

Academic Council

Item No: _____

Devrukh Shikshan Prasarak Mandal's

NYA. TATYASAHEB ATHALYE ARTS, VED. S.R. SAPRE COMMERCE &

VID. DADASAHEB PITRE SCIENCE COLLEGE, DEVRUKH

[AN AUTONOMOUS COLLEGE AFFILIATED TO UNIVERSITY OF MUMBAI]



Syllabus for First Year of M.A./ M. Sc.

Program: M.A./ M. Sc.

Course: Geography

Semester I (Geography Paper I to VI)

Credit Based Semester and Grading System with the Effect from

Academic Year 2019-20

M.A./ M. Sc. General (Semester Pattern)

First Year M.A./ M. Sc.

Semester-I

GEOGRAPHY – CURRICULUM

Paper Code	Paper	Lectures /Practical	Evaluation Weightage			Credits
			External	Internal	Total	
ASPCAP GEO101	Geography Paper-I Principles of Geomorphology	60	70	30	100	04
ASPCAP GEO102	Geography Paper-II Principles of Climatology	60	70	30	100	04
ASPCAP GEO103	Geography Paper-III Perspectives in Human Geography	60	70	30	100	04
ASPCAP GEO104	Geography Paper-IV Spatial Organisation of Economic activities	60	70	30	100	04
ASPCAP GEO105	Practical Paper-I Tools and Techniques of Spatial Analysis - I	60	70	30	100	04
ASPCAP GEO106	Practical Paper-II Tools and Techniques of Spatial Analysis - II	60	70	30	100	04

Syllabus for First Year M.A./ M. Sc. Programme in the subject of Geography
(With effect from the academic year 2019-2020)

Semester-I, Geography Paper – I: 101: Principles of Geomorphology
COURSE CODE: ASCASPGE0101 **Credits - 04**

Learning Objectives

- The course provides an overview of the Geomorphology, the interior of the earth, earth movements, landform development processes, and practical component based on it.
- It aims to shed light on the definition, nature, and scope of geomorphology, the composition of the earth interior, geological time scale, continental drift theory and theory of plate tectonics and sea-floor spreading and the role of plate tectonics in folding, faulting, volcanic eruption and earthquake, and geomorphic processes in the development of landforms with special reference to the Konkan region.
- The course shall further convey an understanding of landforming processes on different temporal and spatial magnitudes.

COURSE CONTENT

Topic No.	Content	Credits	No. of Lectures
1	Fundamentals of Geomorphology <ul style="list-style-type: none"> ○ Definition, Nature, and scope of Geomorphology ○ Geological Evolution of Earth ○ Geological time scale ○ Development of geomorphic thought- Fundamental Concepts in Geomorphology 	01	15
2	Interior of the Earth and Earth Movements <ul style="list-style-type: none"> ○ Continental Drift Theory - Sea-floor spreading - Plate Tectonics ○ Geosynclines: Geosyncline Theory of Kobber, Holmes' Convection Current Theory, ○ Theories of Isostasy ○ Endogenic Movements- types, consequences (earthquakes and volcanoes) and landforms 	01	15
3	Geomorphic Processes and Landform Development <ul style="list-style-type: none"> ○ Fluvial Geomorphic system: processes and resulting landforms ○ Glacial Geomorphic system: geomorphic processes and features ○ Karst landscape: development and processes ○ Aeolian Geomorphic system: processes and landforms ○ Coastal Geomorphic system: processes and landforms 	01	15
4	Major Geomorphic Theories <ul style="list-style-type: none"> ○ Geomorphic Theory of G. K. Gilbert ○ Geomorphic Theory of Davis ○ Geomorphic Model of Penck ○ Geomorphic Model of L. C. King 	01	15
Total		04	60

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The student can explain nature and scope of Geomorphology, the interior of the earth, types of rocks and minerals, plate tectonics on the earth surface and its relation with folding, faulting, volcanic eruptions and earthquakes, landforming processes and basic theories related to landform development and slope.

Skills

The student can plan and carry out a geomorphological field investigation in the locality and identify the changing nature of the interior of the Earth.

General competence

The student can apply a precise geomorphological language to describe and discuss geomorphological processes with context to the Konkan region.

Required Previous Knowledge

Knowledge of fundamentals of Geography, branches of Geography, the interior of the earth is necessary before to start to learn the course

Access to the Course

The course is compulsory and it is available for all the students admitting for Master of Arts.

Forms of Assessment

The assessment will be external as well as internal. **The pattern of external and internal assessment will be 70:30.** The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 2.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	Fill in the Blanks	14
Q.2	All	Attempt Any two questions from the following (Out of four) (Knowledge-Based Question)	20
Q.3	All	Explain Any four concepts from the following (Out of six) (Skill-Based Question)	20
Q.4	All	Attempt any one question from the following (Out of four) (Long Answer Question based on General Competence)	16
		Total	70

Internal evaluation (30 Marks)

Sr. No.	Description	Marks
1	Test (Preferably Online Test with Fifteen Minutes Duration- MCQ, Match the following, True or False, etc.)	10
2	Project Report	10
3	Overall Conductance	10
	Total	30

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail. The Board of Examinations of the college reserves right to change the grading scale.

References:

1. Bloom, A. L. (2002), 'Geomorphology: A Systematic Analysis of Late Cenozoic Landforms', Pearson Education Pvt. Ltd., and Singapore.
2. Bunnnett, R. B. (1965): "Physical Geography in Diagrams", Parson Education, New Delhi
3. Christopherson, R.W. (1994), 'Geosystems: An Introduction to Physical Geography', Macmillan College Publishing Company, New York.
4. Dayal, P. (2010): "A Text Book of Geomorphology", Rajesh Publications, New Delhi
5. Engeln, O. D. Von (1944), 'Geomorphology', The Macmillan Company, New York.
6. Fairbridge R. W. (1968) (ed.), 'Encyclopaedia of Geomorphology', Reinhold, New York.
7. Hussain, Majid (2001): "Fundamentals of Physical Geography", Rawat Publications, Jaipur,
8. Lal, D. S. (2009): "Physical Geography: Sharada Pustak Bhavan, Allahabad
9. Mishra, B. (2008): "Interpreting Contours and Topographical Maps", Frank Bros. and Co., New Delhi
10. Mishra, R. P., and Ramesh, A. (2002): "Fundamentals of Cartography", Concept Publishing Company, New Delhi
11. Anhert, F., (1996), 'Introduction to Geomorphology', Arnold, London, Sydney, Aukland
12. Mitchell, C. E. (1973), 'Terrain Evaluation', Longmans, London.
13. Negi, B. S. (1993): "Physical Geography", S. J. Publications, Meerut
14. Qazi, S. A. (2009): "Principles of Physical Geography", APH Publishing Corporation, New Delhi
15. Singh, L. R. (2009): "Fundamentals of Practical Geography", Sharda Pustak Bhavna, Allahabad
16. Singh, Savindra (2015): "Physical Geography", Pravalika Publications, Allahabad
17. Sparks B. W. (1988): "An Introduction to Geomorphology", Longman, London
18. Strahler A. (1996), 'Physical Geography: Science and System of the Human Environment', John Willey, New York.
19. Strahler, A. H. and Strahler, A. N. (1992): "Modern Physical Geography", John Willey & Sons,
20. Thornberry, W.D. (1998), 'Principles of Geomorphology', New Age International Press, New Delhi.

Syllabus for First Year M.A./ M. Sc. Programme in the subject of Geography

(With effect from the academic year 2019-2020)

Semester-I, Geography Paper – II: Principles of Climatology

COURSE CODE: ASPCASPGEO102

Credits - 04

Learning Objectives

- The course provides an overview of the climatology, insolation, temperature, air pressure and air masses.
- It aims to shed light on the definition, nature, and scope of Climatology, composition of the atmosphere, insolation and heat budget, impact of temperature on weather and climate. Atmospheric pressure and circulation, air masses and special weather conditions.
- The course shall further focus on the climatic classification.

COURSE CONTENT

Topic No.	Content	Credits	No. of Lectures
1	Climatology and Atmosphere <ul style="list-style-type: none"> ○ Nature and scope of Climatology ○ Relationship of Climatology with Meteorology ○ Structure and composition of Atmosphere ○ Weather elements and climatic controls 	01	15
2	Insolation and Temperature <ul style="list-style-type: none"> ○ Insolation and heat balance of the Earth ○ Temperature - Vertical, horizontal and seasonal variations ○ Processes of heat energy transport ○ Inversion of temperature 	01	15
3	Atmospheric pressure and Circulation <ul style="list-style-type: none"> ○ Atmospheric pressure – vertical and horizontal distribution ○ General Circulation of atmosphere ○ Types of winds – Geotropic, Gradient, and local winds ○ Modern views about space wind system, Tri-cellular meridional circulation, Jet stream ○ Origin of Monsoon: classical and recent views 	01	15
4	Humidity and Precipitation <ul style="list-style-type: none"> ○ Air masses: Origin, classification, types ○ Fronts: frontogenesis and frontolysis – classification of fronts ○ Extra-tropical cyclones: formation and impacts ○ Climatic Classification: Koppen and Thornthwaite 	01	15
Total		04	60

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The student can explain the definitions, nature, and scope of Climatology, insolation, temperature, atmospheric pressure, air circulation, classification of the air masses, frontogenesis and cyclones.

Skills

The student can explain the weather and climate of the region with geographical reasoning.

General competence

The student can find out the correlation between, insolation, temperature, air pressure and other weather conditions of the region.

Required Previous Knowledge

The concept of weather and climate should be clear also students should have knowledge of the correlation between insolation, temperature and other weather phenomena.

Access to the Course

The course is compulsory and it is available for all the students admitting for Master of Arts.

Forms of Assessment

The assessment will be external as well as internal. **The pattern of external and internal assessment will be 70:30.** The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 2.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	Fill in the Blanks	14
Q.2	All	Attempt Any two questions from the following (Out of four) (Knowledge-Based Question)	20
Q.3	All	Explain Any four concepts from the following (Out of six) (Skill-Based Question)	20
Q.4	All	Attempt any one question from the following (Out of four) (Long Answer Question based on General Competence)	16
		Total	70

Internal evaluation (30 Marks)

Sr. No.	Description	Marks
1	Test (Preferably Online Test with Fifteen Minutes Duration- MCQ, Match the following, True or False, etc.)	10
2	Project Report	10
3	Overall Conductance	10
	Total	30

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail

References:

1. Barry, R.S. & Chorley, R.J. (1971): Atmosphere, Weather and Climate, ELBS, Methuen & Co. Ltd., U.S.A.
2. Griffiths, J.F.(1966): Applied Climatology-An Introduction, Oxford University Press, London.
3. Lal, D.S.(1997):Climatology, Sharda Pustak Bhawan, Allahabad.
4. Mather, J. R.(1974): Climatology: Fundamentals and Applications, McGraw Hill Book Co. New York.
5. McBoyle, G.(1973): Climate in Review, Houghton Mifflin Co., Boston.
6. Subrahmanyam, V.P.(ed)(1983): Contribution to Indian Geography, Heritage Publishers, New Delhi, a) Vol. III - General Climatology b) Vol. IV- Applied Climatology
7. Harp, H.J. and Trinidad, O.D. (eds) (1990): Climate and Development, Springer Verlag, U.S.A.
8. Oliver, J.E. and Hidose, J.J. (1984): Climatology - An Introduction, Charles and Merrill, U.S.A.
9. Robinson, P.J. and Hendersen-Sellers, A.(1999): Contemporary Climatology, Pearson Education, London

**Syllabus for First Year M.A./ M. Sc. Programme in the subject of Geography
(With effect from the academic year 2019-2020)**

Semester-I, Geography Paper – III: Perspectives in Human Geography

COURSE CODE: ASPCASPGEO103

Credits - 04

Learning Objectives			
<ul style="list-style-type: none"> ➤ The course provides an overview of the Human Geography, Demographic characteristics, human settlements, migration, and practical component based on it. ➤ It aims to shed light on the definition, nature, and scope of Human Geography, Demographic Transition Model, Growth and distribution of the Population, site situation and patterns of human settlements, and migration-related aspects. ➤ The course shall further focus on the practical application of the various techniques related to population growth, human settlements, and migration. 			
COURSE CONTENT			
Topic No.	Content	Credits	No. of Lectures
1	Changing Approaches in Human geography <ul style="list-style-type: none"> ○ Definition, nature, and Scope of Human Geography ○ Environmentalism ○ Possibilism and Neo-Possibilism ○ Behaviouralism – Emergence of the welfare approach and its social relevance 	01	15
2	Evolution of Human Societies and Dynamics of rural and urban societies <ul style="list-style-type: none"> ○ Evolution of Human Societies – Economic, Political and Cultural Transformation ○ Rural society: caste hierarchy, segregation in the rural settlement – rural social morphology ○ Urban society – Various models of urban morphology - Hierarchy of urban settlements- ○ Evolution tribal societies – characteristics – spatial distribution – Indian Examples 	01	15
3	Interaction of human societies-Socio-Cultural identities-patterns and landscapes <ul style="list-style-type: none"> ○ Racial groups– biological divergence-blending-process of assimilation – behavioral and structural-acculturation ○ Evolution of language – diffusion over space – the evolution of linguistic provinces –relevant issues – language as the basis of nation and states- Linguistic division in India ○ Religion– contemporary dynamics – a spatial pattern of major religions- Role of religion in the formation of nation-states ○ Implications of race, religion, language and ethnicity-Contestation, conflicts and negotiations 	01	15

4	Dynamics of Population Change: Patterns, Processes, and spatial distribution <ul style="list-style-type: none"> ○ Components of Population Change – fertility, mortality and associated patterns - Demographic characteristics - developing and developed countries ○ Population Growth – Attitudes and Interpretations – Demographic transition theory ○ Population, Resources and Spatial Pattern of Development - Optimum population, overpopulation and under population – Recent World Views ○ Migration- early and subsequent migration – scales of migration – mechanism and laws – major theories - Typology of migration – Political, cultural and economic dimensions - Contemporary Trends in migration 	01	15
Total		04	60

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The students can explain various changing approaches in the study of Human Geography, dynamics of human societies, cultural grounds of the society and changes in the population composition.

Skills

The student can plan and carry out a field investigation related to human resources in the locality and identify the changing composition of human society.

General competence

The student can apply their knowledge for the study of Human phenomena in the locality.

Required Previous Knowledge

Knowledge of fundamentals of Human Geography is necessary

Access to the Course

The course is compulsory and it is available for all the students admitting for Master of Arts.

Forms of Assessment

The assessment will be external as well as internal. **The pattern of external and internal assessment will be 70:30.** The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 2.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	Fill in the Blanks	14
Q.2	All	Attempt Any two questions from the following (Out of four) (Knowledge-Based Question)	20
Q.3	All	Explain Any four concepts from the following (Out of six) (Skill-Based Question)	20
Q.4	All	Attempt any one question from the following (Out of four) (Long Answer Question based on General Competence)	16
Total			70

Internal evaluation (30 Marks)

Sr. No.	Description	Marks
1	Test (Preferably Online Test with Fifteen Minutes Duration- MCQ, Match the following, True or False, etc.)	10
2	Project Report	10
3	Overall Conductance	10
Total		30

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail. The Board of Examinations of the college reserves right to change the grading scale.

References:

1. Ahmed, A. (1999). Social Geography, Rawat Publication, New Delhi.
2. Aitken, S and Valentine, G. (2006), Approaches to Human geography, Sage.
3. Ambrose, P. G. (1969): Analytical Human Geography, Longman, London
4. Atkinson, D., Jackson, P., Sibley, D. and Washbourne, N. (eds.) (2005), Cultural Geography, A Critical Geography of Key Concepts, Tauris, I.B.
5. Barnes, T. and Gregory, D., 1997, Reading Human geography, Arnold.
6. Benko, G. and Strohmayer, U. (2004), Human Geography, a History for the 21st Century, Arnold, London.

7. Bhende, A. and Kanitkar, T. (2015): "Principles of Population Studies", Himalaya Publishing House, Mumbai
8. Castles, S., Haas, H., and Miller, M. (2013): "The Age of Migration: International Movements in the Modern World", Guilford Pr.
9. Chandna, R. C. (2016): "Geography of Population: Concepts, Determinants and Patterns", Kalyani Publishers, Ludhiana
10. Cloke, P. and Johnston, R.,(eds.), (2005), Spaces of Geographical Thought, Deconstructing Human Geography's Binaries, Sage.
11. Cloke, P., Crang, P., Goodwin, M., (2004), Envisioning Human Geographies, Arnold.
12. Coates, B.E., Johnston, R.J. Knox, (1977): Geography and Inequality, Oxford University Press
13. De Blij, H. J. (1986): Human Geography, John Wiley & Sons, New York.
14. Dikshit, R. D. (1997): "Geographical Thought: A Contextual History of Ideas", PHI Learning Private Limited, Delhi
15. Fellman, J (1997): Landscape of Human Activities, Brown and Benchmark Pub.
16. Hussain, M. (2011): "Human Geography", Rawat Publications, Jaipur
17. Johnston, R.J., Gregory D. Pratt G. and Watts M., (2005, 5th ed.), the Dictionary of Human Geography, Blackwell.
18. Kitchin R., Thrift, N, (eds.) (2009), The International Encyclopedia of Human Geography, Elsevier.
19. Knowles, R. and Warding, J. (2012): "Economic and Social Geography", Rupa and CO., Kolkata
20. Koser, K. (2007): "International Migration: A Very Short Introduction", Oxford University Press, UK
21. Leong, G. C. and Morgan, G. C. (1982): "Human and Economic Geography", Oxford University Press, Delhi
22. Mahmood, A. (2008): Statistical Methods in Geographical Studies", Rajesh Publications, New Delhi
23. Massey, D, Alien, J, P, Jarre, P (eds) (1999): Human Geography Today, Cambridge Polity Press.
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25. Peet R. and Thrift, N. (eds) (1989): New Models in Geography, Vol. I & II, Unwin Hyman.
26. Peet, R. (ed) (1987): Radical Geography, Maroufa Press, Rawat, New Delhi, 2003
27. Siddhartha, K. and Mukherjee, S. (2016): "Cities, Urbanisation and Urban Systems", Kitab Mahal, Delhi
28. Singh, L. R. (2009): "Fundamentals of Human Geography", Sharda Pustak Bhavan, Allahabad
29. Singh, R. Y. (2002): "Geography of Settlements", Rawat Publications, Jaipur
30. Smith, D. M. (1977): Human Geography, A Welfare Approach, Arnold
31. Vivello, F. R. (1978): Cultural Anthropology, McGraw Hill, USA.
32. Waugh, D. (2009): "The New Wider World", Oxford University World, Oxford

**Syllabus for First Year M.A./ M. Sc. Programme in the subject of Geography
(With effect from the academic year 2019-2020)**

Semester-I, Geography Paper – IV: Spatial Organization of Economic activities

COURSE CODE: ASPCASPGEO104

Credits - 04

Learning Objectives			
<ul style="list-style-type: none"> ➤ The course provides an overview of the interlink between Geography and various economic activities. ➤ It aims to shed light on the definition, nature, and scope of economic geography, approaches to the study of economic geography, fundamentals of industries and industrial geography, energy resources and role of transportation in the economic development of the region. ➤ The course shall further convey an understanding of Indian international trade and trade policy and the impact of leadership on the changing pattern of trade. 			
COURSE CONTENT			
Topic No.	Content	Credits	No. of Lectures
1	Economic Geography: <ul style="list-style-type: none"> ○ Nature, scope, and branches of economic geography; ○ Approaches to the study the economic geography; ○ Basis of economic processes: Production, exchange & consumption, ○ Economic Activities ○ Special Economic Zones 	01	15
2	Industrial Geography: <ul style="list-style-type: none"> ○ Nature, scope and content of Industrial Geography, ○ Principles of Industrial Location: – Profit maximization, Least cost location, ○ A. Weber & Losch industrial location theory, ○ Factors of Industrial Location, ○ Industrial regionalization; ○ New industrial policies in India ○ Foreign Direct Investment and Make in India 	01	15
3	Unit-3: Energy Resources: <ul style="list-style-type: none"> ○ Resources: Concept and Classification ○ Sources of Energy: Coal, Oil, Natural gas, Nuclear, Solar and wind energy with Indian Context ○ OPEC- Energy Crisis. ○ Carbon Credit ○ Energy Conservation 	01	15
4	Unit-4: Transportation & Trade: <ul style="list-style-type: none"> ○ Modes of transportation, ○ Accessibility and connectivity; ○ National and foreign trade, ○ Trade Policy; International Trade and Characteristics, ○ International trade of India, ○ Trade Organizations -EEC, EFTA, & WTO. GATT, 	01	15
Total		04	60

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The student can explain the nature and scope of Economic Geography, various branches of Economic geography, impact of geographical phenomena on the industry, transport, and trade, and various international organizations.

Skills

The student can plan think logically and critically also they can simplify complex issues and extract the relevant pieces of information.

General competence

The student can recognize spatial distributions at all scales — local and worldwide — in order to understand the complex connectivity of people and places.

Required Previous Knowledge

Knowledge of fundamentals of Geography, branches of Geography, basics of units of measurement and its conversion is necessary before to start to learn the course

Access to the Course

Access to the Course

The course is compulsory and it is available for all the students admitting for Master of Arts.

Forms of Assessment

The assessment will be external as well as internal. **The pattern of external and internal assessment will be 70:30.** The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 2.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	Fill in the Blanks	14
Q.2	All	Attempt Any two questions from the following (Out of four) (Knowledge-Based Question)	20
Q.3	All	Explain Any four concepts from the following (Out of six) (Skill-Based Question)	20
Q.4	All	Attempt any one question from the following (Out of four) (Long Answer Question based on General Competence)	16
Total			70

Internal evaluation (30 Marks)

Sr. No.	Description	Marks
1	Test (Preferably Online Test with Fifteen Minutes Duration- MCQ, Match the following, True or False, etc.)	10
2	Project Report	10
3	Overall Conductance	10
	Total	30

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail. The Board of Examinations of the college reserves right to change the grading scale.

References:

1. Knox Paul, Agnew John, and McCarthy Linda, (2008): The Geography of the World Economy, Hodder Education, UK.
2. Sheppard Eric and Barnes Trevor J., (eds.) (2000): A Companion to Economic Geography, Blackwell, Massachusetts.
3. Wood Andrew and Roberts Susan, (2011): Economic Geography- Places, network and flows, Routledge, London, and New York.
4. Bryson John, Henry Nick, Keeble David, and Martin Ron, (eds.) (1999): The Economic Geography Reader- Producing and Consuming Global Capitalism, John Wiley and Sons Ltd., New York.
5. Hartshorn A. Truman and Alexander W. John, Third edition, (2010): Economic Geography, PHI Learning Private Ltd., New Delhi
6. Liemt van Gijsbert, (eds.) (1992): Industry on the move- Causes and consequences of International Relocation in the Manufacturing Industry, International Labour Office, Geneva.
7. Harrington J.W. and Warf Barney, (1995): Industrial Location- Principle, Practice and Policy, Routledge, London, and New York.
8. Rodrigue Jean-Paul, Comtois Claude, and Slack Brian, (2006): The Geography of Transport System, Routledge, London and New York.
9. Harrington J.W. and Warf Barney, (1995): Industrial Location- Principle, Practice and Policy, Routledge, London, and New York.
10. Berry, B. J. L. et. Al. (1976): Geography of Economic Systems, Prentice Hall, Englewood Cliff.
11. Boyce, R. D. (1974): Bases of Economic Geography, Holt, Rinehart and Winston, New York
12. Conkling, E. C. & Yeates, M. (1976): Man's Economic Environment, McGraw Hill, London.
13. Hodder, B. W., and Lee, R. (1974): Economic Geography, Field of Geography Series, Methuen & Co. Ltd, London.
14. Hussain Majid (ed.), (1993): Perspectives in Economic Geography, Vols. 1-6, Anmol Publication, New Delhi.
15. Cole, J. P., (1983): Geography of World Affairs, Butterworths, London.

Syllabus for First Year M.A./ M. Sc. Programme in the subject of Geography
(With effect from the academic year 2019-2020)
Semester-I, Geography Paper – V: Tools and Techniques of Spatial Analysis I (Based on
Theory Papers: 101 -102)

COURSE CODE: ASPCASPGEO105

Credits - 04

(No. of Credits 4 Hours of Practical experience 60+ Notional Hours 60 Total 120 hours)

1. Techniques of Geomorphic Analysis (30 hours)

A. Drawing Profiles:

- i. Longitudinal
- ii. Composite and Projected
- iii. Profiles using Global Mapper Software

B. Methods of Slope Analysis:

- i. Wentworth's method of average slope determination
- ii. Robison's method of slope analysis'
- iii. G. H. Smith's method of slope analysis
- iv. Slope analysis using Global Mapper Software

C. Altimetry Analysis:

- i. Ring contour method
- ii. Highest grid-cell elevation method
- iii. Contour Generation using Global Mapper Software

2. Techniques of Soil Analysis (10 hours)

- i. Textural analysis
- ii. Chemical Analysis – pH and moisture determination

3. Techniques of Climatic Data Analysis (20 hours)

1. Rainfall dispersion diagrams
2. Wind roses
3. Water surplus-deficiency graphs
4. Climograph
5. Hyther graph,
6. Taylor's climograph
7. Index of aridity and index of moisture
8. Isoleth Maps
9. Water budget and its graphical analysis.
10. Erogographs (**Crop Calendar**)

References

1. King, C. A. M. (1978): Techniques in Geomorphology, Edward Arnold, London.
2. Miller, A.A. (1966): The Skin of the Earth, Methuen, London.
3. Monkhouse, F.J. and Wilkinson, H.R. (1971): Maps and Diagrams, Methuen, London.
4. Cole, J.R and King, C.A.M. (1968): Quantitative Geography, John Wiley And Sons, London.
5. Goudie, A. (1981): Geomorphological Techniques, George Alien And Unwin, London.
6. Hammond, R. And McCullagh, P.S. (1974): Quantitative Techniques in Geography: An Introduction, Oxford University Press, London.
7. Mahmood Aslam (1977): Statistical Methods in Geographical Studies, Rajesh Publication, New Delhi.
8. Singh, Gopal (2001): Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd.
9. Singh, L.R. (2011): Fundamentals of Practical Geography, Sharda Pustak Bhavan, Allahabad.
10. Singh, R.L. and Singh, R. B. (2004): Elements of Practical Geography, Kalyani Publishers, New Delhi – Ludhiana.

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(With effect from the academic year 2019-2020)
Semester-I, Geography Paper – V: Tools and Techniques of Spatial Analysis II (Based on
Theory Papers: 103 -104)
COURSE CODE: ASPCASPGEO105 **Credits - 04**
(No. of Credits 4 Hours of Practical experience 60+ Notional Hours 60 = Total 120 hours)

1. Statistical Techniques (24 hours)

1.1 Measures of Central Tendency

- a. Measures of central tendency: mean center, weighted mean center, median center
- b. Z score – different applications and interpretations.

1.2. Network Analysis:

- a. Topological graphs -Connectivity- Calculations of Alpha, beta and gamma indices.
- b. Mapping of relative accessibility and connectivity – Matrices- point of minimum aggregate travel distance

2. Nature and application of spatial data: (20 hours)

1. Data types – qualitative and quantitative
2. Spatial and non-spatial data
3. Scales of measurement of data: nominal, ordinal, interval and ratio – symbolization and representation – interpretation and relationships.
4. Sources of data – Primary and secondary
5. Designing a questionnaire

3. Computer processing of geographical data (16 hours)

1. Symbolisation, Preparation of matrix
2. Diagrammatic Representation.
3. Compilation of data
4. Computation of data: qualitative and quantitative data based on descriptive statistical measures application of computer programmes- use of SPSS.

References:

1. Robinson, A. H. and Others (1995): Elements of Cartography, VI Edition, John Wiley & Sons, New York.
2. Anson, R. W. and Ormeling, F. J., (Ed.) (1993): Basic Cartography for Students and Technicians, Vol.I, International Cartographic Association and Elsevier Applied Science Publishers, London.
3. Dickinson, G. C. (1977) Statistical Mapping and the Presentation of Statistics, Edward Arnold Ltd., London.
4. Monkhouse, F. J. and H. R. Wilkinson, (1971): Maps and Diagrams, Methuen & Co. Ltd., London.
5. Hodgkiss, A. G. (1970): Maps for Books and Theses, David and Charles Publishers Ltd., London.
6. Misra R. P. and A. Ramesh, (1969): Fundamentals of Cartography, Prasaranga, University of Mysore
7. Young, P. V. and Schmid, C. F. (1979) : Scientific Social Surveys and Research, ntice Hall, New Delhi.
6. 8 . Mahmood Aslam(1977), Statistical Methods in Geographical Studies, Rajesh Publication, New Delhi.
7. Hammond,R. and McCullagh,P.S. (1974), Quantitative Techniques in Geography: An Introduction, Oxford University Press, London.
8. 9. Yeates, M (1974), An Introduction to Quantitative Analysis in Human Geography, McGraw Hill Book Co., New York.
9. 10. Cole, J. P. and King, C. A. M., (1968), Quantitative Geography, John Wiley and Sons, London.
10. 11. Fotheringham,A.S., Brunsdon, C., Charlton,M ,(2000) Quantitative Geography: Perspectives on Spatial Data Analysis, Sage Publication Ltd, London,
11. 12. 13 . Baily,T.C., and Gatrell, A. C, (1995), Interactive Spatial Data Analysis, Prentice Hall, London
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13. 15. Wicox, P.R. (2003), Applying Contemporary Statistical Techniques, Academic Press, Amsterdam
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Academic Council
Item No: _____

Devrukh Shikshan Prasarak Mandal's
NYA. TATYASAHEB ATHALYE ARTS, VED. S.R. SAPRE COMMERCE &
VID. DADASAHEB PITRE SCIENCE COLLEGE, DEVRUKH
[AN AUTONOMOUS COLLEGE AFFILIATED TO UNIVERSITY OF MUMBAI]



Syllabus for First Year Bachelor of Arts

Program: F. Y. B. A.

Course: Geography

Semester I and II (Geography Paper I and II)

Credit Based Semester and Grading System with the Effect from

Academic Year 2019-20

B.A. General (Semester Pattern)

First Year Bachelor of Arts

GEOGRAPHY – CURRICULUM

Semester	Paper Code	Paper	Lectures /Practicals	Evaluation Weightage			Credits
				External	Internal	Total	
Semester I	ASPCAUGEO101	Geography Paper-I Geomorphology	60	70	30	100	04
Semester II	ASPCAUGEO102	Geography Paper-II Human Geography	60	70	30	100	04

**Syllabus for First Year BA Programme in the subject of Geography
(With effect from the academic year 2019-2020)**

SEMESTER-I

Geography Paper – I: Geomorphology

COURSE CODE: ASPCAUGEO101

Credits - 04

Learning Objectives			
<ul style="list-style-type: none"> ➤ The course provides an overview of the Geomorphology, the interior of the earth, earth movements, landforming processes, and practical component based on it. ➤ It aims to shed light on the definition, nature, and scope of geomorphology, the composition of the earth interior, the role of plate tectonics in folding, faulting, volcanic eruption and earthquake, and geomorphic processes in the development of landforms with special reference to the Konkan region. ➤ The course shall further convey an understanding of landforming processes on different temporal and spatial magnitudes. 			
COURSE CONTENT			
Topic No.	Content	Credits	No. of Lectures
1	Geomorphology and Interior of the Earth <ul style="list-style-type: none"> ○ Definition & meaning of Geomorphology ○ Nature of Geomorphology ○ Scope of Geomorphology ○ Composition, and Structure of the Interior of the Earth ○ Rocks and Minerals 	01	15
2	Earth Movements: <ul style="list-style-type: none"> ○ Plate Tectonics ○ Folding: Causes and Forms ○ Faulting: Causes and Forms ○ Volcanoes: Causes and Forms ○ Earthquakes: Causes and Forms 	01	15
3	Geomorphic Processes and Landforms: <ul style="list-style-type: none"> ○ Weathering: Concept and Classification ○ Mass Movement: Concept and Classification ○ Fluvial Landforms – Erosional and Depositional ○ Coastal Landforms – Erosional and Depositional ○ The cycle of Erosion (Davis) 	01	15

Topic No.	Content	Credits	No. of Lectures
4	<p>Practical: Part A</p> <ul style="list-style-type: none"> ○ Scales – Concept, and application; Conversion of Scale and Construction of Graphical Scale. ○ Map Projections – Classification, Properties and Uses; Graphical Construction of Polar Zenithal Equal Area Projection, Mercator’s Projections, and reference to Universal Transverse Mercator (UTM) Projection. ○ Concept of Contours ○ Calculation of gradient (with H.E. and V.I.) – ○ Drawing of sections to depict Contour Landforms (Coastal and Fluvial) ○ Slope Analysis – Wentworth’s method <p>Practical: Part B</p> <ul style="list-style-type: none"> ○ Field Visit and Sketching for field-based project based on First to third topics 	01	15
	Total	04	60

Practical Record: A journal comprising one exercise each needs to be submitted by the student.

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The student can explain nature and scope of Geomorphology, the interior of the earth, types of rocks and minerals, plate tectonics on the earth surface and its relation with folding, faulting, volcanic eruptions and earthquakes, landforming processes with special reference to Konkan region and will understand the basics of scale, map projects and contours.

Skills

The student can plan and carry out a geomorphological field investigation in the locality and identify the basic types of rocks and minerals in the region.

General competence

The student can apply a precise geomorphological language to describe and discuss geomorphological processes and may prepare a contour map of a region.

Syllabus for First Year BA Programme in the subject of Geography
(With effect from the academic year 2019-2020)

SEMESTER-II

Geography Paper – II: Human Geography

COURSE CODE: ASPCAUGEO102

Credits - 04

Learning Objectives			
<ul style="list-style-type: none"> ➤ The course provides an overview of the Human Geography, Demographic characteristics, human settlements, migration, and practical component based on it. ➤ It aims to shed light on the definition, nature, and scope of Human Geography, Demographic Transition Model, Growth and distribution of the Population, site situation and patterns of human settlements, and migration-related aspects. ➤ The course shall further focus on the practical application of the various techniques related to population growth, human settlements, and migration. 			
COURSE CONTENT			
Topic No.	Content	Credits	No. of Lectures
1	Human Geography and Demography <ul style="list-style-type: none"> ○ Meaning, Nature and Scope of Human Geography ○ Branches and sub-branches of Human Geography ○ Demographic Transition Model and its application in India, Maharashtra, and Konkan ○ Population Growth and Distribution: Factors and Patterns 	01	15
2	Human Settlements <ul style="list-style-type: none"> ○ Concept of Urban and Rural Settlements ○ Types & Patterns of Settlements ○ Site and Situation of Settlements ○ Functional classification of Rural and Urban Settlements 	01	15
3	Migration <ul style="list-style-type: none"> ○ Concept and Types of Migration ○ Causes of Migration: Push and Pull Factors ○ Consequences of Migration ○ Recent Trends in International Migration ○ Migration Theories: Lee's Theory of Migration & Reilly's Gravity Model) 	01	15

Topic No.	Content	Credits	No. of Lectures
4	<p>Practical Part A</p> <ul style="list-style-type: none"> ○ Exponential Growth Rate of Population ○ Construction and Interpretation of Age-Sex Pyramids ○ Nearest Neighbour Analysis ○ Construction and interpretation of Flow Diagrams ○ Thematic Mapping Techniques (Preparation and Interpretation) –Choropleth and Dot Method ○ Cartographic Overlays using Trace Paper – Point, Line, and Areal Data <p>Practical: Part B</p> <ul style="list-style-type: none"> ○ Field Visit and Sketching for field-based project based on First to third topics 	01	15
	Total	04	60

Practical Record: A journal comprising one exercise each needs to be submitted by the student.

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The student can explain the definitions, nature, and scope of Human Geography, Growth, and distribution of World population, demographic transition theory and its application in the region, site, situation, patterns and classification of human settlements, classification, causes, consequences and trends of international migration.

Skills

The student can explain the demography of the region with geographical reasoning.

General competence

The student can apply various techniques for the study of population, human settlement and migration of a region.

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail. The Board of Examinations of the college reserves right to change the grading scale.

References:

1. Singh, Savindra (2015): "Physical Geography", Pravalika Publications, Allahabad
2. Bunnett, R. B. (1965): "Physical Geography in Diagrams", Parson Education, New Delhi
3. Lal, D. S. (2009): "Physical Geography: Sharada Pustak Bhavan, Allahabad
4. Qazi, S. A. (2009): "Principles of Physical Geography", APH Publishing Corporation, New Delhi
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6. Strahler, A. H. and Strahler, A. N. (1992): "Modern Physical Geography", John Willey & Sons, INC, New York
7. Hussain, Majid (2001): "Fundamentals of Physical Geography", Rawat Publications, Jaipur
8. Dayal, P. (2010): "A Text Book of Geomorphology", Rajesh Publications, New Delhi
9. Thornbury, W. (1993): "Principles of Geomorphology", Wiley Eastern Limited, New Delhi
10. Sparks B. W. (1988): "An Introduction to Geomorphology", Longman, London
11. Mishra, B. (2008): "Interpreting Contours and Topographical Maps", Frank Bros. and Co., New Delhi
12. Singh, L. R. (2009): "Fundamentals of Practical Geography", Sharda Pustak Bhavna, Allahabad
13. Mishra, R. P., and Ramesh, A. (2002): "Fundamentals of Cartography", Concept Publishing Company, New Delhi

Required Previous Knowledge

Knowledge of fundamentals of Geography, branches of Geography, basics of units of measurement and its conversion is necessary before to start to learn the course

Access to the Course

The course is available for all the students admitting for Bachelor of Arts.

Forms of Assessment

The assessment will be external as well as internal. **The pattern of external and internal assessment will be 70:30.** The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 2.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	a) Fill in the Blanks- 05 marks b) Match the following- 05 marks c) Write answers in a single sentence- 04 marks	14
Q.2	Unit-1	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.3	Unit-2	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.4	Unit-3	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.5	Unit-4	Attempt any two from the following a) Skill-Based Question-Scale b) Skill-Based Question- Map Projection c) Skill-Based Question- Contour d) Applied Question- Slope Analysis	14
Total			70

Internal evaluation (30 Marks)

Sr. No.	Description	Marks
1	Test (Preferably Online Test with Fifteen Minutes Duration- MCQ, Match the following, True or False, etc.)	10
2	Practical Record File as mentioned in unit IV Practical Part A Or Field Project as mentioned in unit IV Practical Part B	10
3	Overall Conductance	10
Total		30

Required Previous Knowledge

Basic Computer Knowledge, Knowledge of fundamentals of Geography, branches of Geography, basics of units of measurement and its conversion is necessary before to start to learn the course

Access to the Course

The course is available for all the students admitting for Bachelor of Arts.

Forms of Assessment

The assessment will be external as well as internal. **The pattern of external and internal assessment will be 70:30.** The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 2.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	d) Fill in the Blanks- 05 marks e) Match the following- 05 marks f) Write answers in a single sentence- 04 marks	14
Q.2	Unit-1	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.3	Unit-2	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.4	Unit-3	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.5	Unit-4	Attempt any two from the following a) Skill-Based Question: Population-Based Technique b) Skill-Based Question: Settlement-Based Technique c) Skill-Based Question: Migration-Based Technique d) Skill-Based Question: Cartography Based Technique	14
Total			70

Internal evaluation (30 Marks)

Sr. No.	Description	Marks
1	Test (Preferably Online Test with Fifteen Minutes Duration- MCQ, Match the following, True or False, etc.)	10
2	Practical Record File as mentioned in unit IV Practical Part A Or Field Project as mentioned in unit IV Practical Part B	10
3	Overall Conductance	10
Total		30

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail. The Board of Examinations of the college reserves right to change the grading scale.

References:

1. Johnson R. J. & Others (1983): *The Dictionary of Human Geography*, Blackwell England
2. Singh, L. R. (2009): *"Fundamentals of Human Geography"*, Sharda Pustak Bhavan, Allahabad
3. Hussain, M. (2011): *"Human Geography"*, Rawat Publications, Jaipur
4. Dikshit, R. D. (1997): *"Geographical Thought: A Contextual History of Ideas"*, PHI Learning Private Limited, Delhi
5. Singh, R. Y. (2002): *"Geography of Settlements"*, Rawat Publications, Jaipur
6. Siddhartha, K. and Mukherjee, S. (2016): *"Cities, Urbanisation and Urban Systems"*, Kitab Mahal, Delhi
7. Chandna, R. C. (2016): *"Geography of Population: Concepts, Determinants and Patterns"*, Kalyani Publishers, Ludhiana
8. Bhende, A. and Kanitkar, T. (2015): *"Principles of Population Studies"*, Himalaya Publishing House, Mumbai
9. Koser, K. (2007): *"International Migration: A Very Short Introduction"*, Oxford University Press, UK
10. Castles, S., Haas, H., and Miller, M. (2013): *"The Age of Migration: International Movements in the Modern World"*, Guilford Pr.
11. Leong, G. C. and Morgan, G. C. (1982): *"Human and Economic Geography"*, Oxford University Press, Delhi
12. Knowles, R. and Warding, J. (2012): *"Economic and Social Geography"*, Rupa and CO., Kolkata
13. Waugh, D. (2009): *"The New Wider World"*, Oxford University World, Oxford
14. Mahmood, A. (2008): *Statistical Methods in Geographical Studies*, Rajesh Publications, New Delhi
15. Singh, L. R. (2009): *"Fundamentals of Practical Geography"*, Sharda Pustak Bhavna, Allahabad
16. Mishra, R. P., and Ramesh, A. (2002): *"Fundamentals of Cartography"*, Concept Publishing Company, New Delhi

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Syllabus for First Year Bachelor of Commerce

Program: F. Y. B. Com.

Course: Environmental Studies

Semester I and II (Environmental Studies Paper I and II)

Credit Based Semester and Grading System with the Effect from

Academic Year 2019-20

B. Com. General (Semester Pattern)

First Year Bachelor of Commerce

Environmental Studies – Curriculum

Semester	Paper Code	Paper	Lectures /Practical	Evaluation Weightage			Credits
				External	Internal	Total	
Semester I	ASPCCU EVS101	Environmental Studies Paper-I	60	70	30	100	04
Semester II	ASPCCU EVS102	Environmental Studies Paper-I	60	70	30	100	04

**Syllabus for F.Y.B.Com. course in the subject of Environmental Studies
(With effect from the academic year 2019-2020)**

SEMESTER-I

Environmental Studies: Paper-I

COURSE CODE: ASPCCUEVS101

Credits - 04

Learning Objectives			
<ul style="list-style-type: none"> ➤ The course provides an overview of the environment, ecology, ecosystem, natural resources, sustainable development, urbanization and thematic mapping based on all the aspects. ➤ It aims to shed light on the concept and components of the environment, ecology and ecosystem, natural resources and the sustainable development with a focus on the conservation of natural resources in the Konkan region, population growth, and its environmental impact, and the urbanization with special emphasis on Smart City Mission of India. ➤ The course shall further convey an understanding of thematic mapping from an environmental point of view. 			
COURSE CONTENT			
Topic No.	Content	Credits	No. of Lectures
1	Environment, Ecology, and Ecosystem <ul style="list-style-type: none"> ○ Environment: Concept and components ○ Ecology: Concept and components ○ Ecosystem: Concept, Characteristics, Components, and Types ○ Food Chain and Food Web- With a focus on the Konkan in General and vicinity on particular ○ Man-Environment relationship and Importance of Environmental Studies- Determinism, Possibilism, Neo Determinism (Examples from the Konkan) 	01	15
2	Natural Resources and Sustainable Development <ul style="list-style-type: none"> ○ Natural Resources: Concept of Resources and Classification of Natural Resources ○ Problems associated with natural resources: Water, Forest, Land, and Mineral ○ Remedial Measures for the Conservation of the Natural Resources: Water, Forest, Land, and Mineral ○ Role of an individual in conservation of natural resources. <p>Identify the major natural resources in the vicinity and problems associated with it. Prepare a detailed project report along with your suggestions for the conservation</p>	01	15

Topic No.	Content	Credits	No. of Lectures
3	Populations and Emerging Issues of Development <ul style="list-style-type: none"> ○ Population explosion in the world and India ○ Demographic Transition Theory ○ Population policies: Policies focusing on population control- India and China; Policies focusing on population growth- Siberia and Canada ○ Impact of Increasing population on Environment ○ Human Development Index and the World Happiness Index 	01	15
4	Urbanization and Thematic Mapping <ul style="list-style-type: none"> ○ Concept of Urban and Urbanization ○ Growth of Urbanization and Changing Urban Environmental Problems in India ○ Smart Cities Mission in India Map Filling of India- Minerals, Industrial regions, Trading centers, ports, major pollution centers, Major Cities, Smart Cities, etc. based on First to Fourth	01	15
	Reading of Thematic Maps Related to unit First to Fourth (Only Flow Diagram, Choropleth Method and Dot Method)		
	Total	04	60

Practical Record: A journal comprising one exercise each needs to be submitted by the student.

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The student can explain the environment, ecology, ecosystem, food chain, food web, problems associated with natural resources and its conservation with special focus on the Konkan region. Also, students will acquire knowledge of the population and environmental issues related to it, urbanization in India, problems of Urbanization, Smart City Mission of India.

Skills

The student can depict various environmental hotspots with spatial context on the map.

General competence

The student can apply knowledge and study the environmental problems of the Konkan region that may be helpful for the sustainable development of the Konkan.

Required Previous Knowledge

Knowledge of association of various abiotic and biotic components is required.

Access to the Course

The course is available for all the students admitting for Bachelor of Commerce in the first year.

Forms of Assessment

The assessment will be external as well as internal. **The pattern of external and internal assessment will be 70:30.** The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 2.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	a) Fill in the Blanks- 05 marks b) Match the following- 05 marks c) Write answers in a single sentence- 04 marks	14
Q.2	Unit-1	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.3	Unit-2	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.4	Unit-3	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.5	Unit-4	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Skill-Based Question -Map Filling c) Applied Question- Thematic Map Reading	14
		Total	70

Internal evaluation (30 Marks)

Sr. No.	Description	Marks
1	Test (Preferably Online Test with Fifteen Minutes Duration- MCQ, Match the following, True or False, etc.)	10
2	Project Report	10
3	Overall Conductance	10
	Total	30

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail. The Board of Examinations of the college reserves right to change the grading scale.

References:

1. Allaby M. 2002: Basics of Environmental Sciences, Routledge, London
2. Asthana, D. K., and Asthana, Meera, Environmental Problems and Solutions, S. Chand, New Delhi, 2012
3. Gautam Alka, 2009: Environmental Geography, ShardaPustakBhavan, Allahabad, India
4. Odum E.P. (1971): Fundamentals of Ecology, W.B. Saunders, Philadelphia
5. Botkin D.B. & Keller E.A., 1995: Environmental Science, John Wiley & Sons, New York
6. McKinney M.L. & Schoch R.M., 1998: Environmental Science, Jones & Bartlett Publishers, London
7. Detwiler T.R., 1971: Man's Impact on Environment, McGraw-Hill, New York
8. Singh, Savindra, 2011: Environmental Geography, PrayagPustakBhavan, Allahabad, India
9. Ahirrao W.R. & others, ParyavaranVijnan (Marathi), Nirali Prakashan, Pune

Syllabus for First Year BA Programme in the subject of Geography
(With effect from the academic year 2019-2020)

SEMESTER-II

Geography Paper – II: Human Geography

COURSE CODE: ASPCCUEVS102

Credits - 04

Learning Objectives			
<ul style="list-style-type: none"> ➤ The course provides an overview of solid waste management, the impact of agriculture, industry, and tourism on the environment and inversely. ➤ It aims to shed light on solid wastes and its management, individuals role in the Solid Waste Management, sustainable agriculture, sustainable industrial practices, Bioremediation, and impact of tourism on the environment and conversely. Also, it proposes the role of technology in environmental management. ➤ The course shall further focus on the applications of Google Services in environmental management. 			
COURSE CONTENT			
Topic No.	Content	Credits	No. of Lectures
1	Solid Waste Management for Sustainable Society <ul style="list-style-type: none"> ○ Solid Wastes: Concept and Detailed Classification ○ Sources of Solid Waste ○ Effects of Solid Waste ○ Sustainable Solid Waste Management ○ The rôle of citizens in waste management ○ Sustainable Habitats-Green building 	01	15
2	Agriculture and Industrial Development <ul style="list-style-type: none"> ○ Environmental Problems Associated with Agriculture ○ Sustainable Agricultural practices and Food Security ○ Sustainable Industrial practices ○ Green Business and Green Consumerism, ○ Corporate Social Responsibility for Environmental Protection with reference to India ○ Bioremediation: Types and roles of plants and microbes for in-situ and ex-situ remediation 	01	15
3	Tourism and Environment <ul style="list-style-type: none"> ○ Tourism: Concept and Classification; ○ Major Eco-Tourism Centers in India ○ Tourism potential in Konkan region with special reference to Ecotourism New Tourism Policy of India ○ Impact of the Environment on Tourism ○ Impact of Tourism on the Environment 	01	15

Topic No.	Content	Credits	No. of Lectures
4	<p>Environmental Movements, Management and Use of Google Maps for Environmental Management</p> <ul style="list-style-type: none"> ○ Environmental movements in India: Save Narmada Movement, Chipko, Movement, Appiko Movement, Save Western Ghat and Save Jaitapur ○ Environmental Management: Concept, Need and Relevance; ○ Geospatial Technology: Concept, Components, and Applications in Environmental Management ○ Locating point, line and polygon features using Google maps (based on the unit first to fourth) ○ Use of Google Maps for E-Commerce/ E-Marketing ○ Google Services in the Environmental Awareness and E-Commerce <p>Students are required to prepare a journal using snapshots of the work done using Google maps and submit the same in online mode only and it will be considered for internal evaluation</p>	01	15
	Total	04	60

Practical Record: A journal comprising one exercise each needs to be submitted by the student through online mode only.

Learning Outcomes

On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

The student can explain the problem of SWM, its sources and classification, significance of sustainable agricultural practices and sustainable industrial practices, role of CSR in environmental protection, Bioremediation tourism potential in the Konkan, impact of tourism on environment, and Geospatial Technology for environmental management.

Skills

The student can identify the hotspots of solid wastes and other environmental problems with the help of technology.

General competence

The student can apply Geo-Spatial technology and Google Services for the environmental management in the locality.

Required Previous Knowledge

Basic Knowledge of computer and knowledge of interdisciplinary nature of agriculture, industry, and tourism is required.

Access to the Course

The course is available for all the students admitting for Bachelor of Commerce in the first year.

Forms of Assessment

The assessment will be external as well as internal. **The pattern of external and internal assessment will be 70:30.** The question paper pattern will be as given below.

External evaluation (70 Marks)

Question Paper Pattern

Time: 2.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	a) Fill in the Blanks- 05 marks b) Match the following- 05 marks c) Write answers in a single sentence- 04 marks	14
Q.2	Unit-1	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.3	Unit-2	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.4	Unit-3	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Descriptive Skill-Based Question c) Descriptive Applied Question	14
Q.5	Unit-4	Attempt any two questions from the followings a) Descriptive Knowledge-Based Question b) Skill-Based Question- Steps of locating point/ line/ polygon on Google earth- Applied Question c) Applied Question - Use of Google Services in Environmental Management	14
Total			70

Internal evaluation (30 Marks)

Sr. No.	Description	Marks
1	Test (Preferably Online Test with Fifteen Minutes Duration- MCQ, Match the following, True or False, etc.)	10
2	Project Report	10
3	Overall Conductance	10
	Total	30

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade in the grading scale, grade F is a fail. The Board of Examinations of the college reserves right to change the grading scale.

References:

1. Allaby M. 2002: Basics of Environmental Sciences, Routledge, London
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