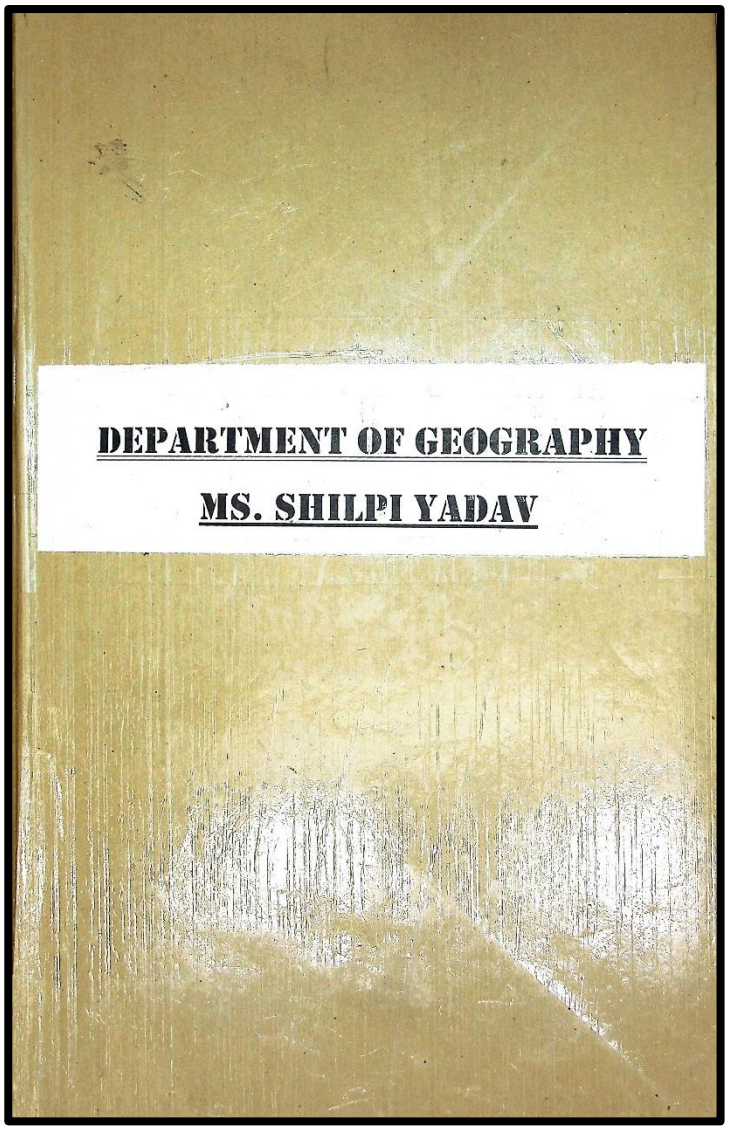

COURSE_PLAN_2021-22_MS_SHILPI_YADAV

SOPHIA GIRL'S COLLEGE, AJMER (*AUTONOMOUS*)

B.A SEMESTER I

GEOGRAPHY OF RAJASTHAN (PAPER II) (GEO-102)

Max. Marks : 75 (50Ext; 25 Int) Min. Marks: 30(20 Ext;10 Int) Credit: 03

COURSE PLAN

SEM/ Month	UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Weightage (%)
SEM I AUG	**UNIT I** Physiography; Climate: Factors affecting, Koppen's Climatic classification;	Water divide of India, Windward and Leeward.	PPT, PDF's, Flipped Classrooms, Maps, Quiz.	Classify and understand the physiographic divisions of Rajasthan.	*Knowledge Based* Elaborate the Physiographical features of Rajasthan. Write a note on desertification in Rajasthan. *Understanding Based* Discuss the factors affecting population density in Rajasthan.	Knowledge--60 Understanding-30/
	Drainage: Rivers and Lakes; Soil: Types and distribution; Vegetation: Factors affecting, conservation;	Badlands, Sand dunes.	Maps, Quiz, Diagrams.			
	Desertification.	Climate change, Alkaline and saline soils.	Maps, Flow Charts.			
SEPT.	**UNIT II** Population: Factors affecting, Growth, Density, Distribution	Sex ratios, Gender issues.	Diagrams, Tables and flow charts.	Enumerate the qualitative and quantitative aspects of population and determine the agricultural	*Higher Order-*	
	Tribes: Meena, Bhill, Garasia and Saharia;	Social structure of tribes.	Diagrams, PPT's.			
	Agriculture: Major crops (Bajra,	Dryland Farming.	Maps,			

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	Wheat, Gram, Jowar, Maize, Barley, Cash crops: Sugar cane, Cotton, Oil seeds), Dryland Farming	Water Logging.	Diagrams, Flip Learning.	regions of Rajasthan.	*Thinking Skills Based* Justify the present distribution of power resources with the help of suitable map.	10
OCT.-NOV.	**UNIT III** Mineral Resources: Metallic Minerals: Iron-ore, Zinc, Manganese, Lead, Silver, Copper, and Tungsten; Non-Metallic: Gypsum, Mica, Manganese, Limestone, Marble;	Illegal mining.	Diagrams, Models, demonstration through Globe, Blended Learning	List the major metallic, non-metallic resources and correlate with industrial development of the state.		
	Power Resources: Non-Renewable (Coal, Petroleum, Natural gas, Hydroelectricity, Atomic); Renewable (Wind, solar, Biogas);	Coke, charcoal.	PPT, Demonstration, PDF's			

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B.A SEMESTER I

PRACTICALS BASICS OF CARTOGRAHY (GEO-103)

Max. Marks: 50(40Ext; 10 Int) Min Marks: 20(16 Ext;4 Int) Credit: 02

COURSE PLAN

SEM/ Month	UNIT/TOPIC	Concepts/facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Weightage (%)
SEM I AUG.	Scales: Plain Linear, Statement - Diagonal and Comparative; Representation of different landforms by contours.	Basic mathematics, Tables, Conversion Units	Exercises with Use of Wooden Geometry Box, Demonstration	To develop skills and competency regarding area analysis and map making with relief features and profiles.	*Knowledge Based* Practical File Work *Understanding Based* Lab exercises Draw a Plain Scale on R.F 1:50,000 *Higher Order Thinking Skills Based* Interpret and develop a Profile for the given region? Viva Voce	Knowledge-- 30 Understanding -50 Higher Order- 20
SEPT.	Representation of different landforms by contours.	Topographical understanding, Landform distribution	Demonstration with 3 D Models, Tracing Table			
OCT.- NOV	Drawing of profiles: cross and long profiles, superimposed, composite and projected profiles and their relevance in landform mapping and analysis.	Slopes, Areal topographical interpretation	Demonstration and Lab exercises with Video Animations			

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B.A SEMESTER V

ENVIRONMENT GEOGRAPHY- (PAPER I) (GEO-501)

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 V AUG.	UNIT I Definition, Scope and Importance of Environment Geography; Elements of Environment: Physical and Cultural;		PPT, Chart, Maps, Visual 3-D Models	Recall and relate the elements of environment which are impacting the climate and present surroundings.	*Knowledge Based* 3. What is Solar System? 4. Illustrate the different layers of Earth`s Interior? *Understanding Based* 3. Compare the Continental Drift Theory and the concept of Plate Tectonics? 4. Classify the	Knowledge--55 Understanding-
	Environmental Ethics: Issues and solutions,		Match the following, Quiz, Demonstration			
	Climate change, Global warming, Ozone layer depletion		Maps, Flow Charts, Discussions			
SEPT.	UNIT II		Diagrams, Models,	Justify the		

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	Ecosystem: Concept, Biotic and Abiotic elements; Structure and Function of an ecosystem;		demonstration through PDF's and PPT's	fundamentals of ecology and the dynamic ecosystem.	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?	30 Higher Order-15
	Classification: Forest, Grassland, Desert, Aquatic ecosystems;		Diagrams, Models, demonstration through Globe			
	Energy flow in the ecosystem: Food chains, Food webs and Energy pyramids.		Maps, Diagrams, Models, Demonstration			
OCT.-NOV.	**UNIT III** Biodiversity: Definition, Concept,		Demonstration through PPT's and PDF's	Prioritize the importance and the need to conserve biodiversity.		
	In-situ and Ex-situ conservation;		PPT, Discussions			
	Environmental Pollution: Cause, Types (Air, Water, Soil, Marine, Noise, Nuclear Pollution), Measures to control various pollution.		PPT, Case Studies, Flipped Classroom			

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M. A/M.Sc. GEOGRAPHY (Previous)
SEMESTER I
GEOGRAPHICAL THOUGHT (GEOM-101)
COURSE PLAN

SEM/ Month	UNIT/TOPIC	Concepts /Facts	Teaching Pedagogy	Learning Outcomes	Questions	Marks Weightage (%)
SEM I NOV.	UNIT I The nature and scope of geography: Geography of Vedic age and Geography of Purana: Dwipa, oceans.	Origin of the subject, environmental determinism. Understanding of Vedas & Upnishadas	PPT, Diagrams, Flow Charts.	Recognize the elements of Geography and trace the evolution of the subject.	*Knowledge Based* Summarize the elements of geography.	Knowledge-- 40
	River and Mountain systems, Contribution of Greek	Puranic rivers and mountains, Geographical understanding of countries	Flipped Classroom, Diagrams.		*Understanding* *Based* Examine the contributions of Arab Geographers.	Understanding-30
	Roman and Arab Geographers	Geographical understanding of countries	Maps, Flow Charts, PPT.			
DEC.	UNIT II German school of Geography: Contribution of Humboldt, Ritter and Ratzel;	Geographical understanding of countries	Charts, Demonstration through Maps.	Discover and develop understanding about the contributions of various schools of		

	School of French Geography: Contribution of Blache and Brunhes;	Geographical understanding of countries.	PPT, Maps, Flow Charts	Geographical Thought.		Higher Order-30
	British and American school of Geography: Contribution of Mackinder, Herbertson, Miss Semple, Huntington and Davis.	Geographical understanding of countries.	Diagrams, Charts, Demonstration through Maps.		*Higher Order Thinking Skills Based* Elaborate the concept of Dualism in Geography.	
JAN. TO FEB.	UNIT III Dualism in Geography: Determinism and Possibilism and Concept of Neo-determinism, Physical and Human,	Ecological balance, forces of nature.	Flipped Classroom, PPT, Class discussions.	Identify and focus on the various geographical concept and dichotomy in the subject.		
	Quantitative revolution in geography; Behavioural geography;	Development of the subject.	PPT, Class discussions.			
	Concepts of Terrestrial unity, Pragmatism, Idealism, Positivism, Radicalism and Areal differentiation.	Human ideologies.	PPT, Flipped Classroom			

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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 JULY	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 remotely sensed data.	Knowledge-- 30 Understandin
	Data Acquisition, Platforms, Sensors, Resolutions, Launch Vehicles, Merit and Demerit of Remote Sensing.	Platforms, Launch Vehicles Resolutions and sensors	Match the following, Quiz, Demonstration			
	Indian Space Programmes, Indian & Foreign Satellites, Hyperspectral Remote Sensing, Thermal and Microwave Remote Sensing.	Types of Remote Sensing	Maps, Flow Charts			
AUG UST	UNIT II Elements of Visual Image Interpretation,	Visual Image Interpretation	Diagrams, Models, demonstration through Globe			

	Ground Verification. Applications of Remote Sensing.	Importance of Applications and ground verification.	Diagrams, Models, demonstration through Globe		*Higher Order Thinking Skills Based* Demonstrate orbital characteristics and data products.	g-40 Higher Order-30
	Major Remote Sensing Practicals using Erdas & SAGA Software, Creation of Base Map from Toposheet or Satellite Image	Thematic mapping	Maps, Diagrams, Models.			
SEPTEMBER-OCTOBER	**UNIT III** Layer Stacking, Mosaicking & Subset	Image Enhancement Techniques	Diagrams, Models.			
	Low Pass & High Pass Filtering	Image Enhancement Techniques	PPT, Demonstration			
	NDVI, Resolution Merge	Image Enhancement Techniques	PPT, Case Studies, Flipped Classroom			

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M. A/M.Sc GEOGRAPHY (Previous)

SEMESTER II

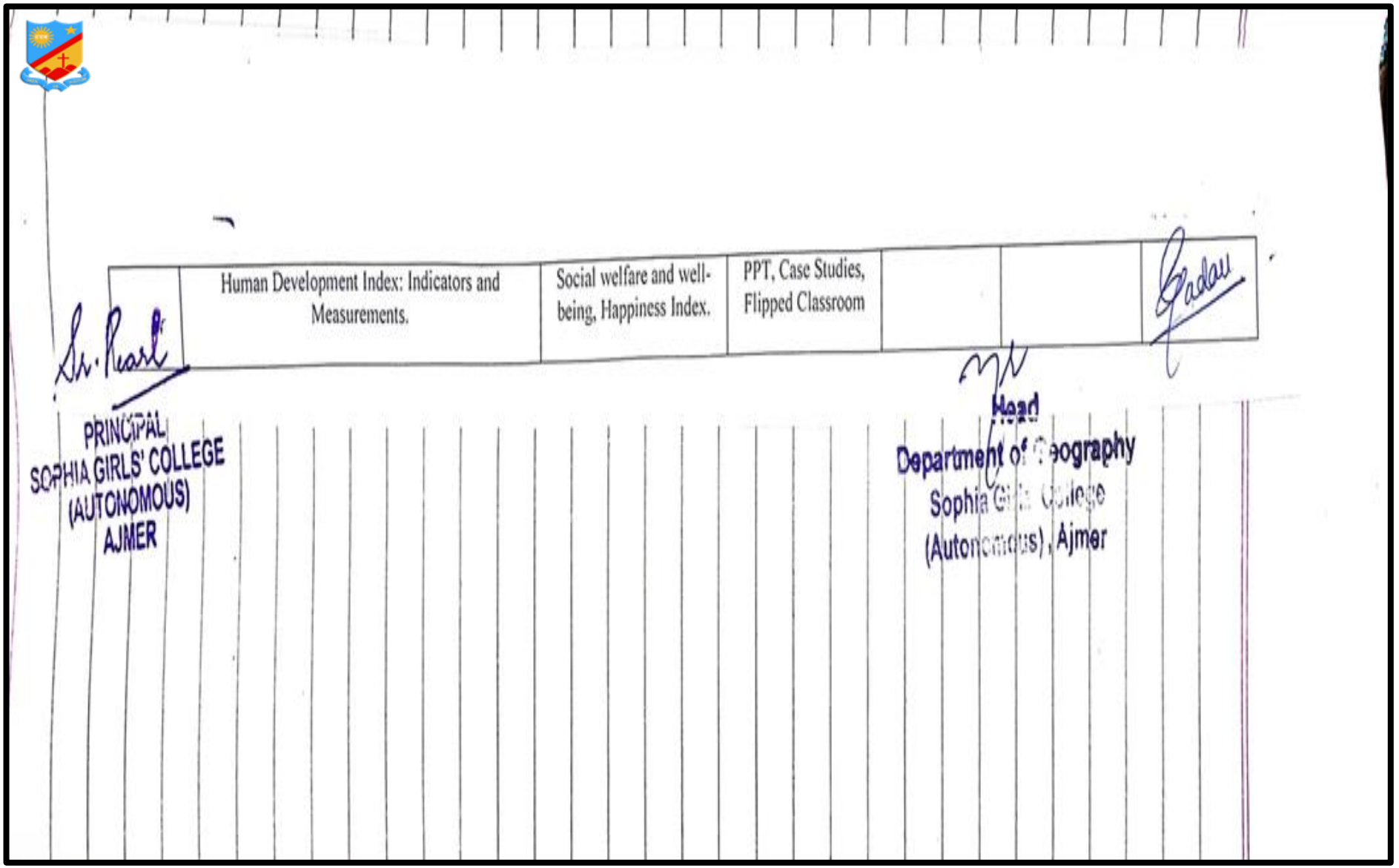
POPULATION GEOGRAPHY (GEOM - 103)

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 NOV.	UNIT I Population Geography: Nature, Scope;	Demography, Factors affecting.	PPT, Chart, Maps.	Explain the development of demography and elaborate the concept of population.	*Knowledge Based* Summarize the development of demography and elaborate the concept of population. *Understanding Based* Examine the population dynamics of the world. *Higher Order Thinking Skills Based* Evaluate the theories of migration.	Knowledge-- 40 Understanding- 30 Higher Order-30
	Objectives and Approaches;	Demography, Factors affecting.	PPT, Quiz.			
	Modern theories: Malthusian Theory, Optimum Theory and Demographic Transition Theory.	Concept of Sustainable development	Flow Charts, Diagrams.			
DEC.	UNIT II Population Dynamics: Qualitative and Quantitative aspect;	Age pyramids, Factors affecting, Qualitative aspects of population.	Diagrams, Models, demonstration through Globe	Measure and discuss the population dynamics of the world.		
	Urbanization (with special reference to India);	Urban Sprawl, Slum development.	Diagrams, Models,			
	Migration: Types, Causes, Consequences and related theories.	Push and Pull Factors	Maps, Diagrams, Models, Demonstration			
JAN. TO FEB	UNIT III World Population Distribution;	Regional disparity	Demonstration through rock samples	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, Demonstration			



	Human Development Index: Indicators and Measurements.	Social welfare and well-being, Happiness Index.	PPT, Case Studies, Flipped Classroom			

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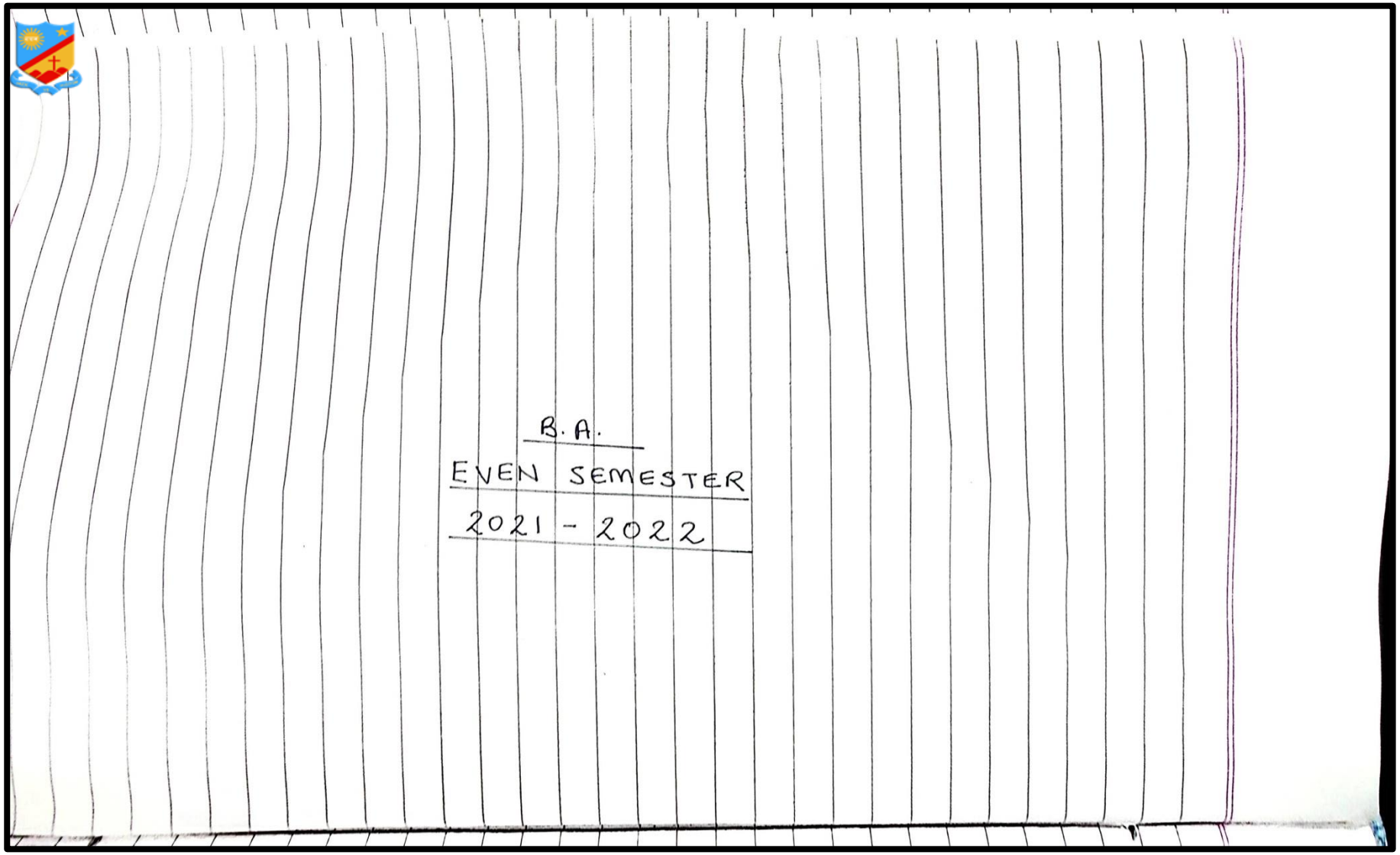
B.A.
EVEN SEMESTER
2021 - 2022

SOPHIA GIRL'S COLLEGE (AUTONOMOUS), AJMER

B.A SEMESTER II

HUMAN GEOGRAPHY PAPER II (GEO-202)

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.	**UNIT I** Nature, Scope and its Branches;	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. *Higher Order Thinking Skills Based* Discuss the factors affecting the	Knowledge--55 Understanding-30 Higher Order-15
	Concepts of man-environment relationship: Determinism, Possibilism, Neo-determinism;	Forces of nature	Flipped Classroom, Quiz, Demonstration			
	Races of Mankind; Early economic activities of mankind: Food gathering and Hunting, Fishing and Shifting cultivation.	Tribes with examples of their economic activities.	Maps, Flow Charts.			
JAN.	**UNIT II** Human Adaptation to the environment: (i) Cold region—Eskimo; (ii) Hot region Bushman, Beduin; (iii) Plateau—Gonds, Masai, (iv) Mountain- Gujjars;		Diagrams, Maps and Quiz.	Classify the different tribes of the world and use various factors to interpret the spatial distribution of population.		
	World's population: factors affecting, growth, density and spatial distribution;		Diagrams, Models, demonstration through Globe.			

	Concepts of over, under, optimum and Zero population growth.		Maps, Diagrams, Models, Demonstration		population growth and distribution in India.	
FEB.-MAR.	**UNIT III** Migration: Push and Pull factors, 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.	Critically evaluate the migration zone theory.	
	Human Settlements: Site and Situation, House types (with special reference to India);		PPT, Demonstration			
	Urbanization: factors affecting, associated problems.	Urban Sprawl, Slum expansion, unemployment.	PPT, Case Studies, Flipped Classroom			

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B.A III (SEMESTER VI)

REGIONAL GEOGRAPHY OF THE WORLD:

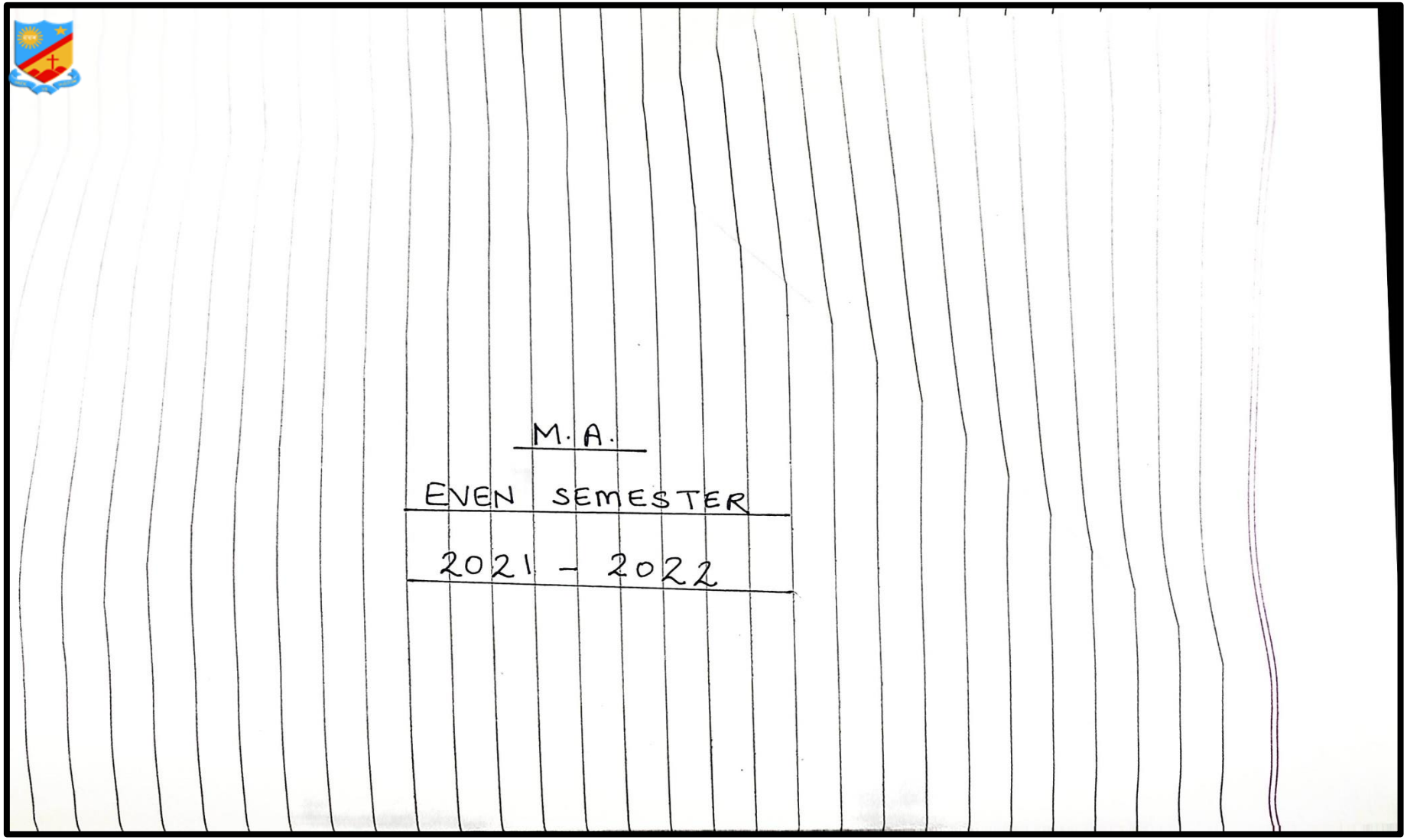
(NORTH AMERICA, SOUTH AMERICA AND AFRICA) (PAPER II) (GEO-602)

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.	**UNIT I** North America: Major Physiographic Divisions; Drainage- Mississippi, St. Lawrence, Colorado River Systems; Climate; Natural Vegetation;		PPT, Chart, Maps, Visual 3- D Models	Gain geographical knowledge of North America and by identifying the 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	*Knowledge Based* What is Solar System? Illustrate the different layers of Earth's Interior? *Understanding Based* Compare the Continental Drift Theory and the concept of Plate Tectonics? Classify the different landforms formed by the action of river?	Knowledge--55 Understanding-30 Higher Order-15
	Agriculture Belts; Minerals: Iron, Copper, Zinc, Bauxite, Uranium, Limestone, Manganese;		Match the following, Quiz, Demonstration			
	Power: Coal, Petroleum and Natural Gas; Industries: Iron and Steel, Engineering & Textiles, Manufacturing; Spatial distribution of Population.		Maps, Flow Charts			

				and trace the economic development.	*Higher Order Thinking Skills Based* Justify the present distribution of world continents and oceans on the basis of Hary Hess's Plate Tectonics Theory? Critically evaluate the concepts of Sea Floor spreading?	
JAN.	**UNIT II** South America: Major Physiographic Divisions; Drainage: Amazon, Orinoco, and Paraguay River Systems; Climate; Natural Vegetation;		Diagrams, Models, demonstration through Globe			
	Agriculture; Minerals: Iron, Copper, Zinc, Bauxite, Limestone, Manganese;		Diagrams, Models, demonstration through Globe			
	Power: Coal, Petroleum and Natural Gas; Industries: Iron and Steel, Engineering, Agro-based, Manufacturing; Spatial distribution of Population.		Maps, Diagrams, Models, Demonstration			
FEB.-MAR.	**UNIT III** Africa: Major Physiographic Divisions; Drainage- Nile, Congo, Niger River Systems; Climate;		Demonstration through rock samples	PRINCIPAL SOPHIA GIRLS' COLLEGE (AUTONOMOUS) AJMER		Head Department of Geography Sophia Girls' College (Autonomous), Ajmer
	Natural Vegetation; Agriculture; Minerals: Iron, Copper, Zinc, Bauxite, Uranium, Gold;		PPT, Demonstration			
	Power: Coal, Petroleum and Natural Gas; Industries: Iron, Copper, Diamond, Oil, Gold; Spatial *distribution of Population.*		PPT, Case Studies, Flipped Classroom			


M.A.
EVEN SEMESTER
2021 - 2022

SOPHIA GIRLS' COLLEGE, AJMER (*Autonomous*)

M. A/M. Sc GEOGRAPHY SEMESTER II

DIGITAL CARTOGRAPHY, AERIAL PHOTOGRAPHY AND GPS (GEOM-204)

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 II	**UNIT I** Nature and Scope of Cartography, Basic Geodesy, Geoid /Datum/ Ellipsoid, Elements of Digital Cartography,	Understanding of a map.	PPT, Chart, Maps, Visual 3- D Models	Identify the components on an aerial photography and distinguish the elements of photo interpretation.	*Knowledge Based* Discuss the principles and elements of Digital Cartography. *Understanding Based* Exemplify the functional segments of GPS. *Higher Order Thinking Skills Based* Compare the limitations and advantages of	Knowledge—40 Understanding-30 Higher Order-30
	Maps: Types, Purpose and Classification, Generalization of Map, Map Layout, Data Models for Digital Cartographic Information,	Map coordinate system, Topographic maps.	Match the following, Quiz, Demonstration			
	Qualitative Mapping Techniques: Choroschematic and Chorochromatic. Quantitative Mapping Techniques: Choropleth and Isopleth.	Data models for digital cartographic information	Maps, Flow Charts			
	UNIT II Aerial Photography: Introduction to Aerial Photography – Basic Information and Specifications of Aerial Photographs;	Aerial Photography	Diagrams, Models.	Become familiar with the history, film type, and angles of aerial photography distortions and		
	Planning and Execution of Photographic Flights Basic; Geometric Characteristics of Aerial Photographs- Types of Aerial Photographs,	Flight Planning & Execution	Diagrams, Models, demonstration through Globe			

			through Globe		*Thinking Skills Based*	
	Types of Aerial Camera. Photogrammetry and Its Applications.	Stereographic vision,	Maps, Diagrams,		Compare the limitations and advantages of Arial Photographs .	
JUNE - JULY	UNIT III Global Positioning System (GPS) – Introduction of Global Positioning System and Its Segments,	Coordinate system, Locational understanding.	Maps, Diagrams, Models, Demonstration	Use photogrammetric techniques to calculate: distance, area and object height from aerial photographs.		
	Satellite Constellation, Factors Affecting of GPS, GPS Signals and Codes	Understanding satellite signals,	PPT, Demonstration, Diagrams			
	Geo-Positioning-Basic Concepts. NAVSTAR, GLONASS, GALILEO & NAVIC, Applications of GPS.	Space Programs.	PPT, Demonstration Video			

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JUNE TO JULY	GPS Surveying and Mapping: Field Exercises using Hand Held GPS.	Image interpretation elements. Flight planning.	PPT, Demonstration Case Studies, Flipped Classroom		*Higher Order Thinking Skills Based* Summarize the importance of GPS Sureying.	

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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 MARCH	UNIT I Introduction to GIS Basic Concepts: Definition and History, Components of GIS, Recent Trends and Applications of GIS.	Elements of GIS	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 Skills Based* Illustrate the applications of GIS in Land	Knowledg e--30 Understan ding-30 Higher Order-40
	Data Structure and Formats, Spatial Data Models – Raster and Vector, Data Base,	Data Structure and Models	Diagram , Flow Chart Quiz,			
	Linkage between Spatial and Non-Spatial Data, Data Inputting in GIS,	Integration of Data	Maps, Data Analysis			
APRIL	UNIT II Generating Thematic Map from the Toposheet.	Thematic Mapping	Diagrams, Models, Demonstration through Toposheet			
	Advanced GIS: Clip, Buffer, Proximity Analysis,	Advanced GIS Concepts	Diagrams, Models,			

	Overlay Analysis, Network Analysis, Interpolation, DEM, TIN.	GIS-Digital Elevation Models	Maps, Diagrams, Models,		Information System.	
MAY-JUNE	**UNIT III** Digital Database Creation – Point Features, Line Features, Polygon Features, Data Collection and Integration, Non-Spatial Data Attachment Working with Tables	Shapefile's creations	Diagrams, Models, Software Training			
	Editing and Digitization, Clipping, Intersection, Union and Buffering Techniques.Spatial and Attribute Query and Analysis, Interpolation Techniques	Spatial Analysis	PPT, Software Training.			
	GPS And GIS Integrations Output Preparation (Transfer of GPS Point Location), LU/LC Using Supervised and Unsupervised Classification, Map Making.	Map Making	PPT, Software Training.			

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