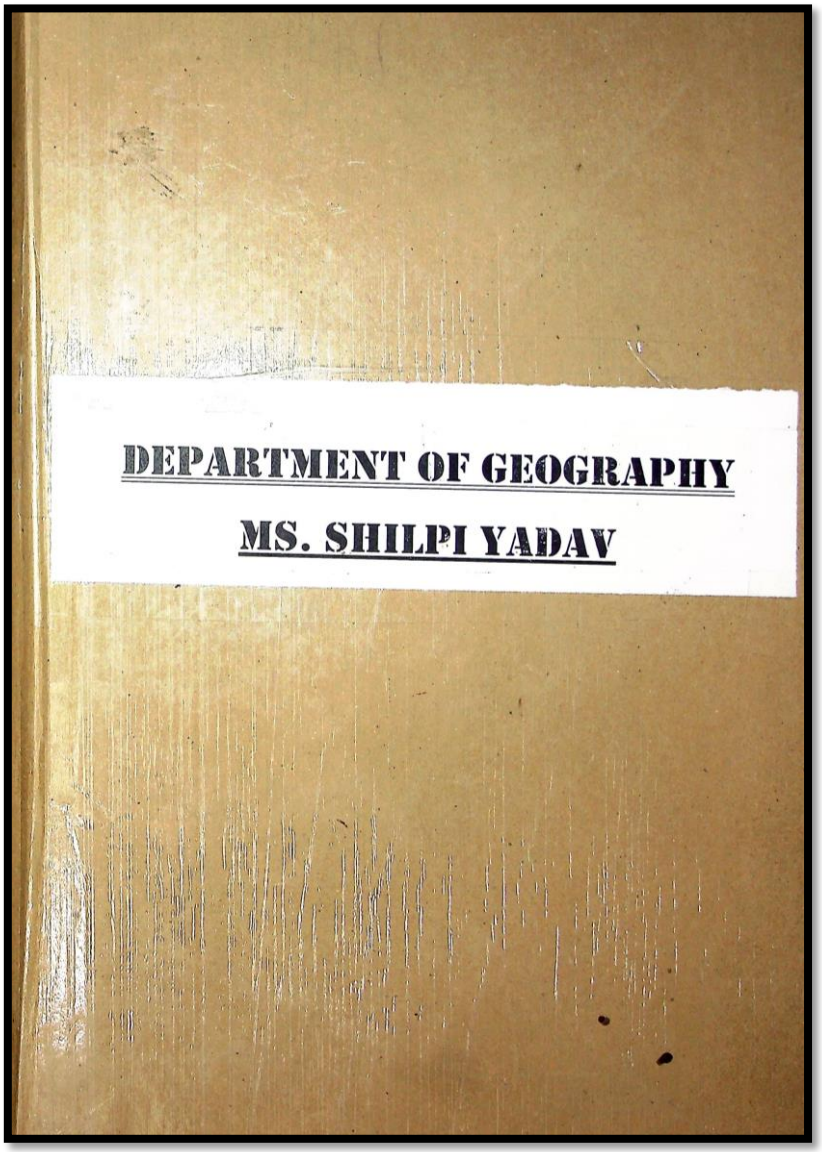
SOPHIA GIRLS' COLLEGE(AUTONOMOUS), AJMER



COURSE_PLAN_2022-23_MS_SHILPI_YADAV

SOPHIA GIRLS' COLLEGE, AJMER (*Autonomous*)

M. A/M.Sc GEOGRAPHY (Previous)

SEMESTER I

POPULATION GEOGRAPHY (GEOM - 103)

Max Marks: 100 (70Ext; 30 Int) Min. Marks: 40 (28 Ext;12 Int)

Credit: 06 Duration: 03 hrs

COURSE PLAN

SEM/ Month	UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Weightage (%)
SEM I SEP	UNIT I Population Geography: Nature, Scope;	Demography, Factors affecting.	PPT, Flow Chart,	Explain the development of demography and elaborate the concept of population.	*Knowledge Based* Summarize the development of demography and elaborate the concept of population.	Knowledg e--40
	Objectives and Approaches;	Demography, Factors affecting.	PPT,Diagrams Quiz.			
	Modern theories: Malthusian Theory, Optimum Theory and Demographic Transition Theory.	Concept of Sustainable development	Flow Charts, Diagrams.			
OCT	UNIT II Population Dynamics: Qualitative and Quantitative aspect;	Age pyramids, Factors affecting, Qualitative aspects of population.	Diagrams, Quantitative Models, Demonstration through Globe	Measure and discuss the population dynamics of the world.	*Understanding Based* Examine the population dynamics of the world.	Understan ding-30
	Urbanization (with special reference to India);	Urban Sprawl, Slum development.	Diagrams, Models, Study of Census Data			Higher

	Migration: Types, Causes, Consequences and related theories.	Push and Pull Factors	Maps, Diagrams, Models, Group Discussion		*Higher Order Thinking Skills Based* Evaluate the theories of migration.	Order-30
NOV TO DEC	**UNIT III** World Population Distribution;	Regional disparity	Statistical Data, Maps, Diagram	Critically evaluate the population as a resource and population policies.		
	Ackerman's Population Resource Regions; Critical appraisal of Population Policies of India;	Government initiatives and need of regional planning.	PPT, Diagrams			
	Human Development Index: Indicators and Measurements.	Social welfare and well-being, Happiness Index.	PPT, Case Studies, Flipped Classroom, Group Discussion			

PRINCIPAL
SOPHIA GIRLS' COLLEGE
(AUTONOMOUS)
AJMER

Head
Department of Geography
Sophia Girls' College
(Autonomous), Ajmer

SOPHIA GIRLS' COLLEGE, AJMER (*Autonomous*)
M. A/M.Sc GEOGRAPHY (Final)
SEMESTER III
AGRICULTURAL GEOGRAPHY (a) (GEOM-301)

Max Marks: 100(70Ext; 30 Int) **Min. Marks: 40(28 Ext;12 Int)**
Credits: 06 **Duration: 03 hrs**

COURSE PLAN

SEM/ Month	UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Weightage (%)
SEM III SEP	**UNIT I** Nature, Scope and Development; Approaches to the study of Agricultural Geography: Commodity, Systematic, Regional and Ecological;	Approaches to the study of Agricultural Geography	PPT, Chart, , Visual 3- D Models	Trace the development of agricultural geography as a subject and analyze the sources of agricultural data.	*Knowledge Based* Summarize the development of agricultural geography. *Understanding Based* Examine the determinants of agricultural land use. *Higher Order Thinking Skills*	Knowledge--30 Understanding-40 Higher
	Origin and Dispersal; Concepts: Cropping Pattern, Crop Concentration,	. Origin and dispersal of agriculture	Maps, History of Agriculture Quiz, Statistical Methods			
	Crop Productivity, Crop Diversification, Crop Efficiency.	agricultural productivity.	Maps, Flow Charts Statistical Methods ,Diagram			

					Based	Order-30
OCT	**UNIT II** Theories of Crop Combination Regions: Weaver, Doi and Rafiullah;	Agricultural regionalisation	Diagrams, Models, demonstration through Globe	Distinguish agricultural concepts and theories for the classification of agricultural regions.	Discuss the problems and solutions of contemporary Issues in Agriculture.	
	Present relevance of Von Thunen's agricultural model;	Locational Rent	Diagrams, Flow chart Models,			
	Whittlesey's classification of agricultural regions.	topography and climate.	Maps, Diagrams, Models, PPT			
NOV. TO DEC.	**UNIT III** Green Revolution and Regional Disparity;	Land productivity.	Diagrams, Models, Flipped Classs	Examine the contemporary issues and discuss the agricultural policies of India.		
	Agro-climatic Regions of India;	Regional planning and management.	PPT, Maps, Demonstration			
	Contemporary Issues: Food Security, Sustainable Agriculture, Dryland Farming, Organic Farming.	Environmental concerns.	PPT, Case Studies, Flipped Classroom, Group Discussion			

PRINCIPAL
SOPHIA GIRLS' COLLEGE
(AUTONOMOUS)
AJMER

Head
Department of Geography
Sophia Girls' College
(Autonomous), Ajmer

SOPHIA GIRLS' COLLEGE, AJMER (*Autonomous*)
M. A/M.Sc. GEOGRAPHY (Final)
SEMESTER III
PRACTICAL GEOGRAPHY: REMOTE SENSING TECHNIQUES (GEOM-305)

Max Marks: 100(70Ext; 30 Int) **Min. Marks: 40(28 Ext;12 Int)**
Credit: 06 **Duration: 05 hrs**

COURSE PLAN

SEM/ Month	UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Weightage (%)
SEM III SEP	**UNIT I** Remote Sensing: Definitions, Concepts, Evolution and Stages of Remote Sensing, Electromagnetic Spectrum.	Electromagnetic radiation, Concept of remote sensing.	PPT, Chart, Maps, Visual 3- D Models	Build a functional understanding of basic remote sensing concepts and applications. Demonstrate GIS techniques of processing remotely sensed data and understand data acquisition, storage and its synthesis.	*Knowledge Based* Discuss the functional understanding of basic remote sensing concepts and applications. *Understanding Based* Illustrate the GIS techniques of processing	Knowledge-- 30 Understandin
	Data Acquisition, Platforms, Sensors, Resolutions, Launch Vehicles, Merit and Demerit of Remote Sensing.	Platforms, Launch Vehicles Resolutions and sensors	PPT, Chart, Maps, Visual 3- D Models			
	Indian Space Programmes, Indian & Foreign Satellites, Hyperspectral Remote Sensing, Thermal and Microwave Remote Sensing,	Types of Remote Sensing	Maps, Flow Charts, Audio Visual Classroom			
	UNIT II Elements of Visual Image Interpretation,	Visual Image Interpretation	Diagrams, Models,			
	Ground Verification. Applications of Remote Sensing.	Importance of	Use of ICT ,			

OCT		Applications and ground verification.	Models,		remotely sensed data.	g-40
	Major Remote Sensing Practicals using Erdas& SAGA Software, Creation of Base Map from Toposheetor Satellite Image	Thematic mapping	Diagrams, Models. Use of R.S.Software		*Higher Order Thinking Skills Based* Demonstrate orbital characteristics and data products.	Higher Order-30
NOV TO DEC	**UNIT III** Layer Stacking, Mosaicking & Subset	Image Enhancement Techniques	Diagrams, Models. Use of R.S.Software			
	Low Pass & High Pass Filtering	Image Enhancement Techniques	PPT, Demonstration Models. Use of R.S.Software			
	NDVI, Resolution Merge	Image Enhancement Techniques	Models. Use of R.S.Software			

Sr. Pearl

PRINCIPAL
SOPHIA GIRLS' COLLEGE
(AUTONOMOUS)
AJMER

Head
Department of Geography
Sophia Girls' College
(Autonomous), Ajmer

SOPHIA GIRL'S COLLEGE (AUTONOMOUS),AJMER

B.A SEMESTER II

HUMAN GEOGRAPHY PAPER II (GEO-202)

: :75 (50Ext; 25 Int)

Min. Marks: 30(20 Ext;10 Int)

Duration: $2^{1/2}$ hrs

COURSE PLAN

UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Distribution
UNIT I Nature, Scope	Synthesised study, relationship with other fields.	PPT, Chart, Maps, Class discussions.	Identify branches of human geography and distinguish between the different concepts of man – environment relationship.	*Knowledge Based* Explain the nature and scope of human geography. *Understanding Based* Categorize the early economic activities. With the help of suitable map show the distribution of human races.	Knowledge--55 Understanding- 30
Concepts of man-environment relationship: Determinism, Possibilism, Neo-determinism;	Forces of nature	Flipped Classroom, Quiz, Demonstration			
Races of Mankind	Tribes with examples of their economic activities.	Maps, Flow Charts.			
UNIT II Human Adaptation to the environment: (i) Cold region—Eskimo; (ii) Hot region Bushman, Beduin;	Human Evolution, Variations of the Mankind	Diagrams, Maps and Quiz.	Classify the different tribes of the world and use various factors to interpret the		

	(iii) Plateau—Masai			spatial distribution of population.	*Higher Order Thinking Skills Based* Discuss the factors affecting the population growth and distribution in India. Critically evaluate the migration zone theory.	Higher Order-15
	World's population: factors affecting, growth, density and spatial distribution;	Population zones	Diagrams. Models. demonstration through Globe.			
	Concepts of over, under, optimum and Zero population growth.	Push and Pull factors	Maps, Diagrams, Models, Demonstration			
MAR. – APR.	**UNIT III** Migration: Types ; Griffith Taylor's Migration Zone Theory;	Immigration and emigration.	Demonstration through rock samples	Visualize the various patterns of migration, settlements and summarize the major problems of urbanization in India.		
	Human Settlements: Site and Situation, House types (with special reference to India);	Types of settlements	PPT, Demonstration			
	Urbanization: factors affecting, associated problems.	Urban Sprawl, Slum expansion, unemployment.	PPT, Case Studies, Flipped Classroom			

Sr. Pearl
PRINCIPAL
SOPHIA GIRLS' COLLEGE
(AUTONOMOUS)
AJMER

Yadav

Head
Department of Geography
Sophia Girls' College
(Autonomous), Ajmer

SOPHIA GIRL'S COLLEGE (AUTONOMOUS), AJMER

B.A III (SEMESTER VI)

REGIONAL GEOGRAPHY OF THE WORLD:

(NORTH AMERICA, SOUTH AMERICA AND AFRICA)

(PAPER II) (GEO-602)

Max. Marks : 75 (50Ext; 25 Int) **Min. Marks: 30(20 Ext;10 Int)**

Credit: 03 **Duration: $2^{1/2}$ hrs**

SEM/ Month	UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Distribution
SEM II DEC.- JAN.	**UNIT I** North America: Major Physiographic Divisions; Drainage- Mississippi, St. Lawrence, Colorado River	Latitudinal and Longitudinal Concept, Types of Delta	PPT, Chart, Maps, Visual 3-D Models	Gain geographical knowledge of North America and by identifying the	*Knowledge Based* 3. What is Solar System? 4. Illustrate the different	

	Systems; Climate; Natural Vegetation;			physiographical elements and trace the economic development. Gain geographical knowledge of South America and by identifying the physiographical elements and trace the economic development. Gain geographical knowledge of Africa and by identifying the physiographical elements and trace the economic development.	layers of Earth's Interior? *Understanding Based* 3. Compare the Continental Drift Theory and the concept of Plate Tectonics? 4. Classify the different landforms formed by the action of river? *Higher Order Thinking Skills Based* 3. Justify the present distribution of world continents and oceans on the basis of Hary Hess's Plate Tectonics Theory? 4. Critically evaluate the concepts of Sea Floor spreading?	Knowledge--55 Understanding- 30 Higher Order-15
	Agriculture Belts; Minerals: Iron, Copper, Zinc, Bauxite, Uranium, Limestone, Manganese;	Division of soil and Climate	Match the following, Quiz, Demonstration			
	Power: Coal, Petroleum and Natural Gas; Industries: Iron and Steel, Engineering & Textiles, Manufacturing; Spatial distribution of Population.	Formation of Fossil fuel, Geological structure, Heat zones	Maps, Flow Charts			

FEB.	**UNIT II** South America: Major Physiographic Divisions; Drainage: Amazon, Orinoco, and Paraguay River Systems; Climate; Natural Vegetation;	Latitudinal and Longitudinal Concept, Types of Delta	Diagrams, Models, demonstration through Globe			
	Agriculture; Minerals: Iron, Copper, Zinc, Bauxite, Limestone, Manganese;	Division of soil and Climate	Diagrams, Models, demonstration through Globe			
	Power: Coal, Petroleum and Natural Gas; Industries: Iron and Steel, Engineering, Agro-based, Manufacturing; Spatial distribution of Population.	Formation of Fossil fuel, Geological structure, Heat zones	Maps, Diagrams, Models, Demonstration			
MAR. – APR.	**UNIT III** Africa: Major Physiographic Divisions; Drainage- Nile, Congo, Niger River Systems; Climate;	Latitudinal and Longitudinal Concept, Types of Delta	Demonstration through rock samples			
	Natural Vegetation; Agriculture; Minerals: Iron, Copper, Zinc, Bauxite, Uranium, Gold;	Division of soil and Climate	PPT, Demonstration			

	Power: Coal, Petroleum and Natural Gas; Industries: Iron, Copper, Diamond, Oil, Gold: Spatial distribution of Population.	Formation of Fossil fuel, Geological structure, Heat zones	PPT, Case Studies, Flipped Classroom			

Sr. Pearl

PRINCIPAL
SOPHIA GIRLS' COLLEGE
(AUTONOMOUS)
AJMER

Head
Department of Geography
Sophia Girls' College
(Autonomous), Ajmer

SOPHIA GIRLS' COLLEGE, AJMER (*Autonomous*)

M. A/M. Sc GEOGRAPHY SEMESTER II

PRACTICAL GEOGRAPHY: AIR PHOTO INTERPRETATION AND GPS (GEOM-205)

Max Marks: 100(70Ext; 30 Int) Min. Marks: 40 (28 Ext;12 Int) Credits: 06 Duration: 05 hrs

COURSE PLAN

SEM/ Month	UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Weightage (%)
SEM II	Air Photos and Photogrammetry: Elements of photographic system: types, scales and ground coverage, resolution, radiometric characteristics, films, filters, aerial cameras, film exposures	Image interpretation elements. Flight planning.	PPT, Chart, Maps, Visual 3- D Models Match the following, Quiz, Demonstration Maps, Flow Charts	To develop knowledge, skills and competency to use stereoscopes, GPS for spatial mapping and referencing	*Knowledge Based* Discuss the elements of photographic system. *Understanding Based* Explain the Geometric fundamentals of photogrammetry *Higher Order Thinking Skills Based* Summarize the importance of GPS Surveying.	Knowledge--60 Understanding-30 Higher Order-10
	Geometric fundamentals of photogrammetry: Elements of vertical photographs, relief displacement, image parallax, stereoscopic, ortho photos air photo interpretation: shape, size, pattern, tone, texture, shadows, and site.	Concept of Ortho-photographs. Image Interpretation Elements Stereoscopic Vision	Diagrams, Models, demonstration through Globe Diagrams, Models, demonstration through Globe Maps, Diagrams, Models, Demonstration			

	GPS Surveying and Mapping: Field Exercises using Hand Held GPS	GPS Survey	PPT, Demonstration PPT. Case Studies. Flipped Classroom			

Sr. Pearl

PRINCIPAL
SOPHIA GIRLS' COLLEGE
(AUTONOMOUS)
AJMER

Head
Department of Geography
Sophia Girls' College
(Autonomous), Ajmer

SOPHIA GIRLS' COLLEGE, AJMER (*Autonomous*)

M. A/M.Sc. GEOGRAPHY (Final) SEMESTER IV

PRACTICAL GEOGRAPHY: GEOGRAPHIC INFORMATION SYSTEM APPLICATION (GEOM-405)

Max Marks: 100(70Ext; 30 Int) Min. Marks: 40(28 Ext;12 Int) Credit: 06 Duration: 05 hrs

COURSE PLAN

SEM/ Month	UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Weightage (%)
SEM IV JAN.	UNIT I **Major Concepts in GIS** • Introduction to GIS Basic Concepts: Definition and History, Components of GIS, Recent Trends and Applications of GIS.	Elements of Geography	PPT, Chart, Maps, Visual 3- D Models	Demonstrate proficiency in integrated geographical knowledge using geographical research tools including Spatial Statistics, Cartography, Remote Sensing, GIS and GPS.	*Knowledge Based* Discuss the elements of information technology. *Understanding* *Based* Summarize the Elements of spatial data. *Higher Order Thinking*	Knowledge--30 Understanding-30 Higher Order-40
	• Data Structure and Formats, Spatial Data Models – Raster and Vector, Data Base, Linkage betwe n Spatial and Non-Spatial Data, Data Inputting in GIS,	Raster & Vector Data Models and Structure	Match the following, Quiz, Demonstration on Software			
	• Generating Thematic Map from the Toposheet. • Advanced GIS: Clip, Buffer, Proximity Analysis, Overlay Analysis.	Geo – Spatial Analysis	Maps, Flow Charts			
FEBRUARY	UNIT II • Network Analysis, Interpolation, DEM, TIN.	Neighbourhood operations and connectivity	Diagrams, Models, Globe			

	Major GIS Practical's using ArcGIS and QGIS Softwares • Digital Database Creation – Point Features, Line Features, Polygon Features	Database management systems	Diagrams, Models. Demonstration on Software		*Skills Based* Illustrate the applications of GIS in Land Information System.	
	• Data Collection and Integration, Non-Spatial Data Attachment Working with Tables • Editing and Digitization		Maps, Diagrams, Models, Demonstration on Software			
MARCH - APRIL	**UNIT III** • Clipping, Intersection, Union and Buffering Techniques. • Spatial and Attribute Query and Analysis	Decision Support System	Diagrams, Models, Demonstration on Software			
	• Interpolation Techniques • GPS And GIS Integrations Output Preparation (Transfer of GPS Point Location)	GIS policy application	PPT, Demonstration on Software			
	• LU/LC Using Supervised and Unsupervised Classification Map Making	Digital Image Processing and Map Making	PPT, Demonstration on Software			

PRINCIPAL
SOPHIA GIRLS' COLLEGE
(AUTONOMOUS)
AJMER

Head
Department of Geography
Sophia Girls' College
(Autonomous), Ajmer