

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,  
AURANGABAD.**



**REVISED SYLLABUS OF**

**M.A. SECOND YEAR (GEOGRAPHY)**

**SEMISTER – III & IV**

**(With Credit System)**

**(Effective from – 2010 – 2011 & onwards)**

**Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.****GEOGRAPHY****Curriculum Structure and Scheme of Evaluation for M.A. – II****With effective from 2010 – 11**

<b>M.A. SEMISTER - III</b>										
Sr No	Course Code	Name of the Subject	Scheme of Teaching (Periods / Week)				Scheme of Evaluation			
			T	P	Total Periods	Total Credits	Theory	In for	Practical	Total Marks
1	Geo 209	Evolution of Geographical Thought	4	-	4	4	30	20	-	50
2	Geo 210	Economic Geography	4	-	4	4	30	20	-	50
3	Geo 211	Geography of Water Resources <b>or</b> Geography of Health	4	-	4	4	30	20	-	50
4	Geo 212	Practical - III	-	4	4	4	-	-	50	50
(A) Total of Semester – III			12	4	16	16	90	60	50	200
<b>M.A. SEMISTER - IV</b>										
Sr No	Course Code	Name of the Subject	Scheme of Teaching (Periods / Week)				Scheme of Evaluation			
			T	P	Total Periods	Total Credits	Theory	In for	Practical	Total Marks
1	Geo 213	Settlement Geography	4	-	4	4	30	20	-	50
2	Geo 214	Political Geography	4	-	4	4	30	20	-	50
3	Geo 215	Biogeography <b>or</b> Remote Sensing Techniques	4	-	4	4	30	20	-	50

4	Geo 216	Practical - IV	-	4	4	4	-	-	50	50
(B) Total of Semester – IV			12	4	16	16	90	60	50	200

## M.A. II SEMESTER – III

### PAPER - IX

#### EVOLUTION OF GEOGRAPHICAL THOUGHT

**Marks - 30**

**Unit I** The field of geography; its place in the classification of sciences; geography as a social science; and natural science selected concepts in the philosophy of geography, distribution; relationships, interaction, area differential and spatial organization. **(Marks – 10 / Periods – 20)**

**Unit II** Dualism in geography; systematic and regional geography; physical and human geography. Systematic geography and its relation with systematic science and with regional geography. The myth and reality about dualisms. Regional geography; Concept of region, regionalizing method. **(Marks – 10 / Periods – 20)**

**Unit III** Scientific explanation; routes to scientific explanation (Inductive, Deductive) types of explanations; cognitive descriptions cause and effect temporal functional/ecological systems. **(Marks – 10 / Periods – 20)**

#### **Suggested Readings:**

1. Abler, Ronald : Adams, Hohn S. Gould, Peter: Spatial Organization. The Geographer's view of the world, Prentice Hall N.J. 1971.
2. Ali S.M. : The geography of puranas, People Publishing House, Delhi 1966.
3. Dikshit, R.D. (ed): The Art & Science of Geography integrated Readings, Prentice Hall of India, New Delhi, 1994.
4. Hartshorn, R.: Perspective on Nature of Geography, Rand McNally & Co. 1959.

5. Husain, M. : Evolution of Geographic Thought, Rawat Pub. Jaipur 1984.
6. Minshul, R. : The Changing nature of geography, Hunchinson University Library, London 1970.

## **M.A. II SEMESTER – III**

### **PAPER - X**

### **ECONOMIC GEOGRAPHY**

**Marks – 30**

- Unit I** Scope, content and recent trends in economic geography, relation of economic geography with economics and other branches of social sciences, Classification of economic activities – primary, secondary, tertiary and quaternary and their characteristics, Location of economic activities and spatial organization of economics. **(Marks – 10 / Periods – 20)**
- Unit II** Factors of location of economic activities: physical, social, economic and cultural; Concept and techniques of delimitation of agricultural regions, crop combination and diversification – Von Thunen’s model and its modifications. **(Marks – 10 / Periods – 20)**
- Unit III** Economic development of India, Regional disparities, impact of green revolution on Indian economy, Globalization and Indian economy and its impact on environment. **(Marks – 10 / Periods – 20)**

#### **Suggested Readings:**

1. Alexander J.W.: Economic Geography, Prentice Hall of India, New Delhi. 1976.
2. Berry, Conkling & Ray: Economic Geography, Prentice Hall, New Jersey. 1988.
3. Dreze, J. and Sen, A.: India-Economic Development and Social Opportunity, Oxford University Press, New Delhi. 1996.

4. Hurst Elliott: Geography of Economic Behaviour. Unwin, London. 1986.
5. Morgan, W.B. and Munton R.J.C.: Agricultural Geography, Methuen, London. 1977.
6. Redcliff M.: Development and the environmental crisis, Methuen, London. 1987.
7. Robertson, D.(ed): Globalization and Environment, E.Elgar Co., U.K., 2001.

### **M.A. II SEMESTER – III**

#### **PAPER - XI**

#### **GEOGRAPHY OF WATER RESOURCES**

**Marks – 30**

- Unit I** Water as a focus of geographical interest, inventory and distribution of world's water resources (surface and subsurface); world hydrological cycle: quantitative estimates; water storages. Glaciers, river channels, lakes and reservoirs; soil moisture, ground water. **(Marks – 10 / Periods – 20)**
- Unit II** Agricultural use of water: estimation of crop – water requirement; soil-water-crop relationships; water balance and drought. Irrigation – water logging, salinity and alkalinity of soil – over exploitation of ground water. Water pollution – river and ground water. **(Marks – 10 / Periods – 20)**
- Unit III** Problems of water resource management. Floods – magnitude/frequency, structural and nonstructural adjustment of flood hazards; embankments, reservoirs, channel improvement, soil conservation, afforestation, flood foresting, flood plains; landuse regulation and insurance. **(Marks – 10 / Periods – 20)**

#### **Suggested Readings:**

1. Agarwal, Anil and Sunita Narain: Rise, Fall and Potential of India's Traditional Water Harvesting System, Centre for science and Environment, New Delhi. 1997.
2. Govt. of India, Ministry of Agriculture: Report of the irrigation Commission, Vol. I to IV, New Delhi. 1972.

3. Jones, J. A. : Global Hydrology: Processes, Resources and Environmental management, Longman, 1997.
4. Matter, J.R.: Water Resources Distribution, use and management, John Wiley, Marylane, 1984.
5. Newson, M.: Land, water and Development River Basin System and Their Sustainable management, Routledge, London, 1992.
6. Rao, K.L.: Indias Water Wealth, Orient Longman, New Delhi, 1979.
7. Kates R.W. and Burton, I. (ed): Geography, Resources and Environment, Ottawa, 1980.

### **M.A. II SEMESTER – III**

#### **PAPER - XI**

#### **GEOGRAPHY OF HEALTH**

**Marks – 30**

- Unit I** Nature, scope and significance of geography of health, Development of this area of specialization its distinction from medical science. **(Marks – 08 / Periods – 16)**
- Unit II** Geographical factors affecting human health and diseases arising from them-
- i) Physical factors – relief, climate, soils and vegetation.
  - ii) Social factors – population density, literacy, social customs and poverty.
  - iii) Economic factors – food and nutrition, occupation and standard of living.
  - iv) Environmental factors – urbanization and congesting, water, air and noise pollution and solid waste.  
**(Marks – 12 / Periods – 24)**
- Unit III** Classification of diseases: genetic, communicable and non-communicable, occupational and deficiency diseases. WHO classification of diseases, Pattern of World distribution of major diseases. **(Marks – 10 / Periods – 20)**

#### **Suggested Readings:**

1. Cliff, A. and Haggett, P.: Atlas of Disease Distribution Basil Blackwell, Oxford, 1989.
2. Learmonth A.T.A.: Patterns of Disease and Hunge: A Study in Medical Geography, David & Charles, Victoria, 1978.
3. May J.M.: The World Atlas of Diseases, Nat Book Trust, New Delhi, 1970.
4. Mc Glashan, N.D.: Medical Geography, Methuen, London, 1972.
5. Pyle, G.: Applied Medical Geography, Winston Halsted Press, Silver Springs, Md. U.S.A. 1979.
6. Rais, A. and Learmonth, A.T.A.: Geographical Aspects of Diseases in India.

### **M.A. II SEMESTER – III**

#### **PAPER - XII**

#### **PRACTICAL GEOGRAPHY - III**

#### **(REMOTE SENSING AND AERIAL PHOTOGRAPHY)**

**Marks – 50**

#### **Unit I**

- A) Relevance of Remote Sensing in Geography, Concept Basics.
- B) Aerial photography – Importance of the aerial photography in Geographical study.
- C) Aerial survey and types of aerial photographs, some define terms associated with aerial photography, fiducial marks, tilting of camera axis, overlaps, flying altitudes.

**(Marks – 15 / Periods – 20)**

**Unit II** Metric photo Grametry – determination of the scale of aerial photo, No of strips and air photos, determination of flying heights of air craft. **(Marks – 15 / Periods – 20)**

**Unit III** Interpretation of Aerial Photographs –

- A) Instruments used for interpretation of aerial photographs.
- B) Interpretations of aerial photographs.

**(Marks – 10 / Periods – 20)**

**Unit IV** Record Book & Viva – voce.

**Marks – 10**

**Suggested Readings:**

1. Aslam Mahamood – Statistical Methods in Geography.
2. Frajer Taylor – Geographic Information Systems, Peramon Press, Oxford, 1991.
3. Harlok wanless – Aerial Photography.
4. Robert E. Boyer & P.B. Snyder – Aerial Stereo Studies.
5. R.L. Singh – Elements of practical Geography.
6. Zamir Alvi – Statistical Geography.

**M.A. II SEMESTER – IV**

**PAPER - XIII**

**SETTLEMENT GEOGRAPHY**

**Marks – 30**

**Unit I** Evolution, Size and growth of settlements: Theories of evolution of settlements, size distribution, spatial and temporal trends in size and growth of settlements. **(Marks – 06 / Periods – 12)**

**Unit II** Distribution pattern: Spatial distribution pattern of settlement. Theoretical Models and empirical findings. **(Marks – 12 / Periods – 24)**

**Unit III** Settlement Structure: Physical (characteristics of internal structure and external form, theories explaining internal morphological of cities; empirical and theoretical models explaining the functional classification of towns and villages, functional classification of urban centers, functional topology of villages, functional landscape, functional structure of towns in India. **(Marks – 12 / Periods – 24)**

**Suggested Readings:**

1. Amrose Pete.: Concepts in Geography, Vol.- I Settlement pattern, Longman, 1970.



2. Carter H.: The study of urban Geography, Edward Arnold, London, 1975.
3. David Peter & Hopkinson M.: The Geography of Settlements, Oliver & Boyot, Edin burph, 1983.
4. Haggett Peter Andrew D. Cliff and Allen Frey (ed): Location Models, Arnold heinemann, 1979.
5. Haggett Peter: Geography a modern synthesis, Harper & Row, New York, 1991.
6. King L.J. & Golledge R.G.: Cities, space & Behavior, Prentice Hall, engle wood cliff, New Jercey, 1978.
7. Mandal R.B.: Urban Geography, Concept Publishing Co., New Delhi, 2000.
8. Mayer: Readings in Urban Geography, C.B.D. Allahabad, 1967.

## **M.A. II SEMESTER – IV**

### **PAPER - XIV**

### **POLITICAL GEOGRAPHY**

**Marks – 30**

- Unit I** Nature, scope, subject matter and recent development in Political Geography; Approaches to study; Major schools of thought. **(Marks – 06 / Periods – 12)**
- Unit II** Geographic Elements and the State: Physical Elements; Human elements; Economic elements; Political geography and environment interface. **(Marks – 12 / Periods – 24)**
- Unit III** Themes in Political Geography: State, Nation, Nation-State and Nation-building, Frontiers and boundaries, Colonialism, decolonization, Neocolonialism, Federalism and other forms of governance. The changing patterns of World Powers Perspectives on core-periphery concept, Conflicts and cooperation. **(Marks – 12 / Periods – 24)**

### **Suggested Readings**

1. Alexander, L.M. World Political Patterns Ran McNally, Chicago, 1963.
2. De Blij, H. J. and Glassner, Martin Systematic Political Geography, John Wiley, New York, 1968.
3. Dikshit, R.D. Political Geography: A Contemporary Perspective. Tata McGraw Hill, New Delhi. 1996.
4. Sukhwal, B.L. Modern Political Geography of India Sterling Publishers, New Delhi.1968.
5. Taylor, Peter: Political Geography Longman, London. 1985.
6. Fisher Charles A.: Essays in Political Geography, Methuen, London, 1968.
7. Pounds N.J.G.: Political Geography. McGraw Hill, New York, 1972.
8. John R. Short: An introduction to Political Geography Routledge, London, 1982.
9. Panikkar K. M. : Geographical Factors in Indian History: 2 vols. Asia Publishing House, Bombay, 1959.

## **M.A. II SEMESTER – IV**

### **PAPER - XV**

### **BIOGEOGRAPHY**

**Marks – 30**

- Unit I** Biogeography-Nature, Scope, significance and development of Biogeography. Environment, Habitat and Plant-animal association, biome types. **(Marks – 10 / Periods – 20)**
- Unit II** Elements of plant geography, distribution of forests and major communities, Distribution of major animal groupings in the world. **(Marks – 10 / Periods – 20)**
- Unit III** Ecosystem – Forms and functions- Marine, Freshwater, Salt, Marsh and Mountain ecosystems, Ecosystem – Conservation and Management, Ecological Balance. **(Marks – 10 / Periods – 20)**

### **Suggested Readings**

1. Agarwal, D.P. : Man and Environment in India Through Ages, Book & Books, 1992.
2. Bradshaw, M.J.: Earth and Living Planet, ELBS. London, 1979.
3. Cox, C.D. and Moore, P.D.: Biogeography: An Ecological and evolutionary Approach 5th edn. Blackwell, 1993.
4. Gaur, R.: Environment and Ecology of Early Man in Northern India R.B. Publication Corporation, 1987.
5. Hoyt, J.B.: Man and the Earth, Prentice Hall, U.S.A.1992.
6. Huggett. R.J.: Fundamentals of Biogeography. Routledge, U.S.A 1998.
7. Khoshoo, T.N. and Sharma, M. (eds.): Indian Geosphere-Biosphere Har-Anand Publication, Delhi 1991.
8. Lapedes, D.N. (ed.): Encyclopedia of Environmental Science, McGraw Hill, 1974.
9. Mathur H.S.: Essentials of Biogeography, Anuj Printers, Jaipur, 1998.
10. Pears, N.: Basic Biogeography. 2nd edn. Longman, London, 1985.
11. Simmon. I.G.: Biogeography, Natural and Cultural, Longman, London 1974.
12. Tivy, J.: Biogeography: A study of Plants in Ecosphere 3rd edition. Oliver and Boyd, U.S.A., 1992.

## **M.A. II SEMESTER – IV**

### **PAPER – XV**

### **REMOTE SENSING TECHNIQUES**

**Marks – 30**

**Unit I** Historical development of remote sensing as a technology-  
Relevance of remote sensing in Geography-Concepts and  
basics: Energy source, energy and radiation principles, and  
energy interactions in the atmosphere and earth surface  
features, remote sensing systems: platforms, sensors and  
radiation records. **(Marks – 10 / Periods – 20)**

**Unit II** Air Photos and Photogrammetry: Elements of photographic  
system: types, scales and ground coverage, resolution,  
radiometric characteristics, films, filters, aerial cameras, film  
exposures, geometric fundamentals of photogrammetry:

elements of vertical photographs, relief displacement, image parallax, stereoscopic, orthophotos airphoto interpretation: shape, size, pattern, tone, texture, shadows, site.

**(Marks – 10 / Periods – 20)**

**Unit III** Satellite Remote Sensing: platforms-LANDSAT, SPOT, NOAAVHRR, RADARSAT, IRS, INSAT: principles and geometry of scanners and CCD arrays, orbital characteristics and data products-MSS, TM, LISS I & II, SPOTPLA & MLA, SLAR.

**(Marks – 10 / Periods – 20)**

### **Suggested Reading**

1. American Society of Photogrammetry: Manual of Remote Sensing. ASP, Falls Church, V.A., 1983.
2. Barrett E.C and L.F. Curtis: Fundamentals of Remote Sensing and Air Photo Interpretation, Mcmillan, New York, 1992.
3. Compbell J.: Introduction to Remote Sensing, Guilford, New York. 1989.
4. Curran, Paul J.: Principles of Remote Sensing, Longman, London, 1985.
5. Luder D.: Aerial Photography Interpretation: Principles and Application, McGraw Hill, New York, 1959.

### **M.A. II SEMESTER – III**

#### **PAPER - XVI**

#### **PRACTICAL GEOGRAPHY - IV**

#### **(QUANTITATIVE TECHNIQUES IN GEOGRAPHY)**

**Marks – 50**

**Unit I** Significance of quantitative methods in Geography.  
 (1) Population projection – Semi average method.  
 (2) Least square method (3) Exponential population growth.  
 (4) Lorenz curve (5) Gini's Co-efficient.

**(Marks – 15 / Periods – 20)**

**Unit II** (1) Agricultural productivity – Kendal's Method.  
 (2) Index of concentration.  
 (3) Gibb's method of Index of diversification.

- (4) Crop Combination (Weaver & Doi).
  - (5) Chi-square method (for relief & landuse analysis).
- (Marks – 15 / Periods – 20)**

**Unit III** Excursion Tour to Important Geographical Places.  
(Anywhere in India for a period of Maximum 15 Days).  
Students have to submit Excursion Tour Report at the time of  
University Examination. **Marks – 10**

**Unit IV** Record Book & Viva – voce. **Marks – 10**

**Suggested Readings:**

- (1) Aslam Mahmood (1977): Statistical Methods in Geographical Studies, Rajesh Pub., New Delhi.
- (2) Gregory S. (1963): Statistical Methods and the Geographer, Longman's London.
- (3) Hammond R. & Mc Cullagh P. (1974): Quantitative Techniques in Geography, Claredon Press, Oxford.
- (4) Haring, Lloyed (1975): Scientific Geographic Research. W.C. Brow Company, U.S.A.
- (5) Kothari, C.R.(1996): Research Methodology, Vishwas Prakashan, New Delhi.
- (6) Mishra, R.P.(1991): Research Methodology in Geography, Concent Publishing, New Delhi.