

॥ शिक्षण हाच धर्म ॥

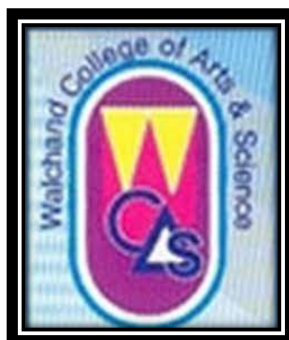
Shri Aillak Pannalal Digambar Jain Pathashala's

(Jain Minority Institute)

**WALCHAND COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS),
SOLAPUR**

(Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur)

COURSE STRUCTURE



Choice Based Credit System Syllabus

Name of Faculty: Science and Technology

Name of the Course: M.A. / M.Sc.-II

Subject: Geography

w. e. f. June 2022

M.A./M.Sc. II – Geography CBCS w.e.f. June 2022 (New Syllabus)									
Sem.-III	Code	Title of the Paper	Semester Exam.			L	T	P	Credits
		Hard Core	ESE	IE	Total				
Geog.	HCT 3.1	Agricultural Geography	80	20	100	4	--	--	4
	HCT 3.2	Settlement Geography	80	20	100	4	--	--	4
Soft Core (Any one)									
	SCT 3.1	Biogeography	80	20	100	4	--	--	4
	SCT3.2	Geography of Marketing	80	20	100	4	--	--	
Open Elective (Anyone)									
	OET 3.1	Cultural Geography	80	20	100	4	--	--	4
	OET 3.2	Commercial Geography	80	20	100	4	--	--	
Practical									
	HCP3.1	Quantitative Techniques in Economic Geography	40	10	50	--	--	2	2
	HCP3.2	Introduction to Computer	40	10	50	--	--	2	2
Soft Core (Any one)									
	SCP3.1	Applications of Computer in Geography	40	10	50	--	--	2	2
	SCP3.2	Map Projection and Cartography	40	10	50	--	--	2	
Open Elective (Anyone)									
	OEP3.1	Quantitative Techniques in Population & Settlement Geography	40	10	50	--	--	2	2
	OEP3.2	Global Positioning System and Geographical Information System	40	10	50	--	--	2	
		Tutorial	--	25		-			1
Total for Third Semester			480	145	625				25
Semester IV									
Sem-IV	Code	Title of the Paper	Semester Exam			L	T	P	Credits
Geog		Hard Core	ESE	IE	Total				
	HCT 4.1	Regional Planning and Development in India	80	20	100	4	--	-	4
	HCT 4.2	Development of Modern Geography	80	20	100	4	--	-	4
	HCT 4.3	Political Geography	80	20	100	4	--	-	4
Soft Core (Any one)									
	SCT4.1	Geography of Tourism	80	20	100	4	--	-	4
	SCT4.2	Geography of Manufacturing	80	20	100	4	--	-	
Practical									
	HCP 4.1	Introduction to Remote sensing and GIS	40	10	50	--	--	2	2
	HCP 4.2	Application of Remote Sensing	40	10	50	--	--	2	2
	HCP 4.3 (MP)	Research Methodology and Project Work	80	20	100	--	--	4	4
		Tutorial	--	25		-	-	-	1
Total for Forth Semester			480	145	625	-	-	-	25
Short Term Course: Certificate Course in RS, GIS and GPS			100	--	100	--	--	--	

L= Lecture, T= Tutorials, P= Practical, ESE=End Semester Examination, IE= Internal Examination, 4 Credits of Theory = 4 Hours of teaching per week, 2 credits of Practical = 4 Hours per week, HCT= Hard Core Theory, SCT= Soft Core Theory, HCP= Hard Core Practical, SCP= Soft Core Practical, OET= Open Elective Theory, OEP= Open Elective Practical, MP= Major Project

Walchand College of Arts and Science (Autonomous), Solapur
MA/M.Sc.-II (Sem-III & IV) Geography
Course Structure

Sr. No.	Paper	Type of Paper	Semester III ESE + IE	Semester IV ESE + IE	Credits (Annual) Semester III+IV	Number of Lectures (Both Semesters)	Total Marks (Both Semesters)
1	T-IX	Hard Core Theory	80+20	--	04	60	100
2	T-X	Hard Core Theory	80+20	--	04	60	100
3	T-XI	Soft Core Theory	80+20	--	04	60	100
4	T-XII	Open Elective Theory	80+20	--	04	60	100
5	T-XIII	Hard Core Theory	--	80+20	04	60	100
6	T-XIV	Hard Core Theory	--	80+20	04	60	100
7	T-XV	Hard Core Theory	--	80+20	04	60	100
8	T-XVI	Soft Core Theory	--	80+20	04	60	100
9	Tutorial	Tutorial	0+25	0+25	01+01	-	25+25
10	P-IX	Hard Core Practical	40+10	--	02	30	50
11	P-X	Hard Core Practical	40+10	--	02	30	50
12	P-XI	Soft Core Practical	40+10	--	02	30	50
13	P-XII	Open Elective Practical	40+10	--	02	30	50
14	P-XIII	Hard Core Practical	--	40+10	02	30	50
15	P-XIV	Hard Core Practical	--	40+10	02	30	50
16	P-XV	Hard Core Practical (MP)	--	80+20	04	60	100
17	COC	COC		100+00	04	60	100
Total	Eight Papers Each Semester	Marks=	625 Each Semester	725 Each Semester	54	780	1350

Title of the Course/Paper

Agricultural Geography

Semester III

MAGE23C0922

[Credits: 4]

Walchand College of Arts and Science (Autonomous), Solapur

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Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective.

3. **Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds: **Ability Enhancement Compulsory Courses (AECC)** and **Skill Enhancement Courses (SEC)**. "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; (i) Environmental Science and (ii) English/MIL Communication. These are mandatory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

Credit: Credit is a numerical value that indicates students work load (Lectures, Lab work, Seminar, Tutorials, Field work etc.) to complete a course unit. In most of the universities **15 contact hours** constitute **one credit**. The contact hours are transformed into credits. Moreover, the grading system of evaluation is introduced for PG course wherein different modes of Internal Evaluation are adopted. **The candidate has to appear for Internal Evaluation of 20 marks and End Semester Examination for 80 marks during the academic year.**

Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester III – Agricultural Geography

CBCS (Choice Based Credit System)

With effect from 2022

Course Credits: 04

Allotted Lectures: 60

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all latest concepts in Agricultural Geography in brief but in adequate manner. Agricultural Geography is part of these courses deals with the study of origin, development and types of agriculture. In this subject also included the Primitive agriculture, which is found in middle part of Africa continents, South America and SE Asia which is in primitive stage of agriculture.

1.2 Objectives of the Course:

1. To familiarize the students with concept origin and development of agriculture.
2. To examine the role of agricultural determinants.
3. To make familiarize the students with the application of various theories, models, Agricultural system, and productivity.
4. To reexamine green revolution in India, contemporary issues and agricultural problems in Solapur district.

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding of the conceptual and dynamic aspects of Agriculture.
2. Students became aware of types of agriculture and regions in the world.
3. Student will identify the basic concept of crop combination and crop diversification.

1.4. Programme Specific Outcomes:

1. Understand the nature and basic concepts of agriculture geography.
2. Identify the different factors affecting on agriculture development.
3. Understand the meaning and concept of Food, Nutrition and Hunger.

1.5 Programme Outcomes:

1. The Students are enabling to show the various agriculture systems on world map.
2. Students acquire the understanding of agricultural land use model.
3. The students identify the green revolution and its impact on environment.
4. Students acquire the understanding of agricultural policies in India.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. Second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper
Agricultural Geography
Semester III
MAGE23C0922
[Credits: 4]

Unit No.	Descriptions	No. of Lectures
I	<p>Agricultural Geography:</p> <p>1.1 Definition, Nature and Scope of Agricultural Geography</p> <p>1.2 Origin and Evaluation of Agriculture</p> <p>1.3 Approaches to the study of Agricultural Geography: 1) Systematic 2) Regional</p>	15
II	<p>Determinants and Types of Agriculture:</p> <p>2.1 Physical, economic and technological Determinants,</p> <p>2.2 World Agricultural systems: Location, distribution, types and characteristics of</p> <p>a) Shifting Cultivation, b) Intensive Agriculture, c) Extensive Agriculture, e) Plantation agriculture, f) Mixed Agriculture g) Dairy Farming, and h) Primitive Farming.</p>	15
III	<p>Concepts and techniques of delimitation of agricultural regions:</p> <p>3.1 Crop combination, Crop diversification,</p> <p>3.2 Measurements of agricultural Productivity,</p> <p>3.3 Agricultural land use Model- a) Von Thunen's Model, and b) Jonasson's Model.</p>	15
IV	<p>Green Revolution in India:</p> <p>4.1 Nature and impact of Socio-Economic,</p> <p>4.2 Problems and prospects in the adoption of Green Revolution,</p> <p>4.3 Ecological implications of the green revolution,</p> <p>4.4 Organic Farming, Agro clinic</p> <p>4.5 Contemporary issues: Food, Nutrition and Hunger,</p> <p>4.6 Agricultural policies in India.</p>	15

Reference Books

Sr. No.	Name of Books	Name of Authors
1	Geography of Agriculture; Themis in Research. Prentice-Hall Englewood cliff. London.	Gregor H. F. (1970)
2	Agricultural Geography. Oxford University Press, London	Ilbury B.W. (1983)
3	Agriculture and Environment Change John Wiley, London.	Mannlon A. M. (1995)
4	Studies in Agricultural Geography/Rajesh Publication New Delhi	Mohammed Ali. (1978)
5	Agricultural Geography, New Delhi	Singh Jasbir & Dhillon S. S.
6	Agricultural Geography, Newton Abbot	Tarrant J. R. (1974)
7	Poverty Agriculture & Economic Growth, Vikas Publication New Delhi	Bhatia B. M. (1977)
8	The agricultural Systems of the World, Cambridge University Press	Grigg D. B. (1973)
9	Systematic Agricultural Geography, Rawat Publication Jaipur (India)	Hussain Majid (1999)
10	Agricultural Geography, London	Symon. (1968)
11	Perspective in Agricultural Geography, Six Volume	Noor Mohammed
12	Green-Revolution How is it? Vishal Publication Kurukshetra.	Jasbir Singh (1973)

Walchand College of Arts & Science (Autonomous), Solapur

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Credit: Credit is a numerical value that indicates students work load (Lectures, Lab work, Seminar, Tutorials, Field work etc.) to complete a course unit. In most of the universities **15 contact hours** constitute **one credit**. The contact hours are transformed into credits. Moreover, the grading system of evaluation is introduced for PG course wherein different modes of Internal Evaluation are adopted. **The candidate has to appear for Internal Evaluation of 40 marks and End Semester Examination for 160 marks during the academic year.**

Walchand College of Arts and Science, Solapur
(Autonomous)

Department of Geography

M.A. Part II

Semester III- Settlement Geography

CBCS (Choice Based Credit System)

With effect from 2021

Course Credits: 04

Allotted Lectures: 60

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all latest concepts and themes Settlement Geography in brief but in adequate manner. Settlement part of this courses deals with the study of settlement processes and evolution and history of human settlement. In this subject also included the site and situations as well as factors impacting on settlements. Also studied the different settlement pattern theories.

1.2 Objectives of the Course:

1. The objective of this course is to introduce the settlement types in world.
2. To study the students with Rural and urban settlement.
3. To introduce functional classifications of towns in urban and rural area.
4. To get the students identified zone of urban, market centre's, urban agglomeration and transport communication.

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding of physical factors and cultural factors of settlement development.
2. Students will also teach the concern of applied wholesaler and retail trader's fields.
3. Students became aware of urban sprawl and urban pollution.
4. Student will identify the basic concept of central business district and concentric zone theory.

1.4. Programme Specific Outcomes:

1. Understand the nature and scope and concepts of settlement.
2. Identify the different settlement patterns and structure landforms in physical manner.
3. Identify the various towns of functional characteristics with historical background.
4. Understand the concepts of nearest neighbor analysis.

1.5 Programme Outcomes:

1. The Students are enabling to sketch the various diagrams of settlement structure.

2. Students acquire the understanding primary activities in rural settlement
3. The students identify the primate cities in the world
4. Students acquire the knowledge of policies of human settlement.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper

Settlement Geography

Semester III

MAGE23C1022

[Credits: 4]

Unit No.	Title of the Unit	No. of Lecture	No. of Credits
1	1.1 Settlement Geography: -Definitions, nature and scope. 2.2 Significance and evolution of human settlement; 2.3 Trend and growth of Human Settlement.	15	1
2	2.1 Rural Settlement: Site and situation, types & pattern, size and growth of Rural settlement, 2.2 Functional Classification of Rural settlement, House types based on building material, 2.3 Environmental, socio-economic, & Cultural Factors influencing the dynamics structure of Rural Settlement.	15	1
3	3.1 Urban Settlement: Meaning, nature and scope of Urban Geography, 3.2 Functional classification of Urban centers, Morphological structure of cities 3.3 The Concentric Zone Theory, The Sector Theory, The multi nuclei Theory	15	1
4	4.1 Theories of Christaller and August Losch and their applications. 4.2 Measurement of centrality and hierarchy, Concept of Primate city, city region and Rank-size rule. 4.3 Issues, perspective and policies on population & human Settlement. 4.4 Sustainable development of rural settlement	15	1

Reference:

- 1 Ambrose, Peter, Concepts in Geography Vol.-I Settlement Pattern, Longman 197.
- 2 Census of India, House types and Settlement Patterns of Villages in India, GOI, New Delhi 1961.
- 3 Singh R. L. and Kashi Nath Singh (Editors); Readings in Rural Settlements Geography, National Geographical Society of India. Varanasi, 1975.
- 4 Ucko, M.J., Ruth Tringham and G.W. Dimbleby (editors), Man, Settlement and Urbanism, Duckworth 1972.
- 5 United Nations Centre for Human Settlements (HABITAT), An Urbanising World, Global Report on Human Settlements, Oxford University Press for HABITAT 1996.
- 6 Hudson, F. S. (1977) Geography of Settlement Mcdonalds and Evans New York
- 7 Singh R. V. Geography of settlement, Rawat Pub. Jaipur
- 8 Mandel R B (1979): Introduction to Rural settlement

Title of the Course/Paper

Biogeography

Semester III

MAGE23O11A22

[Credits: 4]

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Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester III – Biogeography

CBCS (Choice Based Credit System)

With effect from 2022

Course Credits: 04

Allotted Lectures: 60

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all latest concepts in Biogeography in brief but in adequate manner. Biogeography is part of these courses deals with the study of origin and development plants and animals. In this subject also included the Biomes of Taiga and Tundra forest.

1.2 Objectives of the Course:

- 1) To introduce the student the concept of Biogeography and its interpretation.
- 2) To introduce the students with physical environment and their interactions with the living organisms.
- 3) To introduce the students with the living and non-living environments and their interactions.
- 4) To make awareness about conservation of biodiversity and biotic resources.

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding of Ecosystem.
2. Students will also learn the significant and development of biogeography.
3. Students became aware of functions of ecosystem.
4. Student will identify the basic concept of biogeographic region and biomes.

1.4. Programme Specific Outcomes:

1. Understand the nature and basic concepts of Biogeography.
2. Identify the major biomes in world.
3. Identify the migration and dispersal of animals.
4. Understand the National forest policy in India.

1.5 Programme Outcomes:

1. Students acquire the understanding of approaches of biogeography.
2. The students identify the various types of consumer.
3. Students acquire the information of legal protection to plants and animals.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. Second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

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1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper**Biogeography****Semester III****MAGE23O11A22****[Credits: 4]****Course Contents**

Unit No.	Sub Unit	No. of Lectures
I	Biogeography:- 1.1 Introduction, Definition, Nature and Scope of Biogeography 1.2 Significance and Development of Biogeography 1.3 Approaches of Biogeography 1.4 Branches of Biogeography	15
II	Ecosystems :- 2.1 Ecosystem: Concept and Meaning, Elements and types, Habitat, Plant and Animal association 2.2 Functions of Ecosystem: Food Chain, Food Web, Energy Pyramid with examples 2.3 Concept of Biogeographic Region and Biomes; Major Biomes in the World- Tropical, Temperate, Tundra and Taiga Forest, Grassland, Desert and Mountain	15
III	Introduction to Plant and Zoo Geography: A. Plant Geography: 3.1 Factors Influencing on Plants 3.2 World Distribution of Forests 3.3 Plant-evolution, adoption, speciation, extinction, colonization and dispersal importance of Plants B. Zoo Geography: 3.4 Relationship of Zoo geography with the environment. 3.5 Migration and dispersal of animals (Wild Attack on human Settlement) 3.6 Causes of migration and their effects	15
IV	A. Paleo records: 4.1 Paleo records of plants and animals 4.2 Paleo records of climatic changes 4.3 Paleo records of environmental changes in India B. Conservation of Biotic Resources: 4.4 National Forest Policy of India. 4.5 Conservation of Biotic Resources. 4.6 Legal Protection to Plants and Animals	15

Reference Books

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1	Man & Environment in India through ages, Books & Books	Agarwal D. P. 1972
2	Earth an living planet, ELBS, London.	Bradshaw M. J. 1979
3	Biogeography an ecological and evolutionary approach	Cox C.D. & Moore P.D. 1993
4	Environment and Ecology of early man in northern India, R.B. Publication Corp.	Gaur R.1987
5	Fundamentals of Biogeography Rout ledge, USA	Huggett R. J. 1998
6	Indian geosphere – biosphere, Her Anand Publication Delhi	Khoshoo T.N. & Sharma M. (edi) 1991
7	Encyclopedia of Environmental Science. Megrew Hill.	Lapedes D. N. (edi) 1974
8	Basic Biogeography 2 nd edition Longman, London	Pears N. 1985
9	Biogeography, English Language Book Society, London.	Robinson H. 1982
10	Biogeography: - Natural & Cultural Longman, London	Simmon I. G. 1994
11	Biogeography: - A study of plants & ecosphere. 3 rd edition. Oliver & Boyd, USA.	Tivyj. 1992

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(Autonomous)

Department of Geography

M.A. Part II

Semester III –Cultural Geography

CBCS (Choice Based Credit System)

With effect from 2022

Course Credits: 04

Allotted Lectures: 60

1.1 Preamble:

The Geography students of M. A. Part-II can better acquire the knowledge the cultural landscapes and cultural variations. This courses deals with the study of various cultural structures of Race, Religion and languages originated in the world. In this subject also included sub contents of racial classification in this course also studied the nature and scope of Cultural Geography and Social Concept.

1.2 Objectives of the Course:

1. The objective of this course is to introduce Cultural variations and meaning of cultural Geography.
2. To study the students with distribution religion its sub branches and racial classification in different nation.
3. To introduce characteristics of racial elements.
4. To get the students familiar with tribal festivals and locations.

1.3 .Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding the concept of social well being.
2. Students will also learn the different type language families.
3. Students will be achieve the knowledge of religious communities with special identity.
4. Student will identify major cultural regions and hearths in the world.

1.4. Programme Specific Outcomes:

1. Understand the social well-being for old age peoples and female welfare programmes.
2. Identify the different types of race.
3. Student well knowing the knowledge about tribal society system.
4. Understand the major different religious founders and its work.

1.5 Programme Outcomes:

1. The Students are enabling to draw cultural realm and regions.
2. Students acquire the understanding of Indian tribal groups.
3. The students identify the specific geographic location of cultural heritage sites.
4. Students acquire the understanding of major Primitive peoples in the world.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. I in Geography have fourth semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. II Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper

Cultural Geography

Semester III

MAGE23O1222

[Credits: 4]

Unit No.	Title of the Unit	No. of Lecture	No. of Credits
1	Introduction to Cultural Geography 1.1 Introduction, evolution, definition, nature, scope and element. 1.2 Component of culture, significance of cultural Geography. 1.3 Difference between Social and culture	15	1
2	II –Culture ,Race and Religion 2.1 Concept of culture, Bases of cultural diversity. 2.2 Race, Religion and language, cultural diversity and regionalization in India. 2.3 Concept of cultural hearths and cultural diffusion, world cultural realms.	10	3
3	III Social wellbeing and Cultural Process 3.1 Socio-Cultural development and well-being indicators. 3.2 Cultural pattern of rural and urban society. 3.3 Social and cultural processes in the developing countries with special reference to India.	15	
4	IV Tribal Groups and cultural adaptation 4.1 Tribal groups, diffusion of Religion and Ethnic traits in the world. 4.2 Economic activities and cultural adaptation- 4.3 Agricultural, Industrial and modern technological changes and their geographic implications	20	

Reference:

- 1 Social Geography, Rawat Publication Jaipur Ahmad Aijarudin (1999)
- 2 A Geography of Mankind, Mc-grew-K Book Co. New York Broek, Jan O. M. & Webb. John W. (1973)
- 3 An introduction to cultural Geography, Unwin Hyman London. Jackson Peter (1989)
- 4 Cultural geography, - People places and Environment west Publishing Co. New york. Jackon, Richard H and Loyd E. Hudman (1990)
- 5 An Introduction to Social Geography, - Oxford University Press Oxford. Jones, Emrys and Eyles John (1997)
- 6 Human Geography – Rawat Publication Jaipur. MajidHussain (1994)
- 7 India culture Society and economy Inter India Publication, New Delhi Mukherjee A. B.K. Arijazuddin A (1985)
- 8 A place in the world cultures and Globalization, Oxford University, New York Massey D. K. Jess P. (1995)
- 9 Cultural Geography – Rout, leldge, Publication, London. Crag Mike (1998)

Walchand College of Arts & Science (Autonomous), Solapur

Choice Based Credit System: With the view to ensure worldwide recognition, acceptability, horizontal as well as vertical mobility for students completing undergraduate degree, Walchand College of Arts & Science, Solapur has implemented Choice Based Credit System (CBCS) at Undergraduate level. The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations.

Outline of Choice Based Credit System:

1. **Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
2. **Elective Course:** Generally, a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective.

3. **Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds: **Ability Enhancement Compulsory Courses (AECC)** and **Skill Enhancement Courses (SEC)**. "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; (i) Environmental Science and (ii) English/MIL Communication. These are mandatory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

Credit: Credit is a numerical value that indicates students work load (Lectures, Lab work, Seminar, Tutorials, Field work etc.) to complete a course unit. In most of the universities **15 contact hours** constitute **one credit**. The contact hours are transformed into credits. Moreover, the grading system of evaluation is introduced for PG course wherein different modes of Internal Evaluation are adopted. **The candidate has to appear for Internal Evaluation of 20 marks and End Semester Examination for 80 marks during the academic year.**

Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester III –Quantitative Techniques in Economic Geography

CBCS (Choice Based Credit System)

With effect from 2021

Course Credits: 02

Allotted Lectures: 30

1.1 Preamble:

The Geography students of M. A. Part-II can well calculate all basic and different techniques with skill of appropriate quantitative methods in agricultural and marketing geography. Agricultural techniques are one of the most revolutionary and advanced techniques used in geographical information with socio-economic data analysis. Part of these courses deals with the measures of cropping pattern, intensity and agricultural productivity. In this subject also consisted crop combination, crop concentration and crop diversification measurement techniques. Otherwise in Marketing geography typical models method it can help the better understanding of basic gravity model, retail gravitation and transport network accessibility.

1.2 Objectives of the Course:

- 1) To understand the students to the quantitative techniques in agricultural geography.
- 2) To acquaint the student to the quantitative techniques applied in marketing geography.
- 3) To introduce some basic Agricultural techniques to the students to be applied to various themes in Geography.
- 4) To get the students knowledge about applied to various themes in marketing geography with different formulas.

1.3 Learning Outcomes of the Course:

1. The course will provide an understanding difference between crop combination and crop diversification with typical Measurement.
2. Students will also teach the various type of marketing analysis method in geographical view
3. Students will be examined cropping pattern with agricultural productivity in specific area.
4. Student will identify transport network and connectivity of urban field.

1.4. Programme Specific Outcomes:

1. Understand the uses of quantitative techniques in agricultural pattern.
2. Narrates and computing of crop combination of Weavers and Doi method

3. Sketching and draw the choropleth maps related geographical agricultural structures with numerical analysis
4. Understand the various elements of Measures of law of retail gravitation data.

1.5 Programme Outcomes:

1. The Students are capable to calculate numerical analyses in Kendall coefficient rank of crop.
2. Students acquire the Skill and techniques in crop concentration and crop diversification of Bhatiya.
3. The student's tabulation agricultural productivity of Sapre and Deshpande Analysis Pattern.
4. Students represent and described transport connectivity with geographical information.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. Second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper
Quantitative Techniques in Economic Geography
Semester IV
MAGE23P0922
[Credits: 2]

Unit No.	Title of the Unit	No. of Lecture	No. of Credits
1	Measurements in Agriculture Geography. 1. Measurement of agricultural productivity- Kendall's method, Sapre and Deshpande's method. 2. Crop Combination method of Weaver and Doi. 3. Crop Concentration-Bhatia's method. 4. Crop Diversification-Bhatia's method. 5 Crop specialization	15	2
2	Measurements in Marketing Geography 2.1 Basic Gravity Model. 2.2 Law of Retail Gravitation 2.3 Breaking Point Theory 2.4 Accessibility of Transport network	15	
	Journal		

References:

Name of Books

- 1 Gregory, S. Statistical Methods and the Geographers. Longman Group Ltd.
- 2 Hammond. R and McCulloch,-Quantitative Techniques in Geography: an introduction, Clarendon Press, Oxford.
- 3 Woodcock R. G. & Bailey M. J. – Quantitative Geography, Mac Donald & Erans Ltd. London.
- 4 Elhance D. N. – Fundamentals of Statistics, KitabMahal, Allahbad.
- 5 MahmoodAslam Statistical Methods in Geography.
- 6 Cole and king-Quantitative Geography.
- 7 Saxena. H. M. Geography of Marketing; Concepts and methods, New Delhi
- 8 Singh Jasbir-An Agricultural Geography, Vishal Publication, Kurukshetra.
- 9 Clarke. J. I. – Population Geography, Pergamoh Press, London.
- 10 Chandana and siddhu – Population Geography

Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester III – Introduction to Computer

CBCS (Choice Based Credit System)

With effect from 2022

Course Credits: 02

Allotted Lectures: 30

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all latest version and operating system of computer. Introduction to computer is part of these courses deals with the study of origin, generations and types of computer. In this subject also included the number system, a digital system understands only binary information consisting a stream of 1s and 0s. Any information consisting numeric and alphanumeric must be converted into binary information for further processing this process is called code conversion. Codes are basically a security measures.

1.2 Objectives of the Course:

- 1) To understand the terms, concepts, involved in computer
- 2) To familiarize the student with Internet, Browser and Web page

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding the Structure of Computer.
2. Students became aware of evolution and generations of computer.
3. Student will identify the various geographical websites.

1.4. Programme Specific Outcomes:

1. Understand the Basic concept and structure of Computer.
2. Identify the role of information technology in geographical studies.
3. Understand the Hardware and software.

1.5 Programme Outcomes:

1. The Students are enabling to draw the structure of computer.
2. Students acquire the knowledge of various geographical websites.
3. The students identify the various software and hardware.
4. Students classify various types of number system.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. Second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper
Introduction to Computer
Semester III
MAGE23CP1022
[Credits: 2]

Unit No.	Descriptions	No. of Lectures	No of Credits
I	Introduction to Computer 1.1 Definition, Evolution, Generations, Types and Characteristics of Computer 1.2 Input and Output Devices, Operating System 1.3 Introduction to Dos, Window, Excel 1.4 Types of Software 1.5 Number System	15	01
II	Information Technology 2.1 Importance of Information technology in Geographical studies 2.2 Advantages of Internet in Geography 2.3 Web page, Browsing and surfing the geographical sites and Downloading files	15	01

Reference Books

Sr. No.	Name of Books	Name of Authors
1	Computer Programming for Geographer, Longman London	D. J. Unwin & J. A. Dawson (1987)
2	Computer in Geography, Longman Scientific and Technical, London.	David J. Magthre (1989)
3	Computer Application in Geography, Jahn Wiley & Sons, New York U. S. A.	Paul M. Mather (1993)
4	Quantitative Geography	Cole and King (1968)
5	Quantitative Technique in Geography, Clarendon press – Oxford	Himmond B. (1974)
6	Computer System and Application,	Rustan Shorff
7	Computer System a Application, BPB publication, New Delhi	Sinha & Sinha (2005)

Walchand College of Arts and Science, Solapur
(Autonomous)
Department of Geography
M.A. Part II
Semester III – Application of Computer in Geography
CBCS (Choice Based Credit System)
With effect from 2022

Course Credits: 02

Allotted Lectures: 30

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all graph and diagram in excel. Application of computer is part of these courses deals with the cartography and statistical data analysis. In this subject also included the radar diagram, source of data, spatial component and temporal data. In this course also studied and exercises the various graph and diagrams.

1.2 Objectives of the Course:

1. To familiarizes with geographical data and data structure.
2. To acquaint the student to the computer cartography.
3. To analyze statistical data using computer.

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding the graph and diagram.
2. Students became aware of Data structure.
3. Student will identify geographical data and its types.

1.4. Programme Specific Outcomes:

1. Understand the basic calculation in Excel.
2. Identify the role of computer in statistical data analysis.
3. Understand the correlation between two geographical variables.

1.5 Programme Outcomes:

1. The Students are enabling to draw various graphs using computer.
2. Students acquire the knowledge of various geographical types of geographical data.
3. The students tabulate geographical data in excel.
4. Students estimate the population using trend line.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

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1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper
Application of Computer in Geography
Semester III
MAGE23OP11A22
[Credits: 2]

Unit No.	Descriptions	No. of Lectures	No. of Credits
I	Computer and Geographical Data 1.1 Classification of Geographical Data: Source of Data, Scales/Levels of Measurement, Spatial component, Dimensionality and Temporal data 1.2 Data Structure and Location of data	15	01
II	Cartography and Statistical Analysis in Computer 2.1 Representation of geographical data: Line graph, Bar graph, Histogram, Scatter diagram, Pie diagram, Radar diagram 2.2 Statistical Analysis with Computer: Measures of Central Tendency, Quartile deviation, Standard deviation, Correlation 'r' value and Trend line	15	01

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Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester IV – Quantitative techniques in Population and Settlement Geography

CBCS (Choice Based Credit System)

With effect from 2021

Course Credits: 04

Allotted Lectures: 30

1.1 Preamble:

The Geography students of M. A. Part-II can various types analysis in population geography with understand all basic and latest methods of socio economic mapping phenomena. Besides settlement geography information data is the part of different varieties of dimension of settlement index structures. These courses deal with the draw the several types of choropleth map and dot method and its relevance to distribution of Birth date, crude death rate and age specific death rate. In this subject also calculates semi average and least square method of projected population. Otherwise Representation of nearest neighbour analysis of settlement pattern. The population data included the various graphical analysis used in different techniques and skills. The various techniques analysis in rank size rule, primate city and functional classification towns.

4.5 Objectives of the Course:

- 1) To understand the students to the quantitative techniques in population geography.
- 2) To acquaint the student to the quantitative techniques applied in settlement geography
- 3) To familiarize the students various techniques of projected population with mapping view
- 4) To get the students identify and drawing the Lorenz curve, birth date distribution diagram and its variable relationship.

1.3 Learning Outcomes of the Course:

1. The course will provide an understanding difference between semi average method and least square methods with geographical variability.
2. Students will also attain the skill of different graphical and choropleth mapping techniques and representation.
3. Students will become creative in settlement geography data analysis with nearest neighbor techniques.
4. Student will indicate different information of rank size rules and functional classifications of towns with examples.

1.4. Programme Specific Outcomes:

1. Understand the difference of age specific birth rate and crude birth rate techniques used in graphical analysis.
2. Identify the various data analysis of death rate with particular geographic location
3. Introduce to Nelsons nearest neighbor diagrams and Rn values techniques used to several sector.

1.5 Programme Outcomes:

1. The Students are enabling to draw the various types of graphs and curves.
2. Students acquire the understanding the concept of rank size rule.
3. The students identify projected population techniques in specific regional data analysis.
4. Students acquire the understanding knowledge of different types of settlement pattern.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

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1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper

Quantitative Techniques in Population and Settlement Geography

Semester III

MAGE23P1222

[Credits: 2]

Unit No.	Title of the Unit	No. of Lecture	No. of Credits
1.	Quantitative Techniques in Population Geography 1. Measurement of birth rates, age-specific, crude 2. Measurement of death rates 3. Population projection by semi Average method. 4. Population projection by Least Squares method. 5. Lorenz Curve.	15	2
2.	Quantitative Techniques in Settlement Geography 2.1 Nelson's method of functional classification of towns. 2.2 Nearest Neighbor Analysis. 2.3 Ranks-Size Rule. 2.4 Primate city	15	
	Journal		

Reference:

Name of Books

- 1 Gregory, S. Statistical Methods and the Geographers. Longman Group Ltd.
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Credit: Credit is a numerical value that indicates students work load (Lectures, Lab work, Seminar, Tutorials, Field work etc.) to complete a course unit. In most of the universities **15 contact hours** constitute **one credit**. The contact hours are transformed into credits. Moreover, the grading system of evaluation is introduced for PG course wherein different modes of Internal Evaluation are adopted. **The candidate has to appear for Internal Evaluation of 20 marks and End Semester Examination for 80 marks during the academic year.**

Walchand College of Arts and Science, Solapur
(Autonomous)
Department of Geography
M.A. Part II
Semester IV –Regional Planning and Development in India
CBCS (Choice Based Credit System)
With effect from 2022

Course Credits: 04

Allotted Lectures: 60

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all concepts regions and regional development its types Exemption and distribution of several multi planning regions mainly in India. This courses deals with the study of Indian regional imbalances and its effects on economic condition. In this subject also included emerging role of Panchayat raj systems as well as macro,meso and micro regions in Indian . In this course also studied and functional and natural region with own characteristics.

1.2 Objectives of the Course:

1. The objective of this course is to introduce region with geography
2. To understand the role and relevance of region in regional planning.
3. To introduce the causes of regional deference's of development and perspectives and policies imperatives
4. To understand the problems of regional development.

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding of regional planning's of India.
2. Students will also learn the various type of multi level planning's and hierarchy.
3. Students will be achieving the knowledge of central place theory and growth pole theory

1.4. Programme Specific Outcomes:

1. Students introduce different types of functional region
2. Student identify the classification of development in village,tahsil and district.
3. Students familiar are regional imbalances in Maharashtra state.

1.5 Programme Outcomes:

1. The Students are enabling to understand the indicators of development.
2. Students acquire the understanding of knowledge major natural and functional regions different geographical location.
3. Students acquire the understanding the knowledge of Growth foci-theory.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper

Regional Planning and Development in India

Semester IV

MAGE24C1322

[Credits: 4]

Unit No.	Title of the Unit	No. of Lecture	No. of Credits
1	Unit- I 1.1 Region- Concept of Region, Characteristics, Types of Region- Formal or Natural and Functional, 1.2 Classification of Region-Based on Physical, Cultural and Physical-Cultural Variation, 1.3 Hierarchy of Region. Planning-Concept, Types, Regional planning- Concept and Approaches. 1.4 Identification of formal regions.	20	1
2	Unit -II 2.1 Concept of Growth and Development 2.2 Indicators of Development, Measurement of Regional Development, 2.3 Regional imbalances in India-Agricultural and Industrial.	15	1
3	Unit - III 3.1 Theoretical Framework for Regional Planning –Spread and Backwash Concept, 3.2 Central Place Theory, 3.3 Growth Pole Theory and Growth Foci Approach.	15	1
4	Unit -IV Concept of Multi-level Planning, Role of Panchayat Raj System in Regional Development (Village, Tahsil and District), Regional Development in India and Maharashtra-Problems and Prospects, Regional Development in Macro, Meso and Micro level- Problems and Prospects.	10	1

Reference:

1. Bhat L.S.(1973): Regional Planning in India, Statistical Publishing Society, Calcutta
- 2 Chand M. & Puri V.(1985): Regional Planning in India Allied Publishers Ltd., New Delhi.
- 3 Gosal, G.S. and Krishan, G: Regional Disparities in Levels of Socio-economic Development in Punjab, Vishal Publication, Kurukshetra, 1984.
- 4 Government of India, Planning Commission: Third Five Year Plan, Chapter on Regional Imbalances in Development, New Delhi 1961.
- 5 Kolinsky, A.R. (ed.) Growth Poles and Growth Centers in Regional Planning Mouton, The Hague, 1972
- 6 Regional Planning concepts Techniques, Polies and case studies concept publishing crop New Delhi 1992
- 7 Misra, R. P. and Other (editors) Regional Development Planning in India – A Strategy. Institute of Development Studies Mysore, 1974.
- 8 Myrdal, G: Economic Theory and Under Development Regions Gerald Dockworth, London 1957

Title of the Course/Paper
Development of Modern Geography
Semester IV
MAGE24C1422
[Credits: 4]

Walchand College of Arts and Science (Autonomous), Solapur

Choice Based Credit System: With the view to ensure worldwide recognition, acceptability, horizontal as well as vertical mobility for students completing undergraduate degree, Walchand College of Arts and Science, Solapur has implemented Choice Based Credit System (CBCS) at Undergraduate level. The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations.

Outline of Choice Based Credit System:

1. **Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
2. **Elective Course:** Generally, a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective.

3. **Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds: **Ability Enhancement Compulsory Courses (AECC)** and **Skill Enhancement Courses (SEC)**. "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; (i) Environmental Science and (ii) English/MIL Communication. These are mandatory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

Credit: Credit is a numerical value that indicates students work load (Lectures, Lab work, Seminar, Tutorials, Field work etc.) to complete a course unit. In most of the universities **15 contact hours** constitute **one credit**. The contact hours are transformed into credits. Moreover, the grading system of evaluation is introduced for PG course wherein different modes of Internal Evaluation are adopted. **The candidate has to appear for Internal Evaluation of 20 marks and End Semester Examination for 80 marks during the academic year.**

Walchand College of Arts and Science, Solapur
(Autonomous)
Department of Geography
M.A. Part II
Semester IV – Development of Modern Geography
CBCS (Choice Based Credit System)
With effect from 2022

Course Credits: 04

Allotted Lectures: 60

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all concepts in this subject with brief but in adequate manner. Development of Modern Geography is part of these courses deals with the study of major schools of geographical thought. In this subject also included fundamental concepts in geographical thoughts, Philosophical foundation of scientific geography and shifting paradigm.

1.2 Objectives of the Course:

1. To introduce the students to the philosophical and methodological foundations of the subject and its place in the world of knowledge.
2. To familiarize student with the major land marks in development of geographic thought at different periods of time.

1.3 Learning Outcomes of the Course: The students will be able to

4. The course will provide an understanding of the major schools of geographical thought.
5. Students became aware of rise of dualism and green revolution.
6. Student will identify the fundamental concepts and approaches in geography.

1.4. Programme Specific Outcomes:

1. Understand the age of exploration and impact of discoveries on the development of geography.
2. Identify the different approaches in geography.
3. Understand the measurement and explanation in geography.

1.5 Programme Outcomes:

1. The Students are enabling to draw the old map.
2. Students acquire the understanding of paradigms and philosophy in geography.
3. The students identify the concept of realism and dualism.
4. Students acquire the understanding of laws, theories and models in geography.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. Second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper
Development of Modern Geography
Semester IV
MAGE24C1422
[Credits: 4]

Unit No.	Descriptions	No. of Lectures
I	<p>Introduction:</p> <p>1.1 The field of Geography: Its place in the classification of sciences</p> <p>1.2 Fundamental Concepts</p> <p>1.3 Development of Geography through ages, the ancient and medieval period</p> <p>1.4 Age of exploration and impact of discoveries on the development of geography</p>	15
II	<p>The Foundation of Scientific Geography</p> <p>2.1 Dualism the myth and realism, dualism between Regional and Systematic Geography, dualism between Physical and Human geography.</p> <p>2.2 Philosophical foundation of scientific geography</p> <p>2.3 Development of concepts: Environmental - Determinism, Possibilism</p>	15
III	<p>Founders of Modern Geography</p> <p>3.1 Carl Ritter</p> <p>3.2 Alexander Von. Humboldt</p> <p>3.3 Vidal-de-la-Blache</p> <p>3.4 H. J. Mackinder</p> <p>3.5 Richard Hartshorne</p>	15
IV	<p>Approaches, Measurement and Explanation in Geography</p> <p>4.1 Approaches in Geography: i) Positivism, ii) Humanism, iii) Radicalism, iv) Behaviouralism</p> <p>4.2 Measurement and explanation in Geography: Laws, theories and models in geography – quantitative Revaluation</p> <p>4.3 Paradigms and Philosophy in Geography, Paradigm shift</p>	15

Reference Books

Sr. No.	Name of Books
1	Abler, Ronald; Adams, Johan, S. Gould, Pater, Spatial Organization; The Geographer's View of the World, Prentice Hall, N. J. 1971.
2	Ali, S.M. The Geography of Puranas, Peoples Publishing House, Delhi 1966
3	Amedeo, Douglas: An Introduction to Scientific Reasoning in Geography, John Wiley, U.S.A. 1971.
4	Dikshit, R.D. (ed) The Art & Science of Geography-Integrated Readings, Prentice Hall of India, New Delhi, 1994
5	Hartshorne, R.: Perspectives on Nature of Geography, Rand MC Nally & Co. 1959.
6	Husain, M: Evolution of Geographic Thought Rawat Pub. Jaipur, 1984
7	Johnston, R.J. Philosophy and Human Geography Edward Arnold London, 1983
8	Johnston, R.J. The Future of Geography Methoun, London, 1988
9	Minshull, R. The Changing Nature of Geography, Hutchinson University Library, London, 1970.

Walchand College of Arts & Science (Autonomous), Solapur

Choice Based Credit System: With the view to ensure worldwide recognition, acceptability, horizontal as well as vertical mobility for students completing undergraduate degree, Walchand College of Arts & Science, Solapur has implemented Choice Based Credit System (CBCS) at Undergraduate level. The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations.

Outline of Choice Based Credit System:

1. **Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

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Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective.

3. **Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds: **Ability Enhancement Compulsory Courses (AECC)** and **Skill Enhancement Courses (SEC)**. "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; (i) Environmental Science and (ii) English/MIL Communication. These are mandatory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

Credit: Credit is a numerical value that indicates students work load (Lectures, Lab work, Seminar, Tutorials, Field work etc.) to complete a course unit. In most of the universities **15 contact hours** constitute **one credit**. The contact hours are transformed into credits. Moreover, the grading system of evaluation is introduced for PG course wherein different modes of Internal Evaluation are adopted. **The candidate has to appear for Internal Evaluation of 20 marks and End Semester Examination for 80 marks during the academic year.**

Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester IV –Political Geography

CBCS (Choice Based Credit System)

With effect from 2022

Course Credits: 04

Allotted Lectures: 60

1.1 Preamble:

The Geography students of M. A. Part-II can identified and effective learning of all concepts in Political Geography state, nation and capital with Geo politics. This courses deals with the study of core regions and classification of capitals groups. In this subject also consisted boundary and frontiers and its characteristics In this course also studied the nature and scope of political geography with interstate issues of India .

1.2 Objectives of the Course:

- 1 To understand the basic concepts in political geography.
2. To enhance awareness of Multi-dimensional nature of geo-political space.
3. To make acquaint the students with nature of Geographical factors influencing the geopolitical situations in India and world.
4. To get the students familiar with different components of nation building.

1.3 Learning Outcomes of the Course: The students will be able to

- 1 The course will be provide an understanding composition of recent trends in political geography.
- 2 Students will also learn the different types of boundary lines and its political issues,
- 3 Students will be achieving the knowledge about popular theories of heartland and rimaland

1.4. Programme Specific Outcomes:

1. Understand the meaning of geopolitics and nation.
2. Student will understand the concept of sea power and unity in diversity.
3. familiarized the students SAARC and South East Orgnization.

1.5 Programme Outcomes:

1. The Students are enabling and identified international boundary lines of India and world.
2. Students acquire the understanding of geopolitical significance of Indian Ocean.
3. Students acquire the understanding the concept of centripetal and centrifugal forces.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper**Political Geography****Semester IV****MAGE115007A21****[Credits: 4]**

Unit No.	Title of the Unit	No. of Lecture	No. of Credits
1	Unit -I Introduction to Political Geography : 1.1 Political Geography: Definition, Nature and Scope of Political Geography, 1.2 Approaches of the study Political Geography, Recent trends in political geography, Geographic elements and the state 1.3 Physical, human and economic elements, Political Geography and environment interface.	15	1
2	Unit –II Themes In Political Geography 2.1 Themes in Political Geography: State and nation, nation-state 2.2 Nationalism, nation building, Frontiers and Boundaries. 2.3 Capital Classification, functions and world power perspectives on one core periphery.	15	1
3	Unit -III Theoretical frame work and Geopolitics 3.1 Global Strategic Models(Theory of Heartland), Spykman and Mahan’s sea power concept, its relevance to contemporary, 3.2 World situation, Geopolitical significance of Indian ocean, 3.3 Political Geography of SAARC region, south-east Asia, west Asia.	15	1
4	Unit IV Contemporary Issues and problems 4.1 Political geography of contemporary-India with special reference to: the changing Political map of India. 4.2 Unity-diversity, central and centrifugal forces, Stability and instability, Inter-state issues (like water disputes, riparian claims) and conflicts resolutions 4.3 Belgaum border dispute 4.4 Insurgency in border state, emergence of new states, federal India- Unity in diversity	15	1

- **Reference Books.**

- 1 Bhagwati, J. N. (Ed) New International Economic Order – The North –South Debate. M.I.T. Press, London, 1976.
- 2 Dikshit, R.D. Political Geography: A Contemporary Perspective, Tata McGraw-Hill Publishing Company. New Delhi, 1982
- 3 Glassner M.I. Political Geography, John Wiley, New York, 1993
- 4 Panikkar, K.M. Geographical factors in Indian History. Bharatiya Vidya Bhavan, Bombay, 1956
- 5 Pounds N.T. Political Geography McGraw Hill, New York, 1972
- 6 Prescott, J.R.V. Political Geography Methouen & Co. London, 1972
- 7 Schwartzberg, J.E. A Historical Atlas of South Asia, University of Chicago Press, U.S.A. 1993.
- 8 Short J. R. An Introduction to Political Geography, Routledge and Kegan Paul, London, 1982
- 9 Taylor P. J. (Ed), Political Geography of the 20th Century – A Global Analysis, New York 1993.
- 10 Taylor, Peter: Political Geography, Longman, London, 1985.
- 11 William C.H. (Ed), Political Geography of the New World Order Halsted Ben, New York, 1993.

Title of the Course/Paper
Geography of Manufacturing
Semester IV
MAGE24O16B22
[Credits: 4]

Walchand College of Arts and Science (Autonomous), Solapur

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Outline of Choice Based Credit System:

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Credit: Credit is a numerical value that indicates students work load (Lectures, Lab work, Seminar, Tutorials, Field work etc.) to complete a course unit. In most of the universities **15 contact hours** constitute **one credit**. The contact hours are transformed into credits. Moreover, the grading system of evaluation is introduced for PG course wherein different modes of Internal Evaluation are adopted. **The candidate has to appear for Internal Evaluation of 20 marks and End Semester Examination for 80 marks during the academic year.**

Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester IV –Geography of Manufacturing

CBCS (Choice Based Credit System)

With effect from 2022

Course Credits: 04

Allotted Lectures: 60

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all concepts in geography of manufacturing with brief but in adequate manner. Geography of manufacturing is part of these courses deals with the study of various types of industries in India and world as well as the theories and models of industrial location. In this subject also included concepts of Localization, Centralization and Decentralization. The tourism industry in India is also included due to emerging industry in India.

1.3 Objectives of the Course:

- 1 To introduce the nature, development and significance of manufacturing and its links with the world economy.
- 2 To understand the location of major manufacturing activities with the support of various industrial location theories and models.
- 3 To discuss problems and impact of manufacturing industries with respect to relocation environmental pollution and occupational health and industrial hazard.

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide to understand the major industry in world.
2. Students became aware of industrial policy and tourism industry in India.
3. Student will identify the fundamental concepts of Localization, Centralization and Decentralization.

1.4. Programme Specific Outcomes:

1. Understand the major industrial regions in India.
2. Identify the changing industrial policies in India.
3. Understand the role of industries in socio economic development of any regions.

1.5 Programme Outcomes:

1. The Students are enabling to show the major industrial regions on the map of India.
2. Students acquire the understanding theories and models in industrial location.
3. The students identify the Inter-relationship between the manufacturing and economic development.

4. Students acquire the understanding of tourism industry in India.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. Second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper
Geography of Manufacturing
Semester IV
MAGE24O16B22
[Credits: 4]

Unit No.	Descriptions	No. of Lectures	No. of Credits
I	<p>Introduction</p> <p>1.1 Meaning, Nature, Scope and Recent developments of Manufacturing</p> <p>1.2 Factors of localization of manufacturing industries</p> <p>1.3 Inter-relationship between the manufacturing and economic development</p> <p>1.4 Localization, Centralization and Decentralization</p>	15	01
II	<p>Theories and Models</p> <p>2.1 Theories and models of industrial location:- (a) A. Weber, (b) A. Losch, (c) Sargent Florence's; Modern refinements to Least cost-theory</p> <p>2.2 Critical review and application of industrial location theories</p> <p>2.3 Methods of measuring the spatial distribution of manufacturing industries:- (a) Standard Industrial classification, (b) Neo-classical theory</p>	15	01
III	<p>Major Industries</p> <p>3.1 Distribution and spatial pattern of manufacturing industries: (a) Iron and steel, (b) Textiles, (c) Chemicals, (d) Automobiles, (e) Hardware and software- industries, with special references to U.S.A., Japan, U.K. and India</p> <p>3.2 Methods of delineating manufacturing regions</p> <p>3.3 Major manufacturing regions of the world</p>	15	01
IV	<p>Industries in India</p> <p>4.1 Environmental degradation caused by manufacturing industries: (a) Industrial Hazards (b) Occupation and health</p> <p>4.2 Impact of manufacturing industries on economic development in India</p> <p>4.3 Tourism industry in India</p> <p>4.4 Effects of Privatization, Liberalization and Globalization on Indian Industries</p> <p>4.5 Changing Industrial Policy in India</p>	15	01

Reference Books

Sr. No.	Name of Books
1	Alexander, J.W.: Economic Geography, Prentice Hall, Englewood Cliffs, 1988.
2	Alexanderson, C: Geography of Manufacturing, Prentice Hall, Bombay, 1967.
3	Hoover, E.M.- The location and space economy, McGraw Hill, New York 1948.
4	Isard, W.: Methods of Regional Analysis, The Technology Press of M.I.T. & John Wiley & Sons, New York 1956.
5	Miller, E. A., Geography of Manufacturing, Prentice Hall, Englewood Cliffs, New Jersey. 1962.
6	Weber, Alfred: Theory of Location of Industries, Chicago University Press, Chicago, 1957.

Walchand College of Arts and Science, Solapur
(Autonomous)
Department of Geography
M.A. Part II
Semester IV – Introduction to Remote Sensing and GIS
CBCS (Choice Based Credit System)
With effect from 2022

Course Credits: 02

Allotted Lectures: 30

1.1 Preamble:

The Geography students of M. A. Part-II can better understand all latest concepts of Remote Sensing and Geographical Information System. Introduction to RS and GIS is part of these courses deals with the study of concept EMR and its interaction with atmosphere in data capturing process. In this subject also included the EM Radiation and EM Spectrum, Earth Resources and Meteorological satellites, function and application area of GIS, modern trends in GIS and some basic practical work on GIS software (Global Mapper).

1.2 Objectives of the Course:

- 1) Make students familiar with concept of Remote Sensing and its use in present Geographic studies.
- 2) To give detailed knowledge about Global Mapper GIS Software.
- 3) Make students familiar with concept of Geographical Information System.

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding the fundamentals of RS and GIS.
2. Students became aware of digital cartography.
3. Student will identify the online resources for GIS application.

1.4. Programme Specific Outcomes:

1. Understand the Basic concept of Remote Sensing.
2. Identify the role of Satellite images and GIS software in map making.
3. Understand the various types of Earth Resources and Meteorological satellites.

1.5 Programme Outcomes:

1. The Students are enabling to draw the map using GIS software.
2. Students acquire the knowledge of data structure and data management.
3. The students identify the various natural and manmade features on aerial photographs.
4. Students identify the modern trends in Geographical Information System.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. Second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper
Introduction to Remote Sensing and GIS
Semester IV
MAGE24CP1322
[Credits: 2]

Unit No.	Desc riptions	No. of Lectures	
I	Introduction to Remote Sensing 1.1 Definition, Concept, Advantages and limitations of Remote Sensing 1.2 Types of Platform and Sensors, EM Radiation and EM Spectrum 1.3 Earth Resources Satellites and Meteorological satellites 1.4 Application of Remote Sensing in Geography 1.5 Basic principles, types, steps and Elements of Aerial Photo interpretation	15	01
II	Introduction to GIS 2.1 Geographic Information System: Definition, Purpose, components, Advantages and disadvantages of GIS 2.2 Functions and application areas of GIS 2.3 Data Structure-Raster and Vector, Data input and Data Management 2.4 Modern trends in GIS 2.5 Global Mapper Software – Digitization, Access online data, Terrain analysis, Cartographic symbolization and Map design	15	01

Reference Books

Sr. No.	Name of Books
1	Barrett E.C. and L.F. Curtis (1992): Fundamentals of remote sensing and air photo interpretation – Mcmillon, New York
2	Basudeb Bhatta (2016): Remote Sensing and GIS, Oxford University Press, New Delhi.
3	Curran Paul. J. (1985): Introduction of remotes sensing, londman, London.
4	Comphell J. (1989): Introduction to remote sensing, Fuildord, New York.
5	Kang-Tsung Chang (2017): Introduction to Geographic Information Systems, McGraw Hill Education (India) Private Ltd. Chennai
6	Lillesand I. M. and Kiefer R. W. (1979): Remote sensing and image interpretation, John Willey & Sons New York

7	Leuder D.R. (1959): Areal Photographic interpretation, Mc grew Hill Book Company, New York.
8	Saini R. R. Kalwar S. C. (1991): Remote sensing in geography, pointer Publishers, Jaipur.
9	Sabins F. F. Jour (1987): Remote sensing principal of interpretation, (II edition) W.H. Freeman and Company, New York.
10	Ian, Haywood & others (2006): Geographical Information System, pearson Education, Inc., Delhi.
11	Jamwal, Anil K. (2008): Geographical Information System, Jnanada Prakashan, New Delhi.

Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester IV – Application of Remote Sensing

CBCS (Choice Based Credit System)

With effect from 2022

Course Credits: 02

Allotted Lectures: 30

1.1 Preamble:

The Geography students of M. A. Part-II can better understand of aerial photographs. Application of Remote Sensing is part of these courses deals with the study of photogrammetry, interpretation and mapping of photographs. In this subject also included the introduction and advantages of aerial photographs as well as Types and characteristics of aerial photographs, in photogrammetry the additional point is determination flying height and determination of focal length.

1.2 Objectives of the Course:

- 1) Make students familiar with concept of aerial photographs.
- 2) To give detailed knowledge about photogrammetry.
- 3) Make students familiar with parallax bar and satellite images.

1.3 Learning Outcomes of the Course: The students will be able to

1. The course will provide an understanding the fundamentals of Remote Sensing.
2. Students became aware of digital image process.
3. Student will identify the scale using various methods.

1.4. Programme Specific Outcomes:

1. Understand the relationship between focal length, scale and flying height.
2. Identify the role of stereoscopes in aerial image interpretation.
3. Understand the various types of aerial photographs.

1.5 Programme Outcomes:

1. The Students are enabling to draw the parallax bar.
2. Students acquire the knowledge about various aerial photographs.
3. The students identify the various natural and manmade features on aerial photographs.
4. Students are enabling to calculate the scales using various methods.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. Second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

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1.10 Medium of Instruction: Marathi, English

Title of the Course/Paper
Application of Remote Sensing
Semester IV
MAGE24CP1422
[Credits: 2]

Unit No.	Descriptions	No. of Lectures	No. of Lectures	
I	Introduction to Aerial Photographs 1.1 Indexing of aerial photographs 1.2 Tracing with naked eyes 1.3 Introduction and advantages of aerial photography 1.4 Types and characteristics of aerial photographs	05	01	
II	Photogrammetry 2.1 Determination of scale by various methods 2.2 Determination of flying height 2.3 Determination of focal length 2.4 Determination of height of object 2.5 Relief displacement and height determination 2.6 Introduction to parallax, parallax measurement and height determination 2.7 Determination of overlap 2.8 Scale and resolution of photo 2.9 Area measurement 2.10 Determination of photo coverage area and cost of photographs	10		
III	Interpretation and mapping of aerial photographs 3.1 Land use and land cover 3.2 Relief and landforms 3.3 Significance of drainage 3.4 Cultural landscape mapping 3.5 Rock types lineament and structure	10		01
IV	Visual interpretation of satellite image 4.1 Landuse 4.2 Landforms	05		

Reference Books

Sr. No.	Name of Books
1	Barrett E.C. and L.F. Curtis (1992): Fundamentals of remote sensing and air photo interpretation – Mcmillon, New York
2	Basudeb Bhatta (2016): Remote Sensing and GIS, Oxford University Press, New Delhi.
3	Curran Paul. J. (1985): Introduction of remotes sensing, londman, London.
4	Comphell J. (1989): Introduction to remote sensing, Fuildord, New York.
5	Kang-Tsung Chang (2017): Introduction to Geographic Information Systems, McGraw Hill Education (India) Private Ltd. Chennai
6	Lillesand I. M. and kiefer R. W. (1979): Remote sensing and image interpretation, John Willey & Sons New York
7	Leuder D.R. (1959): Areal Photographic interpretation, Mc grew Hill Book Company, New York.
8	Saini R. R. Kalwar S. C. (1991): Remote sensing in geography, pointer Publishers, Jaipur.
9	Sabins F. F. Jour (1987): Remote sensing principal of interpretation, (II edition) W.H. Freeman and Company, New York.
10	Ian, Haywood & others (2006): Geographical Information System, pearson Education, Inc., Delhi.
11	Jamwal, Anil K. (2008): Geographical Information System, Jnanada Prakashan, New Delhi.

Walchand College of Arts & Science (Autonomous), Solapur

Choice Based Credit System: With the view to ensure worldwide recognition, acceptability, horizontal as well as vertical mobility for students completing undergraduate degree, Walchand College of Arts & Science, Solapur has implemented Choice Based Credit System (CBCS) at Undergraduate level. The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations.

Outline of Choice Based Credit System:

1. **Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

2. **Elective Course:** Generally, a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

Discipline Specific Elective (DSE) Course: Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective.

3. **Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds: **Ability Enhancement Compulsory Courses (AECC)** and **Skill Enhancement Courses (SEC)**. "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; (i) Environmental Science and (ii) English/MIL Communication. These are mandatory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

Credit: Credit is a numerical value that indicates students work load (Lectures, Lab work, Seminar, Tutorials, Field work etc.) to complete a course unit. In most of the universities **15 contact hours** constitute **one credit**. The contact hours are transformed into credits. Moreover, the grading system of evaluation is introduced for PG course wherein different modes of Internal Evaluation are adopted. **The candidate has to appear for Internal Evaluation of 10 marks and End Semester Examination for 40 marks during the academic year.**

Walchand College of Arts and Science, Solapur

(Autonomous)

Department of Geography

M.A. Part II

Semester IV –Research Methodology and Project Report

CBCS (Choice Based Credit System)

With effect from 2021

Course Credits: 04

Allotted Lectures: 90

1.1 Preamble:

The Geography students of M. A. Part-II can improve the knowledge about research skill and project design with understand all basic fieldwork techniques and research data . Primary and secondary data is the part of these courses deals with the collecting and presentation of various data. In this subject properly mentioned types of sampling methods and importance of sampling in research. Otherwise frame work of project reports with text and references. The individual or group wise project report prepares with representing and interpretation of data analysis by selected problematic area. The course intended to provide post graduate students with a thorough knowledge and practice in conducting research development projects and to serve as presentation for carrying gout studies in projects and theses.

1.2 Objectives of the Course:

1. The objective of this course is to introduce the student some basic concept of research and its methodologies
2. To identify appropriate research topics.
3. To select and define suitable research problem and parameters
4. Students so that they are capable prepare a project proposal by individual or team research work. Besides organize and conduct of research framework appropriate manner. .

1.3 Learning Outcomes of the Course: at the end of the course the student should be able to

1. To identify and describe researchable ideas, projects and themes.
2. Students will also design and specify methods for carrying out a scientific research demonstrate of skills and research attitude.
3. Students to be able to analyze data using scientific methodologies.
4. Student will to present research results in a systematic and objectives way.

1.4. Programme Specific Outcomes:

1. Understand the proper methods of data collection and skills about calculation.
2. Identify the different sampling methods and modes of data analysis.
3. Collect the knowledge about fieldwork through Micro, Meso and Macro region

1.5 Programme Outcomes:

1. The Students are enabling to manipulate the collected data the various types of techniques applied
2. Students achieve the skill about preparation of questionnaires, schedules and interviews of relevance topic.
3. The students explains and represents problematic issues in particular location with better suggestions lines and correlation climatic variables with special formulas.

1.6 Eligibility for Admission: Students who have passed B.A. Geography or similar exams will be admitted to this class.

1.7 Programme Duration: The structure of M.A. in Geography has four semesters in total covering a period of two years.

1.8 Duration of the Course: M. A. second Year comprises two semesters. Each semester will have **four** theory and four **practical** papers. The theory papers have 80 marks for End Semester Examination and 20 marks for Internal Evaluation for each paper. The practical papers have 40 marks for End Semester Examination and 10 marks for Internal Evaluation for each paper.

1.9 Modes of Internal Evaluation: Assignment, Seminar, Tutorial, Presentation, MCQs via Google, Field Visits, any other suitable mode along with marks for Attendance of the students.

1.10 Medium of Instruction: Marathi, English

Geography Compulsory
Title of the Course/Paper
 Research Methodology and Project Report
Semester IV
MAGE24PW22
[Credits: 4]

Unit No.	Title of the Unit	No. of Lecture	No. of Credits
1	<p style="text-align: center;">Unit -I</p> <p>Field work and Data collection.</p> 1.1 Significance of fieldwork and geography 1.2 Difference between field work and Survey 1.3 Types of fieldworks (Macro, Meso and Micro), 1.4 Importance of data, Types of data, methods of data collection. 1.5 Presentation and Interpretation of data.	40	2
2	<p style="text-align: center;">Unit II</p> <p>Sampling and format of Project Report :</p> 2.1 Definition and Types of Research 2.2 Importance of Sampling in Research. 2.3 Types of Sampling methods, Format of project report, 2.4 preliminary sections, the text and reference Section. 2.5 Style of writing, quotation, footnotes, reference and bibliography, figures and tables.	50	2
Unit No. 1	<p style="text-align: center;">Section II:</p> <p style="text-align: center;">Project Report.</p> <p style="text-align: center;">Description</p> The students individually or a batches of not exceeding 15 are required to select a problem for the project report. They are expected to carry out field work to generate primary data regarding the problem. By analyzing the data so evolved students should prepare a report and submit it in office for final examination and viva-voce	80	

Reference:

Name of Books

- 1 Johnes P. A.: Field work in Geography, – Longman
- 2 Ahuja Ram, – Research Method
- 3 Kothari C. R. (1996): Research Methodology, – Vishwas Prakashan, New Delhi
- 4 Misra R. P. (1991): Research Methodology in Geography, Concept publication New Delhi
- 5 Archet J. E. Dalton T. H. (1968): The field work in geography, Batsford Ltd., London.
- 6 HamingLioyed (1975): Scientific Geographic Research, W C Brow Company U.S.A.
- 7 Borase: An Introduction of Research Method, (2005)
- 8 Hans Raj (1988): Theory and Practice in Social Research, Surjeet Publication, 7-K,Kolhapur

Theory Question Paper Pattern (for M.A. Part I & II)

M. A. –I & II (Semester I, II, III & IV)

Geography: Revised Syllabus (CBCS)

(To be introduced from June 2021)

End Semester Examination- 80 Marks (Max. Time 3.00 Hours)

{ Internal Evaluation- 20 Marks }

Introductions:

1. *Q. Nos. 1 and 2 are compulsory.*
2. *Attempt any three questions from Q. No. 3 to Q. No. 7*
3. *Figure to the Right indicates full marks.*

Que.1 A) Choose correct alternative (10 MCQ) (With four options each)	10 marks
B) Fill in the blanks OR Write true/false (6 Que.)	06 marks
Que. 2 Answer the following (4 X4) A) B) C) D)	16 marks
Que.3 Answer the following (8+8) A) B)	16 marks
Que. 4 Answer the following (8+8) A) B)	16 marks
Que.5 Answer the following (8+8) A) B)	16 marks
Que.6 Answer the following (8+8) A) B)	16 marks
Que.7 Answer the following (8+8) A) B)	16 marks

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Practical Question Paper Pattern (for M.A. Part II)

M. A. –II (Semester III & IV)

Geography: Revised Syllabus (CBCS)

(To be introduced from June 2022)

End Semester Examination- 40 Marks (Max. Time $2\frac{1}{2}$ Hours)

{ Internal Evaluation- 10 Marks }

Introductions:

- 1. All questions are compulsory.*
- 2. Figure to the Right indicates full marks.*

Que.1) Representation/Analysis/Calculation	10 marks
Que. 2) Representation/Analysis/Calculation	10 marks
Que.3) Short Notes (Any three of Four)	10 marks
Que. 4) Journal	05 marks

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