

UNIVERSITY OF MUMBAI
No. UG/135 of 2011

CIRCULAR:-

A reference is invited to the Ordinances, Regulations and syllabi relating to the B.Sc. degree course vide this office Circular No. UG/69 of 2011, dated 18th April, 2011, and the Principals of the affiliated colleges in Science are hereby informed that the recommendation made by the faculty of Science at its meeting held on 29th April, 2011, has been accepted by the Academic Council at its meeting held on 25th May, 2011 vide item No. 4.96 and that, in accordance therewith, the syllabus as per the Credit Based Semester and Grading System for First Year of B.Sc. Programme in Geography as per Appendix and that the same has been brought into force with effect from the academic year 2011-2012.

MUMBAI – 400 032
13th June, 2011

(Prin. (Dr.) M.S.Kurhade)
I/c. Registrar

UNIVERSITY OF MUMBAI



Syllabus for the F.Y.B.Sc.

Program: B.Sc.

Course : Geography

(Credit Based Semester and Grading System with
effect from the academic year 2011–2012)

F.Y.B.Sc. Geography Syllabus
Restructured for Credit Based and Grading System
To be implemented from the Academic year 2011-2012

SEMESTER I

Course Code	UNIT	Credits	L / Week
USGR101	I	2	1
	II		1
	III		1
USGR102	I	2	1
	II		1
	III		1
USGRP1		2	6

SEMESTER II

Course Code	UNIT	Credits	L / Week
USGR201	I	2	1
	II		1
	III		1
USGR202	I	2	1
	II		1
	III		1
USGRP2		2	6

**F.Y.B.Sc. Geography Syllabus modified for Credit System
To be implemented from the Academic year 2011-2012**

Semester I

Course Code : USGR101

Introduction to Geography

(2 Credits)

Unit : I

(15 Lectures)

Early beginnings of Geography: observations and description - Location and patterns –
Need for explanation: scientific approach - Association, causation and model building -
Evolution of systematic geography : development of physical geography - Impact of
physical sciences and specialization - Evolution of branches and sub-branches.

Unit : II

(15 Lectures)

Approach to physical geography through application of scientific concepts - Understanding
volcanism and seismicity - Formation of minerals and rocks – Rocks and landforms -
Tectonic landforms : folding and faulting. Concept of soil as medium to plant growth -
Factors and processes affecting soil formation - Broad distribution of zonal soils - Soil
Properties in relation to agriculture - Soil Profile.

Unit – III:

(15 Lectures)

Introduction to atmosphere : its evolution and changing composition – Present composition
of dry atmosphere - role of moisture - Relative humidity and concepts of dew point and
condensation - Forms of condensation and precipitation - concepts of weather and climate.

Course Code : USGR102

Fundamentals of Human Geography

(2 Credits)

Unit : I

(15 Lectures)

Human Geography : Nature & scope, Branches, Importance, Major contributors to Human Geography
Changes in the Man – Environment relationship: a historical perspective.

Unit : II

(15 Lectures)

Population Geography World: Factors affecting growth & distribution of population
Demographic Transition Model, Demographic Characteristics: Sex Ratio, Literacy Rate, Occupational Structure, Life Expectancy, Rural-Urban composition, Age and Sex Pyramid
Concepts of under, optimum and over population, their consequences & examples
Migration Definition –Types-Scale ,Causes and consequences of migration –challenges & measures

Unit – III:

(15 Lectures)

World: Distribution of Race, Languages, Religions, Tribe, Caste, Folk culture and Gender issues. Concept of social well being – Indicators & measurement of social well being; examples.

Human Resource Development (HRD) – concept & need for using HRD

Human Development Index

Course Code : USGRP1

SEMESTER I; PRACTICAL – I

- A) Concept of map, types of maps and map reading
Plan of the Earth: Preparation of Simple map / Base map, Pace Survey
- B) Basic elements of map
- a) Location: Latitude, Longitude, Graticule, use of atlas
 - b) Direction : Major directions, concept of bearing, use of magnetic compass
 - c) Distance : Concept of scale, measurement of distances on the map
 - d) Conventional signs and symbols
 - e) Concept of Contour and MSL
- Different types of slopes and landforms represented by the contours,
Contour interpolation, Drawing of cross section and profiles, intervisibility

Skill Experiments

- A) Field sketching - Physical and cultural features - Elevation, cross section, profiles and Three dimensional block diagrams
- B) Basic concepts of GIS, Remote Sensing and GPS

PRACTICAL – II

Preparation of maps & diagrams using following cartographic techniques

- a) Distribution maps
- b) Graphs
- c) Bar diagram
- d) Circle diagram
- e) Pie chart
- f) Age / Sex pyramid
- g) Flow diagrams / Flow maps /Ray diagram
- h) Calculation of Human Development Index
- i) Social survey – Interview

Semester II

Course Code : USGR201
Introduction to Geography

\ (2 Credits)

Unit : I

(15 Lectures)

Rise of man as a factor affecting geographical phenomena: beginnings of human geography - Changing nature of man-environment relation: determinism, possibilism, stop and go determinism, voluntarism - Positive, normative, behavioural and welfare approaches.

Unit : II

(15 Lectures)

Increasing human influence and ramifications in human activities: economic, social, political, cultural, historical - Initial branching - Increasing specialization and complexities: evolution of sub-branches.

Unit – III:

(15 Lectures)

Man-environment conflict and ecological crisis - Rise of environmental geography - Increasing attention to environmental planning and management - Environmental movements - Global and national efforts to save environment

Course Code : USGR202

Fundamentals of Human Geography

(2 Credits)

Unit : I

(15 Lectures)

Geography of Rural Settlement: Rural settlements: Evolution, site, situation, types, size, spacing and morphology House types & building material used in Maharashtra and India

Geography of Urban Settlement : Introduction ,Urbanization – Process and Problems, Classification of Towns, Urban Landuse Models, Rural – urban fringe & sphere of urban influence

Unit : II

(15 Lectures)

Political Geography : Concept of state, nation & nation-state, Frontiers and boundaries: Types (Frontiers & boundaries with special reference to India & neighboring countries), Geopolitics , Global strategic views

Unit – III:

(15 Lectures)

Geography of the Developing Countries : Concept, characteristics of the developing countries & cities , Development problems associated with the developing countries , Impact of globalization & the role of MNCs

Course Code : USGRP2 Semester II;
PRACTICAL – I

Regular experiments

- A) Concept of Statistical diagrams - Importance of statistical diagrams in Geography,
Difference between maps and diagrams
(Preparation and Interpretation of diagrams)
 Graphs - Simple, Superimposed, Band
 Bars - Simple, Multiple, Divided
 Proportionate Circles
 Divided Circles (Pie diagrams)
- B) Distribution maps
(Preparation and Interpretation of maps)
 Simple distribution map
 Dot map
 Choropleth map
 Isopleth map
 Flow map

Skill Experiments

Field excursion to study the landscape

PRACTICAL – II

Preparation of maps & diagrams using following cartographic techniques

- a) Distribution maps
- b) Diagrams / sketches / cross-sections of house types settlement sites, patterns w.r.t.
 SOI Toposheets: 1:50,000, 1:25,000 etc.
- c) Nearest neighbor analysis
- d) Proportionate circles / pie diagram

Skill Experiments

- a) Field sketching
- b) Field study of rural / urban settlement
- c) Morphology of rural settlement- Field visit

References

Course Code : USGR101 and USGR201

1. Husain M. : Human Geography, 2007
2. Bunnett : Physical Geography in Diagrams, Longmans, 2007
3. Goh Cheng Leong : Certificate Physical and Human Geography, Oxford, 2003
4. Strahler A.N. : Physical Geography : Science & Systems of Human Environment, 2002
5. Lal D.S. : Climatology, Pustak Bhawan, 2002
6. Singh R.L. : Elements of Practical Geography, 2007
7. Reddy Anjali : A text Book of Remote Sensing and Geographical Information System, BSP BS publications, 2001
8. Chandna, R.C. : Geography of population : concepts, Determinants and patterns, Kalyani Publishers, New Delhi, 2000
9. Hassan, M.I. : Population Geography, Rawat Publications, 2005
10. Census of India, 2001 series – I, India Provisional Population Tables, Published by
11. Registrar General & Census Commissioner, India, 2001
12. Carter Harold : The study of Urban Geography, Arnold, 1995
13. Clark J. : Population Geography, Permagon Press, New York, 1965
14. UNDP: Human Development Report, Oxford University Press, 2001
15. Deshpande C.D. : Shahare, Continental Prakashan, Pune, 1983 (Marathi)

Course Code : USGR102 and USGR202

1. Robinson H. (1978) : Human Geography, Macdonalds & Evans
2. Johnson R. J. & Others (1983) : The Disctionary of Human Geography, Blackwell England
3. Goodall B. (1987): The Dictionary of Human Geography, Penguin
4. Knowless R & Wareing (1983) : Economic & Social Geography Made Simple
5. Money D. C. (1962) : Introduction to Human Geography, University Tutorial Press, London
6. Leong G. C. & Morgan G. C. (1990) : Human & Economic Geography, Oxford University Press
7. Rubenstein J. M. (1989): The Cultural Landscape - An Introduction to Human Geography, McMillan Publishing company
8. Haggett P. (1975) : Geography : A Modern Synthesis, Harper & Row, London
9. French B. & Squire S. (1974) : Human & Economic Geography, Oxford University Press
10. Gillett J. (1988): Urban & Rural Geography, Longman
11. Leong G. C. (1974) : Certificate Physical & Human Geography, Oxford University Press
12. Bennett R. B. (1977) : General Geography in Diagrams, Longman London
13. Knapp, Ross & McCrae (1989): Challenge of the Human Environment, Longman, London
14. Ahirrao W. R. & Others (1992) : A Textbook of Principles of Human Geography, Nirali Prakashan
15. Cain H. R. (1975) : Human & Economic Geography, Longman
16. Chandna R. C. (1992): A Geography of Population, Kalyani Publishers, Ludhiyana
17. Manorama Yearbook (2007) : Malayala Manorama Press, Kottayam
18. Singh S. (2007) : Geography, Tata McGraw Hill
19. India Yearbook (2007) : Government of India Publications
20. Beaujeau - Garnier J. (1966) : Geography of Population, St.Martins Press, NY
21. Majid Hussain (2006): Human Geography

Scheme of Examination

The scheme of examination for the revised course in Geography at the First Year B. Sc. Semester end examination will be as follows.

The performance of the learners shall be evaluated into two parts. The learner's performance shall be assessed by Internal Assessment with 40% marks in the first part by conducting the Semester End Examinations with 60% marks in the second part. The allocation of marks for the Internal Assessment and Semester End Examinations are as shown below:-

(a) Internal assessment

Theory 40 %

Sr No	Evaluation type	Marks
1	Field Trip/ Power point presentation	20
2	Geographical model making/ Exhibition/ Seminar / Landuse Survey	10
3	Preparing Practical Journal	05
4	Viva	05

Practicals 40%

Sr No	Evaluation type	Marks
1	Two best practicals, test on pract, skill/demo expt, error calculations, graph plotting.	10
2	Journal	05
3	Viva	05

(b) External Theory examination 60 %

- i) **Duration** – These examinations shall be of **2 Hours** duration for each paper.
- ii) **Theory Question Paper Pattern:-**
 - There shall be four questions each of 15 marks. On each unit there will be one question and the fourth one will be based on entire syllabus.
 - All questions shall be compulsory with internal choice within the questions.
(Each question will be of 20 to 23 marks with options.)
 - Question may be subdivided into sub-questions a, b, c... and the allocation of marks depend on the weightage of the topic.

Practicals

Each practical examination can be conducted out of 50 marks, 20 internal and 30 external