KOTSHILA MAHAVIDYALAYA

Department of Geography

Semester-IV

Course Code: BGEOMAJ04C

Course Title: Resource and Population & Thematic and Cadastral Mapping

Course Type: MAJ-4

Practical/Theory: Combined

Credit: 6

Syllabus

Course Objectives:

1. *To develop an understanding of the basic concepts and classifications of resources and their economic implications.*
2. *To explore various economic activities and their relationship with geographical factors, with a special emphasis on primary, secondary, and tertiary sectors.*
3. *To introduce students to the fundamental concepts required for creating thematic maps, including mathematical tools like rounding, scientific notation, logarithms, and scales, essential for accurate data representation.*
4. To provide practical skills in designing and interpreting different types of thematic maps, using point, line, area, and volume symbols, including the use of flow maps and pie diagrams.

Course Outcomes:

1. *Students will be able to define and classify different types of resources, and understand their role in shaping economic activities.*
2. *They will develop a comprehensive understanding of the primary, secondary, and tertiary sectors, their functioning, and their economic significance, particularly in relation to agriculture, manufacturing, and services.*
3. *Students will gain a clear understanding of the various methods and rules in cartography, as well as the concepts of scales, scientific notation, and logarithms.*
4. *Students will develop the skills to create large-scale thematic maps by applying the correct symbolization techniques and interpreting data effectively for clear and accurate geographical representation.*

Course Title: Resource and Population

Paper Type: Theoretical Course Credit: 4

Unit I: Resource and Economic Activities [24 Hours]

1.1 Concept and classification of resources; Functional theory of resource; Conservation and management of resources; Classification of economic activities (6 lectures)

1.2 Primary activities: Agriculture (subsistence and commercial agriculture), Forestry, Fishing and Mining. Von Thunen's Model of Agriculture Location. (6 lectures)

1.3 Secondary activities: Manufacturing (Cotton textile, Iron and Steel, Petrochemical), SEZ, Theory of Industrial Location (Weber). (6 lectures)

1.4 Tertiary activities: Transport and trade; Role of WTO, IMF and World Bank (6 lectures)

Unit II: Population Geography [28 Hours]

2.1 Concept and scope of population geography; Determinants and factors of population growth and distribution. (6 lectures)

2.2 Trend of population growth in the world and India; Concept of fertility, mortality and migration. (8 lectures)

2.3 Theories of population growth: Malthus, Marx and Demographic Transition Model. (8 lectures)

2.4 Population policies in developing counties with special references to India. (6 lectures)

Selected References:

1. Hassan, M.I. 2020. Population Geography: A Systematic Exposition, Routledge

2. Bhende, A.A. Kanitkar, T. 2011. Principles of Population Studies, Himalaya Publishing House, New Delhi.
3. Maurya, S.D. 2017. Population Geography, Pravalika Publication, Allahabad.
4. Chandna, R.C. 2015. Geography of Populations, Kalyani Publishers.
5. Alexander, J.W. 1963. Economic Geography, Prentice-Hall Inc., Englewood Cliffs, New Jersey.
6. Hartshorn, T. Alexander, J.W. 2000. Economic Geography, 3rd Edition, Prentice Hall of India, New Delhi.
7. Combes P., Mayer T.. Thisse, J.F. 2008. Economic Geography: The Integration of Regions and Nations, Princeton
University Press.
8. Guha, J.L., Chattoraj, P.R. 2009. A New Approach to Economic Geography – A Study of Resources, World Press, Kol.
9. Siddhartha, K. 2018. Economic Geography, Kitab Mahal, Allahabad.
10. Saxena, H.M. 2018. Economic Geography, 2nd Edition, Rawat Publications, Jaipur.

11. Paul Knox, John Agnew, Linda Mccarthy 2014 The Geography of the World Economy Routledge London

Course Title: Thematic and Cadastral Mapping
Paper Type: Practical Course Credit: 2

Unit I: Thematic Mapping: Fundamental Concept [20 Hours]

1.1 Concepts of rounding, scientific notation, logarithm and anti-logarithm, natural and log scales. (5 lectures)
1.2 Cartography: meaning, rules and methods of geographical data representation. (5 lectures)
1.3 Types of diagrams, graph, distribution maps and cartogram. (5 letures)
1.4 Concept of Large-scale thematic maps (5 lectures)

Unit II: Thematic Mapping: Database Application [32 Hours]

2.1 Point and Line Symbol: Size of Dots, Flow Map (6 lectures)
2.2 Area Symbol: Pie Diagram (6 lectures)
2.3 Volume Symbol: Sphere Map (6 lectures)
2.4 Geomorphological maps from Toposheet and Cadastral map: Identification of plots and verification in the field (14 lectures)

Project File

a) Preparation of Dot map (Population Size) and Flow Diagram (Traffic/ Goods Flow)
b) Develop Comparative Pie Diagram (Area related issues) and Sphere Map (Urban Population).
c) Mapping Geomorphological maps from Toposheet
d) Cadastral map: Identification of plots and verification in the field.

Selected References:

1. Manual, International Cartographic Association, Elsevier Science Publishers.
2. Mishra, R.P., Ramesh, A. 1989. Fundamentals of Cartography, Concept, New Delhi.
3. Sarkar, A. 2015. Practical Geography: A Systematic Approach, 3rd ed. Orient Blackswan Private Ltd.
4. Singh, R.L., Singh, R.P.B. 2008. Elements of Practical Geography, Kalyani Publisher.