510, MAHARASHTRA



Syllabus for Approval

Certificate Course in Arts

B.A. (Geography)

Syllabus for

Sem-II

Reference: GR dated 16th May 2023 for Credit structure

SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA SAWANTWADI (Autonomous)**DEPARTMENT OF GEOGRAPHY**

Proposed List of Major, Minor, Open Elective, Skill Enhancement Course, Ability Enhancement Compulsory Course, Indian Knowledge System Course, Vocational Skill Course, Details of Semesters

(To be implemented from Academic Year 2023-24)

Program: Certificate Course

Class: BA

Semester: II

Sr. No.	Course Code	Title of the Course	Category of Course	No. of Lecture Hours	No. of Lectures per Unit	Teaching Hours per week (L+P)	SEE	CIE	Total Marks	No. of Credits
1	MJA102GET	Introduction to Physical Geography	Major	60	15	04+00	60	40	100	4
2	MNA102GET	Introduction to Physical Geography	Minor	60	15	04+00	60	40	100	4
3	GEOE102	Basic Concept in Geography for Competitive Exam-II	OE	30	15	02+00	30	20	50	2
4	GEOE103	Basic Concept in Geography for Competitive Exam-III	OE	30	15	02+00	30	20	50	2
5	GESE102	Weather Mapping Skills	SEC	60	20	00+04	30	20	50	2
6	GEVS102	Tools and Technique in Geography -II	VSC	60	20	00+04	30	20	50	2
7	GEVE102	Environmental Education-II	VECC	30	10	02+00	30	20	50	2
		Sub - Total		330	110	14 +08	270	180	450	18

Notes:

One Hour of Lecture is equal to 1 Credit
One Hour of Tutorial is equal to I Credit
One Hour of Practical is equal to 1 Credit

Acronyms Expanded

MJ : Major
MN : Minor
OE : Open Elective Course
SEC : Skill Enhancement Course
VECC : Value Education Compulsory Course
IKS : Indian Knowledge System
VSC : Vocational Skill Course
SEE : Semester End examination
CIE : Continuous Internal Evaluation
L+P : Lecture + Practical(s)

**Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24**

(Major/Minor Course) MJ/MNA102GET: GEOGRAPHY

Introduction to Physical Geography

SEMESTER II

1. Syllabus as per NEP 2020:		
i)	Name of the Programme	: Certificate Course in Arts
ii)	Course Code	: (Major/Minor Course) MJ/MNA102GET
iii)	Course Titles	: Introduction to Physical Geography (Semester II)
iv)	Credit Structure	: No. of Credits per Semester – 04
v)	No. of lectures per Unit	: 15
vi)	No. of lectures per week	: 04
2.	Scheme of Examination	: <ul style="list-style-type: none">• Written Exam: 4 Questions of 15 Marks each : 60 Marks• Internal Assessment: 40 marksTotal : 60 + 40 =100

**Syllabus as per NEP 2020 for Certificate Course in Arts
(Major/Minor Course) MJ/MNA102GET: GEOGRAPHY**

To be implemented from the Academic year 2023-24

**Course Title: Introduction to Physical Geography
SEMESTER II**

Objectives:

1. To introduce the students' basic concepts in Physical Geography.
2. To introduce the students with geographical processes, phenomena, and formation of landforms indifferent environment.
3. To acquaint the utility and application of Physical geography.

Programme Outcomes:

6. Understand, coherently and effectively about various genres of Geography.
7. Understanding the diverse concepts in the field of Geography.
8. Understand global and regional patterns of cultural, political and economic institutions, and their effects on exploitation of natural resources and landscapes.
9. Understand need for protection and conservation of natural recourses.
10. Develop basic skills in practical Geography and its industrial applications.

Course Outcomes:

1. Students will understand and familiarize with the basic concepts in Physical Geography.
2. Students will understand significance and various applications of Physical Geography.
3. Students will be able to understand various geographical processes and phenomenon, their origin, as well as use and applications of modern technology in Physical Geography.

**Syllabus as per NEP 2020 for Certificate Course in Arts
(Major/Minor Course) MJ/MNA102GET: GEOGRAPHY**

Course Title: Introduction to Physical Geography

SEMESTER II

No. of Credits - 04

COURSE CODE: MJ/MNA102GET

Course code	Unit	Topics	Credits	Lecture
MJ/MNA102GET (Major /Minor Course)	I	Physical Geography: An Introduction <ul style="list-style-type: none"> • Physical Geography- Definition, Nature & Scope • Branches of Physical Geography • Introduction about Earth system 	04	15
	II	Lithosphere: <ul style="list-style-type: none"> • Interior of the earth • Rocks- Definition, Types of Rocks- Igneous, Sedimentary and Metamorphic rocks • Weathering; Concept and Types • Drainage system and patterns 		15
	III	Atmosphere: <ul style="list-style-type: none"> • Composition and Structure of the Atmosphere • Insolation; Concept and factors affecting the distribution. • Distribution of temperature, Heat Balance of Earth • Forms and types of Precipitation 		15
	IV	Hydrosphere: <ul style="list-style-type: none"> • Distribution of seas & oceans • General structure of ocean floor • Distribution of temperature, salinity, and density of oceans. • Concept and characteristics of Waves, tides, tsunamis & ocean currents 		15
		Total	04	60

References:

1. Sparks B. W. (1988): An Introduction to Geomorphology, Longman, London
2. Dayal P. (1990): An Textbook of Geomorphology, Shukla Book Depot, Patna
3. Strahler Alan H. and Strahler Arther N. (1992): Modern Physical Geography, John Willey & Sons, INC, New York
4. Negi B.S (1993): Physical Geography, S.J. Publications, Meerut
5. Englen, O.D. (1994): Geomorphology, The Macmillan Company, New York
6. Bhatt J.J. (1998): Oceanography, Exploring the Planet Ocean, D. Von Nestrand Co. New York
7. Singh Savindra (1998): Physical Geography, Prayag Pustak Bhavan, Allahabad

8. Majid Hussain (2001): Fundamentals of Physical Geography, Rawat Publications, Jaipur and New Delhi
9. Muller Peter O. (2003): Physical Geography: The Global Environment Text Book & Study Guide, Oxford University Press, USA.
10. Qazi S.A. (2009): Principles of Physical Geography, APH Publishing Corporation, New Delhi
11. प्रा. दाते (1995): प्राकृतिक भूगोल, विद्या प्रकाशन, नागपूर
12. अहिराव, धापटे, भोस (1998): प्राकृतिक भूगोल, निराली प्रकाशन, पुणे
13. सुभाषचंद्र सारंग (2000): प्राकृतिक भूगोल, विद्या प्रकाशन, नागपूर
14. डॉ. विठ्ठल घारपुरे (2001): प्राकृतिक भूगोल, शैलजा प्रकाशन, नागपूर
15. डॉ. जयकुमार मगर (2001): भुरूपशास्त्राची मूलतत्वे, अॅकडमिक इंटेरप्राईज, औरंगाबाद
16. डॉ. विठ्ठल घारपुरे (2001): प्राकृतिक भूगोलाची मूलतत्वे, पिंपळपुरे अॅकॅडेमी, नागपूर
17. रजनी देशमुख (2003): प्राकृतिक भूगोल, विद्या प्रकाशन, नागपूर
18. कोलते, भोयर, पुराणिक (2003): भूगोल शास्त्राची मूलतत्वे, विद्या प्रकाशन, नागपूर
19. यू. बी. पाठारे (2008): प्राकृतिक भूगोल, विद्या प्रकाशन, नागपूर
20. डॉ. पाथरे आणि डॉ. राजहंस (2008): प्राकृतिक भूगोल, विद्या प्रकाशन, औरंगाबाद
21. ए. बी. सवदी आणि कोळेकर (2019): प्राकृतिक भूगोल, निराली प्रकाशन, पुणे

Question Paper Pattern of Major & Minor Subject
University of Mumbai
SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA SAWANTWADI
(Autonomous) Revised Syllabus w.e.f. Academic Year, 2023-24
F.Y.B.A. Geography, Semester- II

Scheme of Examination for Each Semester:

Continuous Internal Evaluation (CIE): 40 Marks

Sr. No.	Particulars	Marks
01	One Unit Tests	20 Marks
02	Home Assignment/ Book Review/Skit/ Presentation/Poster/Chart /Model Making	15 Marks
03	Attendance	05 Marks
	Total	40 Marks

Semester End Examination (SEE): 60 Marks

Duration: 2 hours		Marks: 60
N.B. 1. All questions are compulsory and carry equal marks. 4. Use of Map Stencils and simple Calculator is allowed. 5. Attach appendix along with answer paper.		
Q. 1	Unit-I	15 Marks
<i>OR</i>		
Q.1	Unit-I (Question may be divided in to A and B)	15 Marks
Q. 2	Unit-II	15 Marks
<i>OR</i>		
Q. 2	Unit-II (Question may be divided in to A and B)	15 Marks
Q. 3	Unit-III	15 Marks
<i>OR</i>		
Q. 3	Unit-III (Question may be divided in to A and B)	15 Marks
Q. 4	Unit-IV	15 Marks
<i>OR</i>		
Q. 4	Unit-IV (Question may be divided in to A and B)	15 Marks

Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24

**Course Title: Basic Concept in Geography for
Competitive Exam-II
(Open Elective)**

1. Syllabus as per NEP 2020:		
i)	Name of the Programme	: Certificate Course in Arts
ii)	Course Code	: GEOE102 & GEOE103 (Open Elective)
iii)	Course Titles	: Basic Concept in Geography for Competitive Exam-II Semester II
iv)	Credit Structure	: No. of Credits per Semester – 04
v)	No. of lectures per Unit	: 15
vi)	No. of lectures per week	: 04
2.	Scheme of Examination	: <ul style="list-style-type: none">• Written Exam: 3 Questions of 10 Marks each= 30 Marks• Internal Assessment: 40 marksTotal : 60 + 40 =100

Revised Syllabus for FYBA

Course Title: Basic Concept in Geography for Competitive Exam-II

(Open Elective)

To be implemented from 2023-24

Objectives:

This course is designed exclusively for the students preparing for the different competitive examinations including civil services, banking, railways, eligibility tests, and all other competitive examinations.

Course Outcomes:

After completion of the course the students will be able to:-

3. Understand the geographical features of India.
4. Introduce students with geographical aspects of India.

Students will be able to:-

3. Understand the basic concepts in Human and Physical Geography.
4. Familiarize with the fertility, mortality, migration and weathering.

No. of Credits - 02

COURSE CODE: GEOE102

Course code	Unit No	Topics	Credits	No. of Periods
GEOE102 (Open Elective)	I	Basic Concepts in Human Geography i. Definition and branches of human geography ii. Basic concepts in population Geography i. Fertility- ii. Mortality- iii. Migration-	02	15
	II	Basic Concepts in Physical Geography i. Definition and branches of Physical geography ii. Interior of the earth iii. Weathering- Definition, Types iv. Structure and Composition of the atmosphere		15
		Total	02	30

Reference Books:

10. Monkhouse, F., (1967). Principle of Physical Geography. Philosophical Library Publishers: New York.
11. Pitty, A. (1971). Introduction to Geomorphology. Methuen & Co. Ltd: London. • Singh, S. (2000). Physical Geography. Prayag Pustak Bhavan: Allahabad.
12. Johnson R. J. & Others (1983): The Dictionary of Human Geography, Blackwell England Singh, L. R. (2009): "Fundamentals of Human Geography", Sharda Pustak Bhavan, Allahabad
13. Hussian ,M(2011): human Geography, Rawat Publication, Jaipur
14. Kale, V., & Gupta, A. (2015). Introduction of Geomorphology. University Press PVT: Kolkata.
15. More, J., & Devne, M. (2019). Physical Geography. Nirali Prakashan: Pune.
16. डॉ. पाथरे आणि डॉ. राजहंस (2008): प्राकृतिक भूगोल, विद्या प्रकाशन, औरंगाबाद
17. ए. बी. सवदी आणि कोळेकर (2019): प्राकृतिक भूगोल, निराली प्रकाशन, पुणे

Revised Syllabus for FYBA

Course Title: Basic Concept in Geography for Competitive Exam-III

(Open Elective)

To be implemented from 2023-24

Objectives:

This course is designed exclusively for the students preparing for the different competitive examinations including civil services, banking, railways, eligibility tests, and all other competitive examinations.

Course Outcomes:

After completion of the course the students will be able to:-

1. Understand the geographical features of India.
2. Introduce students with geographical aspects of India.

Students will be able to:-

1. Understand the basic concepts of sustainable development and Modern Geography.
2. Familiarize with the HDI, GPS, GIS, Satellite images and Aerial Photographs

No. of Credits - 02

COURSE CODE: GEOE103

Course code	Unit No	Sub Topics	Credits	No. of Periods
GEOE103 (Open Elective)	I	Basic Concept of Sustainable Development i. Sustainable development: Definition and meaning ii. Growth of population iii. Human development index iv. Human Happiness index	02	15
	II	Basic Concepts in Modern Geography i. Satellite images ii. Aerial Photographs iii. Global positioning System (GPS) iv. Geographical Information System (GIS)		15
		Total	02	30

Reference Books:

1. Dayal, P. (1996). Geomorphology. Shukla Book Depot: Patna.
2. Kale, V., & Gupta, A. (2001). Elements of Geomorphology. Oxford University Press: London.
3. Alfred Leick (2004). GPS Satellite Surveying. 3rd ed. John Wiley and Sons Inc.,
4. Kennedy M. (2002). The Global Positioning System & GIS: An Introduction, Taylor & Francis, London and New York.
5. Bao, J., Tsui, Y. (2005): Fundamentals of Global Positioning System Receivers, John Wiley Sons, Inc., Hoboken.
6. Guochang Xu and Yan Xu (2016). GPS Theory, Adjustments and Applications. 3rd ed., Springer Berlin, Heidelberg.
7. Kaplan, E. D. and Hegarty C J (2017). Understanding GPS/GNSS: Principles and Applications. 3rd ed. Artech House's Inc.
8. More, J., & Devne, M. (2019). Physical Geography. Nirali Prakashan: Pune.
9. डॉ. श्रीकांत कार्लेकर (२०१३): भौगोलिक माहितीप्रणाली व दूरसंवेदन: डायमंड प्रकाशन, पुणे

Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24

Course Title: Environmental Education -II
(Value Education Course)

1. Syllabus as per NEP 2020:		
i)	Name of the Programme	: Certificate Course in Arts
ii)	Course Code	: GEVE102 – (Value Education Course)
iii)	Course Titles	: Environmental Education –II (Semester II)
iv)	Credit Structure	: No. of Credits per Semester – 02
v)	No. of lectures per Unit	: 15
vi)	No. of lectures per week	: 02
2.	Scheme of Examination	: <ul style="list-style-type: none">• Written Exam: 3 Questions of 10 Marks each= 30 Marks • Internal Assessment: 20 marks<li style="text-align: right;">Total : 30 + 20 = 50

Revised Syllabus for FYBA
Course Title: Environmental Education -II
(Value Education Course)

To be implemented from 2023-24

Objectives:

3. To introduce the students about the nature of Environment.
4. To acquaint the students with fundamental knowledge of ecosystem.

Course Outcomes:

5. Understand the basic types of Environment Pollution.
6. Familiarize with different processes associated with Solid waste management.
7. Understand the basic concept of urbanization.
- 8.

No. of Credits - 02

COURSE CODE: GEVE102

SEMESTER-II

COURSE CONTENT				
Course Code	Unit No.	Content	No. of Credits	No. of Periods
GEVE102 (Value Education Course)	I	Environmental pollution and its management i. Air pollution, water pollution, and noise pollution, - Causes, effect and control measures. ii. Climate change, global warming, iii. Solid waste management – iv. Impact of plastic on human and animal health	02	15
	II	Urbanization and Environment i. Concept of Urbanization– Causes and effects of urbanization in India ii. Problems of migration and urban environment iii. Urban heat islands iv. Emerging Smart Cities and safe cities in India - Sustainable Cities		15
		Total	2	30

References:

11. Singh, S., Prayag. (1997). Environment Geography, Allahabad: Pustak Bhawan.
12. Gholap, T. N. (2000). Environment Science (Marathi), Pune: Nishikant Publications.
13. Goudie, A. (2001). The Nature of the Environment, Blackwell: Oxford Publication.
14. Chandana, R.C. (2002). Environmental Geography, Ludhiana: Kalyani Publication.
15. Miller, G.T. (2004). Environmental Science: Working with the Earth. Singapore: Thomson Books.
6. Odum, E.P. (2005). Fundamentals of Ecology, India: Ceneage Learning.
16. Saxena, H.M. (2004). Environmental Geography, Jaipur: Rawat Publications.

17. Saxena, H.M. (2007). Environmental Geography, Jaipur: Rawat Publications.
18. Singh, R.B. (2009). Biogeography and Biodiversity, Jaipur: Rawat Publications.
19. Kormondy, E. J. (2012). Concept of Ecology, PHI Learning Pvt. Ltd.
20. Sharma, P.D. (2015). Ecology and Environment, Meerut, New Delhi: Rastogi Publications.

Question Paper Pattern of OE, & VEC
University of Mumbai
SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA SAWANTWADI
(Autonomous) Revised Syllabus w.e.f. Academic Year, 2023-24
Revised Syllabus for FYBA
Semester- II

Scheme of Examination for Each Semester:

Continuous Internal Evaluation (CIE): 20 Marks

Sr. No.	Particulars	Marks
01	Presentation/Seminar/ Home Assignment	15 Marks
02	Attendance	05 Marks
	Total	20 Marks

Semester End Examination (SEE): 30 Marks

Duration: 2 hours		Marks: 30
N.B. 1. All questions are compulsory and carry equal marks. 6. Use of Map Stencils and simple Calculator is allowed. 7. Attach appendix along with answer paper.		
Q. 1	Unit-I	10 Marks
<i>OR</i>		
	Unit-I	10 Marks
Q. 2	Unit-II	10 Marks
<i>OR</i>		
	Unit-II	10 Marks
Q. 3	Unit-I & II	10 Marks
Short Notes (Any Two)		

Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24

Course Title: Weather Mapping Skills
(Skill Enhancement Course)

1. Syllabus as per NEP 2020:		
i)	Name of the Programme	: Certificate Course in Arts
ii)	Course Code	: GESE102 – (Skill Enhancement Course)
iii)	Course Titles	: Weather Mapping Skills (Semester -II)
iv)	Credit Structure	: No. of Credits per Semester – 02
v)	No. of lectures per Unit	: 30
vi)	No. of lectures per week	: 02
2.	Scheme of Examination	: Practical Exam: 3 Questions of 10 Marks each & 1 Questions of 20 Marks= 50 Marks

Revised Syllabus for FYBA
Course Title: Weather Mapping Skills
(Skill Enhancement Course)
To be implemented from 2023-24

Objectives:

- 5) To introduce the students about the mapping skill
- 6) To acquaint the students with fundamental knowledge of weather maps.

Course Outcomes:

7. Remember the fundamentals of Maps and Weather Maps.
8. Understand the elements of maps.
9. Apply Spatial Statistical Techniques in Weather graphs.
10. Analyze the different types of Weather Instruments.
11. Evaluate the infographics provided through Weather maps.
12. Create his/her Weather map using spatial-statistical techniques.

No. of Credits - 02

COURSE CODE: GESE102

SEMESTER-II

COURSE CONTENT				
Course Code	Unit No.	Content	No. of Credits	No. of Periods
GESE102 (Skill Enhancement Courses)	I	Introduction to Weather Maps a) Introduction to Weather Maps b) Description and drawing of conventional signs and symbols. c) Interpretation of Indian Daily Weather map <ol style="list-style-type: none"> i. Introduction ii. Air pressure distribution, Wind direction and speed, Rainfall distribution iii. Cloud Cover, weather Conditions, Sea Conditions 	02	30
	II	Weather Instruments a) Weather Instruments -Use <ol style="list-style-type: none"> i. Thermometers, Max.& Min thermometer, Thermograph ii. Barometer, Barograph iii. Wet & dry Hygrometer, Hair Hygrograph iv. Wind vane, Anemometer ,Rain Gauge 		30
		Total	2	60

References:

1. Carter, James, 1984 Computer Mapping (Progress in the '80s), Resource Publications in Geography, Washington, DC: Association of American Geographers.
2. Slocum, Terry A., 1999, Thematic Cartography and Visualization, Prentice-Hall, Upper Saddle Creek, NJ. www.prenhall.com/slocum

3. MacEachren, Alan, M., 1995, How Maps Work, Representation, Visualization, and Design, Guilford Press
4. Ramamurthy, K., (1982): Map Interpretation, Rex Printers, Madras.
5. Mishra R.P. and Ramesh A., (1989): Fundamentals of Cartography, Concept Publishing.
6. Gupta K.K and Tyagi V.C., (1992). Working with Maps, Survey of India, DST, New Delhi.
7. Singh R.L. and Singh R.P.B., (1999): Elements of Practical Geography, Kalyani Publishers.
8. Singh, R.L., (2005): Elements of Practical Geography. Kalyani Publishers, New Delhi. India.
9. Singh, G., (2005): Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi.
10. Siddhartha, K., (2006): Geography through maps, Kisalaya Publications Pvt. Ltd, Delhi.
11. Asis Sarkar (2015): Practical Geography, A Systematic Approach, Orient Black Swan
12. ESRI, Serving Maps on the Internet, Redlands CA: ESRI Press
13. डॉ. अर्जुन कुंभार(१९९४): प्रात्यक्षिक भूगोल: सुमेरू प्रकाशन, डोंबिवली
14. डॉ. विश्वास यादव(१९९८): भूगोलातील नकाशाशास्त्र व संख्याशास्त्रीय पद्धती: प्राची प्रकाशन, मुंबई
15. डॉ. एस बी शिंदे:(२००२): नकाशा शास्त्र: फडके प्रकाशन, कोल्हापूर

Certificate Course in Arts Syllabus as per NEP 2020
To be implemented from the Academic year 2023-24

**Course Title: Tools and Techniques in
Geography -II
(Vocational Skill Course)**

1. Syllabus as per NEP 2020:		
i)	Name of the Programme	: Certificate Course in Arts
ii)	Course Code	: GEVS102 – (Vocational Skill Course)
iii)	Course Titles	: Tools and Techniques in Geography -II (Semester II)
iv)	Credit Structure	: No. of Credits per Semester – 02
v)	No. of lectures per Unit	: 30
vi)	No. of lectures per week	: 02
2.	Scheme of Examination	: Practical Exam: 3 Questions of 10 Marks each & 1 Questions of 20 Marks= 50 Marks

Revised Syllabus for FYBA
Course Title: Tools and Techniques in Geography -II
(Vocational Skill Course)
To be implemented from 2023-24

Objectives:

1. To introduce the students about the Tools and Techniques in Geography
2. To acquaint the students with fundamental knowledge of Tools and Techniques in Geography

Course Outcomes:

5. Remember the fundamentals of Cartographic Techniques.
6. Understand the Meaning and types of data and its presentation.
7. Understand and able to solve the examples of Techniques of spatial distribution.
8. Understand and able to solve the examples of Sampling Techniques

No. of Credits - 02

SEMESTER-I

COURSE CODE: GEVS102

COURSE CONTENT				
Couse Code	Unit No.	Content	No. of Credits	No. of Periods
GEVS102 (Vocational Skill Course)	I	Cartographic Techniques a. One Dimensional Diagrams i) Simple Line graph ii) Multiple Line Graph iii) Bar Graph iv) Multiple Bar Graph b. Two Dimensional Diagrams i) Pie Diagram ii) Proportionate Squares (At least 01 example of each manually and using computer with using MS Excel)	02	30
	II	Sampling Techniques a. Sampling: Concept, Definition b. Types of sampling i. Simple random sampling. ii. Systematic sampling. iii. Stratified sampling.		30
		Total	2	60

References:

12. Singh R. L. and Dutt, P.K., 1968. Elements of Practical Geography, Students Friends, Allahabad.
13. Jog. S. R. and Saptarshi, P. G., 1980. Sankhikhi Bhugol, Narendra Publication, Pune.
14. Creswell J., 1994. Research Design: Qualitative and Quantitative Approaches, Sage Publications.
15. Slocum, Terry A., 1999, Thematic Cartography and Visualization, Prentice-Hall, Upper Saddle Creek, NJ. www.prenhall.com/slocum
16. Kumbhar, A., 2000. Pratyakshik Bhugol, Sumeru Publications, Mumbai.
17. Ahirrao, D. Y. and Karanjkele, E.K., 2002. Pratyakshik Bhugol, Sudarshan Publication, Nashik.

18. Dikshit, R. D., 2003. The Art and Science of Geography: Integrated Readings. Prentice Hall of India, New Delhi.
19. Singh R. L., 2005. Elements of Practical Geography. Kalyani Publishers, New Delhi.
20. Karlekar, S. N. and Kale, M., 2006. Statistical Analysis of Geographical Data, Diamond Publication, Pune.
21. डॉ. प्रवीण सप्तर्षी, संख्याकी भूगोल, निराली प्रकाशन, पुणे
22. डॉ. अर्जुन कुंभार, प्रात्यक्षिक भूगोल, सुमेरु प्रकाशन, डोंबिवली(पूर्व)

Practical Question Paper Pattern of SEC & VSC
University of Mumbai
SHRI PANCHAM KHEMRAJ MAHAVIDYALAYA SAWANTWADI
(Autonomous) Revised Syllabus w.e.f. Academic Year, 2023-24
Revised Syllabus for FYBA
Semester- I

Scheme of Examination for Each Semester:

Semester End Examination (SEE): 50 Marks

Duration: 2 hours		Marks: 50
N.B. 1. All questions are compulsory and carry equal marks. 2. Use of Map Stencils and simple Calculator is allowed. 3. Attach appendix along with answer paper.		
Q. 1	Unit-I	10 Marks
<i>OR</i>		
	Unit-I	10 Marks
Q. 2	Unit-II	10 Marks
<i>OR</i>		
	Unit-II	10 Marks
Q. 3	Unit-I & II	10 Marks
Short Notes (Any Two)		
Q. 3	Unit-I & II	10 Marks
Q. 4	Journal & Viva	20 Marks