

**GOVERNMENT COLLEGE FOR WOMEN
(AUTONOMOUS)
SRIKAKULAM
B.A/B.Sc GEOGRAPHY SYLLABUS
SYLLABUS FOR SEMESTER - II : FUNDAMENTALS OF PHYSICAL GEOGRAPHY – I
(PAPER-I) (GEOMORPHOLOGY) (MINOR SUBJECT)**

COURSE OBJECTIVES

To learn about:

1. Land and water distribution.
2. Various processes of dynamic earth.
3. To introduce the basic concepts of geomorphology to the students of geography.
4. To understand the origin of landforms, weathering, erosion, and deposition.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Understand the land and water distribution.
2. Obtain the knowledge and describe the occurrence of earthquakes and volcanoes.
3. Improve the knowledge on weathering and mass wasting.
4. Describe the morphology of the landscape and related processes in areas influenced by fluvial, glacial, aeolian and coastal systems.

Syllabus

UNIT- I : EARTH DYNAMICS

1. Land and Sea : formation and Distribution :- Oceans and continents hypothesis gaeous, nebular the hided and supernova age of the earth religious and scientific concepts
2. Theories : Isostasy, continental drift, Plate tectonics, pratta hypothesis and aery continental drift theory plate techonic theory plates movements of the plate original ocean ridge, evidences

UNIT- II : EARTH DYNAMICS

3. Interior of the Earth
4. Earthquakes : waves, causes for earth quakes intensity of earth quakes scales, distribution effects
5. Volcanoes

UNIT-III : EARTH DYNAMICS

6. Rocks : definition –classification of rocks –distribution
7. Weathering and mass-wasting : denudation –causes of the weather types importance of mass wasting changes in the direction of moments

UNIT- IV : GEOMORPHOLOGY Process and Landform Development

8. River : Flow and work - Erosion, Transportation, Deposition - Landforms
9. Wind : Air flow and work - Erosion, Transportation, Deposition - Landforms - desert formation.

UNIT- V : GEOMORPHOLOGY

10. Marine : Waves and currents and work - Erosion, Transportation, Deposition - Shoreline and landforms
11. Karst : flow of underground water and work - solutions - Erosion and deposition-landforms.
12. Glacial : Types, Movements and work - Erosion, Transportation and deposition - landforms.

PRACTICAL - I

Elements of Mapping (Scales)

COURSE OBJECTIVES

To learn about:

1. Understanding the different geographical tools.
2. To teach the representation and conversion of scales.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Draw and compute map scale of different kinds.
2. Measure the distance, areas and find the directions on maps.
3. Reduce and enlarge maps of different scales manually to the required size.
4. Perform map layout and map interpretation for any geographical area.

Syllabus:

1. Scales : Classification - Statement - Representative Fraction(R.F), Graphic scales.
2. Representation of Relief - Spot heights, Bench marks, Layer colouring, Contours - Hachures and Hill shading.

**GOVERNMENT COLLEGE FOR WOMEN
(AUTONOMOUS)
SRIKAKULAM
BA/BSc GEOGRAPHY SYLLABUS
SYLLABUS FOR SEMESTER - III : FUNDAMENTALS OF PHYSICAL GEOGRAPHY- II
(PAPER -II) (CLIMATOLOGY& OCEANOGRAPHY)**

COURSE OBJECTIVES

To learn about:

1. Weather and climate elements of weather.
2. Atmosphere structure and composition.
3. Acquiring knowledge on temperature, pressure, wind, cyclones, humidity, clouds, and precipitation.
4. Acquiring knowledge of oceans.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Appreciate the climate phenomena and oceanic resources.
2. Identify and recognize the different types of weather events.
3. Identify the factor influence in the incidence and distribution in insolation.
4. Understand the different types of precipitation, their types, formation and distribution.
5. Recognise the different types of washing deposits, waves and tides.

Syllabus

UNIT- I : CLIMATOLOGY

1. Weather and climate, Elements of Weather
2. Atmosphere : Structure and composition
3. Insolation : Factors influencing the incidence and distribution
4. Temperature : Horizontal and vertical distribution

UNIT- II : CLIMATOLOGY

5. Pressure : Influencing factors - High and low pressure areas, global pressure belts
6. Winds : Local, Periodic and Planetary.
7. Cyclones - formation, distribution and impacts : Tropical and Temperature

UNIT- III : CLIMATOLOGY

8. Humidity : Absolute and relative
9. Clouds : Types, formation and potentials
10. Precipitation : Types, formation and distribution

UNIT- IV : OCEANOGRAPHY

11. Submarine Relief : Continental Shelf, continental Slope, Abyssal Plain, Ocean Deep and Trenches, Mid-Oceanic ridges.
12. Temperature : Horizontal and vertical distribution.
13. Salinity : Factors and Distribution

UNIT- V : OCEANOGRAPHY

14. Waves and Tides : Types and formation
15. Ocean Currents : Types and factors Responsible - currents of Atlantic, Pacific and Indian Oceans.
16. Ocean Deposits - Types and Distribution.

PRACTICAL - II

Elements of Mapping (Contours)

COURSE OBJECTIVES

To learn about:

1. Understanding the different geographical tools.
2. To protect the representation of the landforms by using contour lines.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Depict landforms by contours.
2. Students can perform profiles which are drawn from landforms through contours.
3. Perform map layout and map interpretation for any geographical area.

Syllabus:

1. Contours: Drawing and Contour Interval - Drawing of Cross profiles and landform Identification and description: Plateau - Ridge -Conical hill - U shaped valley, V Shaped Valley - Gorge-Spur-Cliff -Escarment -Measurement and description of Slopes: Convex, Concave, Uniform and Terraced.

GOVT DEGREE COLLEGE FOR WOMEN, SRIKAKULAM
HUMAN GEOGRAPHY
(CBCS Pattern) (SEMESTER-IV) (PAPER-III)
(w.e.f 2020-2021 admitted batch)

COURSE OBJECTIVES

To learn about:

1. Human adaptation of environment.
2. Special distribution of races.
3. World population, density and population growth.
4. Rural and urban settlements and migration.
5. Location of theories.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Understand the spatial distribution of races.
2. Students will demonstrate and advanced understanding of the human activities and resources.
3. They can understand world population, growth, and settlements.
4. Students will become sensitive to the classification and the concept of resources.

Syllabus

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|---|-----------------|
| Unit – I | 10 hours |
| 1. Nature and objectives of Human Geography | |
| 2. Man and Environment : Physical and cultural environment. | |
| Unit-II | 10 hours |
| 3. Human activities : Primary, Secondary, Tertiary and quaternary. | |
| 4. Resources: Classification, conservation and management and sustainability. | |
| Unit –III | 10 hours |
| 5. Human races: Origin, Classification, Characteristics and distribution; Cultural realms of the world. | |
| 6. Population : world population – Growth and distribution – Demographic transition. | |
| Unit-IV | 10 hours |
| 7. Human migration: Types, causes and consequences of migration: India diaspora. | |
| 8. Human settlements : Forms, Structure, Functions and patterns – Rural and urban settlements – urbanization – impacts of urbanization. | |
| Unit –V | 10 hours |
| 9. Urbanization in asia | |
| 10. Location of theories : Central place theory, Rank size rule. | |

PRACTICAL - III

Diagrams

COURSE OBJECTIVES

To learn about:

1. The climate analysis.
2. To project the representation of the factors of climate.
3. To develop the knowledge on the diagrams.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Represent the data related to climate by means of graphs and diagrams.
2. Students can be able to represent the climate factors.
3. Students can measure weather phenomena.

Syllabus:

1. One Dimensional : Line graph – Poly graph – Bar graph – Pyramid graph – Simple and compound diagrams – Pie diagram.
2. Climatic diagrams : Climo graph, Hyther Graph and wind rose.

GOVT DEGREE COLLEGE FOR WOMEN, SRIKAKULAM
ECONOMIC GEOGRAPHY
(CBCS Pattern) (SEMESTER-IV) (PAPER-IV)
(w.e.f 2020-2021 admitted batch)

COURSE OBJECTIVES

To learn about:

1. Concepts of resources, classification, net, models of natural resources, processes, conservation and management of resources for sustainable development.
2. To introduce economic geography as a dynamic, diverse and contested body of knowledge.
3. To learn about livestock and distribution of dairy, meat and wool.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Explain the importance of economic geography, in analyzing how the societies and economies work.
2. To be able to identify and understand the different types of minerals, metallic non-metallic and fuels.
3. To be able to understand the importance of major industries like iron, steel and cotton.

Syllabus

Unit – I

10 Hours

1. Nature and objectives of economic Geography
2. Agriculture : Land use and special economic zones; Crop patterns and production, Green revolution, Location model of Von thunen.

Unit – II

10 Hours

3. Live stock : Distribution – Dairying, Meat and woollen.
4. Fisheries : Major fishing grounds of the world – production and trade.

Unit –III

10 Hours

5. Forests : Types, Distribution and forest products.
6. Mineral : Metallic (Iron ore, copper), Non-Metallic (Limestone and mica), Fuels (Coal and petroleum) Locations and potentials, Mining and trade.

Unit – IV

10 Hours

7. Industry : Locational factors, Industrial location theory of Alfred Weber.
8. Major industries : Iron and steel, cotton text tiles and ship-building, Industrial regions of the world.

Unit –V

10 Hours

9. Transport: Road ways, Railways, Water ways and Air ways.
10. Trade : International trade ; Major exports and imports – balance of trade – WTO and the developing countries.

PRACTICALS - IV

Maps & Surveying

COURSE OBJECTIVES

To learn about:

1. To develop, develop the knowledge on the thematic maps.
2. To understand the data representation through diagrammatic form and log graphs.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Understand how to represent the data through different themes.
2. To identify, understand and utilize flow maps.

Syllabus:

1. Thematic maps : Class intervals – Choropleth – Isopleths – Choroschematic – Dotmaps – Flow maps.
2. Tape and Chain Surveying.
3. Case study in Srikakulam.

GOVT DEGREE COLLEGE FOR WOMEN(A), SRIKAKULAM
REGIONAL GEOGRAPHY OF INDIA
(CBCS Pattern) (SEMESTER-V) (PAPER –V)
(w.e.f 2022-2023 admitted batch)

COURSE OBJECTIVES

To learn about:

1. To conceptualize the regional approaches to examine regional differentiation in the study of Indian geography.
2. To get exposed to historical, economic, cultural, social and physical characteristics of India.
3. To obtain the knowledge of demographic irrigation and major crops.
4. To understand, mineral and industrial aspects with transportation in India.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Develop the art of regionalization technique while focusing about diversity of Indian region.
2. Visualize and recognize about regional identities and sociocultural dimensions of regionalization to address the issues and concerns needed for regional planning.
3. Improve knowledge on the transportation and communication aspects of India.
4. Improve Knowledge on the physical structure of India.

Syllabus

UNIT 1: **10 Hours**

1. Location Aspects and advantages of India
2. Major Physical Divisions of India
3. Drainage System of India

UNIT-II: **10 Hours**

4. Climate – Mechanism of Indian Monsoons – Drought prone and Flood prone regions of India
5. Natural Vegetation of India
6. Soil types of India

UNIT-III: **10 Hours**

7. Racial and Ethnic Diversities - Major Tribes - Languages – - Religions and Traditions and Cultural regions of India
8. Population –Growth and Distribution–Sex-ratio, Age-Structure - problems and policies –Literacy Rate, Work Force
9. Migration of India

UNIT-IV:**10 Hours**

10. Resources of India – Land, Water, Energy (Coal & Petroleum), Hydel, Thermal, Atomic and Wind; Minerals (Iron Ore, Manganese, Copper and Mica) - Utilization and Conservation of India
11. Agriculture of India – Types (Subsistence, Commercial, intensive, Extensive and Plantation); Irrigation, Land Tenure and Land Reforms, Cropping Pattern, Agriculture problems of India
12. Settlement Patterns – Rural and Urban Growth – Urbanization of India

UNIT V :**10 Hours**

13. Green revolution, Livestock and White revolution, Aqua Culture
14. Industry: Study of Iron & Steel, Cotton Textiles and Oil -Refineries and Industrial Regions of India
15. Transport: Roadways, Railways, Waterways and Airways – - Growth and Distribution of India
16. Regional Development: Regions – Sharing of Resources – - Efforts of Five Year Plans of India

PRACTICAL – V

Projections: Constructions and Uses

COURSE OBJECTIVES

To learn about:

1. To apprise the students about the art and science of map making and representation.
2. To explain the usage of different types of projections.
3. To focus on the importance of scale and projection in the process of representing the Earth surface.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Explain the concept of map, scale and projection.
2. Study can explain the purpose of projection.
3. The main outcome of this course students can be able to select different projections for different geographical areas.

Syllabus:

- 1) Conical Projections: One Standard Parallel, Two Standard Parallel, Bonne's
- 2) Cylindrical Projections: Equal Area, Equal Distance and Mercator's Projection
- 3) Zenithal Projections (Polar Case only): Stereographic, Gnomonic, Zenithal – Equi-Distant and Equal Area

GOVERNMENT DEGREE COLLEGE FOR WOMEN(A), SRIKAKULAM
REMOTE SENSING
(CBCS Pattern) (SEMESTER-V) (PAPER –VI)
(w.e.f 2022-2023 admitted batch)

COURSE OBJECTIVES

To learn about:

1. History and evolution of remote sensing.
2. Platforms, sensors and instruments used for remote sensing.
3. Types of cameras used for remote sensing.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Develop knowledge on history and evolution of remote sensing.
2. Understand knowledge on the platforms and sensors and instruments used for remote sensing.
3. Understand the evolution of GIS.

Syllabus

UNIT-I :

10hours

1. Basics of Remote Sensing: Definition, History and Advantages
2. Aerial Photography and satellite remote Sensing

UNIT- II :

10hours

3. Components of Remote Sensing System
4. Energy Source, Energy- Atmosphere Interaction, Energy –Matter Interaction Platforms, Sensors, Data Handling Systems, Data Users

UNIT- III :

10hours

5. Energy Interaction with Atmosphere and Surface Materials: Nature of Electro Magnetic Radiation – Electro Magnetic Radiation Spectrum Interaction of Electro Magnetic Radiation with Atmosphere and with Earth Surface Materials – Spectral Signatures
6. PLATFORMS : Air Crafts and Satellites; Orbital characteristics Of Sun-synchronous Earth Resource Satellites and Geo-stationery communication Special purpose Satellites

UNIT- IV :

10hours

7. SENSORS : Types of Sensors: Active and Passive – Framing Systems (Cameras) - Scanning Systems
8. Sensor Characteristics: Spatial Resolution, Spectral Resolution, Radiometric Resolution Temporal Resolution

UNIT-V :

10hours

9. Cameras: Single Lens, Multiple Lens, Strip and Digital – Films &Filters, Products - Visual and Digital Scanners: Cross-track Vs Along Track – Mono Spectral Vs Multi spectral Scanners
10. Remote Sensing in India: Development and Growth – Satellites

PRACTICAL - VI

Remote Sensing

COURSE OBJECTIVES

To learn about:

1. To explain practical knowledge on remote sensing applications.
2. To acquire knowledge on allocation of remote, sensing in different fields and sectors.
3. To give a basic understanding of interpretation of imagery.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Explain practical knowledge on remote sensing applications.
2. Acquaint knowledge on allocation of remote, sensing in different fields and sectors.
3. Perform air photo interpretation.

Syllabus:

1. Air Photographs and Satellite Imageries: Describing the Marginal Information
2. Air Photo Interpretation: Using Stereoscopes, Stereoscopic - Vision test, Flight Marking, Land use Mapping, Relief and Drainage Mapping
3. Imagery Interpretation: Visual Methods – Mapping of Land use/Land Cover/Drainage.

GOVT DEGREE COLLEGE FOR WOMEN (A), SRIKAKULAM
Regional Geography of Andhra Pradesh
CBCS Pattern (SEMESTER – VI) (PAPER-VII)
(W.e.f 2022-2023 Admitted Batch)

COURSE OBJECTIVES

To learn about:

1. To conceptualize the regional approaches and examine regional differentiation in the study of Andhra Pradesh.
2. To expose to historical, economic, cultural, social and physical characteristics of AP.
3. To obtain the knowledge and demographic irrigation and major crops of Andhra Pradesh.
4. To understand the mineral and industrial aspects with transportation in Andhra Pradesh.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Develop the art of regionalization technique by focusing about diversity of the Andhra Pradesh region.
2. Have a thorough understanding about the climate and natural vegetation of Andhra Pradesh.
3. Improve knowledge on the transportation and communication aspects of Andhra Pradesh.

Syllabus

Unit – I

10 HOURS

1. **Location and relief of Andhra Pradesh**
2. **Drainage system of Andhra Pradesh**

Unit – II

10 HOURS

3. **Climate of AP , Flood prone and drought prone regions in Andhra Pradesh**
4. **Natural vegetation and types of soils in Andhra Pradesh**

Unit – III

10 HOURS

5. **Irrigation development of Andhra Pradesh**
6. **Population growth and distribution , rural and urban populations and urbanization of A.P.**

Unit – IV

10 HOURS

7. **Live stock and agriculture of Andhra Pradesh**
8. **Resource base fuel and mineral wealth of Andhra Pradesh**

Unit –V

10 HOURS

9. **Industries and transport of Andhra Pradesh**

10. Case study in Srikakulam District

PRACTICAL VII

Surveying

COURSE OBJECTIVES

To learn about:

1. Apply the knowledge, techniques, skills and modern tools of surveying.
2. To carry out topographic survey.
3. To impart knowledge and practical skills in handling various tools of classical surveying.
4. Various measuring and ranging methods for mapping, linear, angular and elevation units.

COURSE OUTCOMES

After the completion of the course, the student will be able to,

1. Describe various surveying concepts, methods, tools and its applications.
2. Measure, linear, angular and elevation details using modern instruments.
3. Import the acquired data into the GIS systems and perform digital analysis.

Syllabus:

1. Tape surveying
2. Chain surveying
3. Case study in srikakulam