B.A./B.SC. GEOGRAPHY HONORS WITH SINGLE MINOR

Semester I

S.No		
1	Major 1	APSCHE Will provide
2	Major 2	APSCHE Will provide

Semester II

	Theory	Practical
3	Minor 1: Fundamentals of Geography	Geographical Tools

Semester III

	Theory	Practical
4	Minor 2: Geomorphology	Terrain Analysis

Semester IV

	Theory	Practical
5	Minor 3 : Fundamentals of Remote Sensing and GIS	Visual Image Interpretation and GIS Data Management
6	Minor 4 : Regional Geography of India	Map Projections

Semester V

	Theory	Practical
7	Minor 5 : Cartography	Map Making
8	Minor 6 : Economic Geography	Map Analysis

Semester VI

Semester Internship / Apprenticeship / OJT with 12 Credits.

Student is eligible for Exit Option-3 with the award of Degree in respective major with minor

Minor Theory –1: Fundamentals of Geography

Course Objectives:

- To Introduce the Geography as discipline
- To describe Universe, Solar system and Earth and its elements

Course Outcome:

After the completion of the course the Students will able to

- Understand the Geography as Discipline.
- Obtain the knowledge on universe Earth and Life.
- Understand Globe and need of Latitudes and Longitudes.
- Improve the knowledge on earth rotation and revolution.
- Understand the importance of Maps and scale.

UNIT-I

Geography as a Discipline- Geography as Integrating Discipline- Branches of Geography: Systematic and Regional approach.

UNIT-II

The Earth :Origination of Universe and solar System- Evolution of the earth- Evolution of Lithosphere, Atmosphere and Hydrosphere- Evolution of life.

UNIT-III

Globe: Globe, Parallels of Latitudes and Longitudes- Longitudes and Time calculation of time- International Date Line.

UNIT-IV

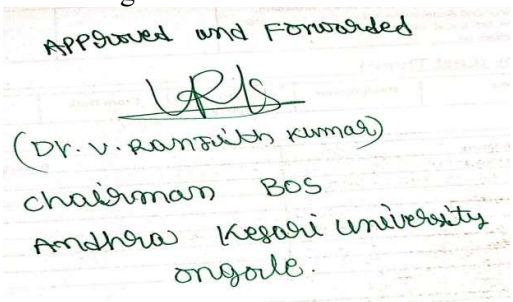
Movements of the Earth: Earth rotation and revolution – Occurrence of Day and nights – Leap Year - Occurrence of Seasons.

UNIT-V

Maps: Meaning, Classification- Scale: Classification - Direction

References:

1. K.Siddhatha (2014) The Earth Dynamic Surface, Kisalaya Publication, New Delhi
2. Strahler, A. H. and Strahler, A N., (2001) Modern Physical Geography (4th Edition), John Wiley and Sons, Inc., New York.
3. Bartholomeo, R. B., (1984) Earth Science, Heath and Co., Toronto.
4. Dury, G. H., (1980) The Face of the Earth, London: Penguins.
5. Ernst, W. G., (Ed.) (2000) Earth Systems: Process and Issues, Cambridge University Press, Cambridge.
6. Recent Earthquakes in India and World –A global view of Tsunami-Volcanoes



SEMESTER – II

Minor Practical -1: Geographical Tools

Course objectives:

Understanding the Different Geographical Tools.

Course Outcome:

On the completion of syllabus students must be able to:

- Draw and compute map scales of different kinds.
- Measure the distance, areas and find the directions on maps.
- Reduce and enlarge maps of different scales manually to the required size.
- Depict landforms by contours.
- Represent the data related to climate by means of graphs and diagrams.

Ex. 01: Preparation Maps classification flow chart

Ex. 02: Drawing Globe and marking important parallels of latitudes and Longitudes.

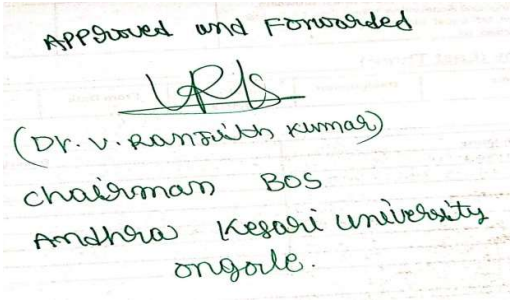
Ex. 03: Drawing different Weather measuring Instruments

Ex. 04: Map Symbols

Ex. 05: Digital versions of aerial photographs, satellite images and GPS.

References:

1. Singh, R.L, (1991) Elements of Practical Geography – Kalyani Publishers, New Delhi.
2. Monk house and Willkinson (1976) Maps and Diagrams, Metuhuen& Co, London.
3. Gobal Singh Map Work and Practical Geography, Vikas Publishing House Pvt Ltd, New Delhi.
4. Worthington, B.D.R. and Robert Gent (1975): Techniques in Map Analysis, Ebenzer Baylis and Sons, USA.
5. Anson, R.W. (Ed.) (1984) Basic Cartography for Students and Technicians, Volume 2,
6. International Cartograhic Association, Elsevier Applied Science Publishers, London.
7. Dorling, D. and David Fairbairn (1997), Mapping: Map of representing the world, Addisson Wesley Longman Ltd., U.K.



SEMESTER - III

Minor Theory –2: Geomorphology

Course Objectives:

- To introduce the basic concepts geomorphology to the students of geography
- To understand the origin of landforms, Weathering, Erosion and Depositional
- To know the applications of geomorphology is helpful in different fields like Civil, mineral and coastal departments**.**

Course Outcome:

On the completion of syllabus students must be able to:

- Describe the morphology of the landscape and related processes in areas influenced by fluvial, glacial, periglacial, Aeolian, coastal, and arid systems.
- Describe major scientific ideas and theories about the development of the land scape.
- Critically analyse geomorphological issues in a scientific context at local, regional and global scales.
- Identify the major landforms on the Earth's surface and interpret theprocesses responsible for their genesis.

UNIT – I

BASICS: Meaning, nature, Scope, and development – Basic Concepts, Branches ingeomorphology – geological time scale – Endogenic process: Diastrophism andvolcanism

UNIT – II

EXOGENIC PROCESS: Weathering –Physical – Chemical – biological (landforms) - Mass Wasting,Drainage: Drainage Patterns - Consequent Drainage, Obsequent Drainage,Antecedent Drainage, Superimposed Drainage – Lakes: Origin – Types

UNIT – III

CONCEPTS: Morphogenetic regions – Concept of cycle of erosion: Davis, Penck - Peneplain and Pediplain –Slope: definition - elements.

UNIT – IV

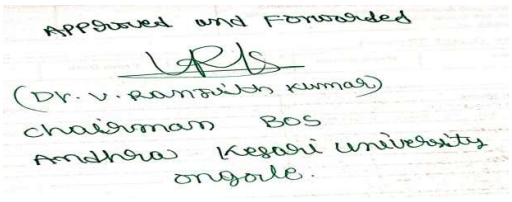
LANDFORMS: Fluvial, Karst, Glacial (Erosional and Depositional).

UNIT – V

LANDFORMS: Aeolian and Coastal landforms (Erosional and Depositional).

References:

1. Dayal, P., (1990). A Text book Geomorphology, Shukla Book Depot, Patna,India.
2. MajidHussain. ed., (1994). Geomorphology, Perspective in Physical Geographyseries, Anmol Publications Pvt. Ltd., New Delhi.
3. Mukerjee, P.K., (1986). A Text of Geology, The World Press (P) limited, Calcutta.
4. 4. Pitty,A.F., (1982). The Nature of Geomorphology, Methuen and Co. Ltd., London.
5. 5. Rice, R.J., (1986). Fundamentals of Geomorphology, Longman, London.
6. Small, R.J., (1978). The Study of Landforms: A Text book of Geomorphology, Cambridge University Press, New York.
7. Thornbury, W.D., (1954). Principles of Geomorphology, John Wiley and sons, Inc., New York.
8. Worcester, P.G., (1948). A Textbook of Geomorphology, Von Nostrand Reinhold, Company, New York.



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SEMESTER – III

Minor Practical -2: Terrain Analysis

Course Objective

- To apprise the students about the Terrain mapping techniques.
- To project the representation of the landforms by using contour lines.
- To explains the methods of slope analysis.

Course Outcomes

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

- Students can able to represent the landforms with contour lines.
- Student can perform profiles which are drawn from landforms through contours.
- Student can represent the slope analysis models.

Ex: 1 Interpolation of contours.

Ex: 2 Landforms represented by contours.

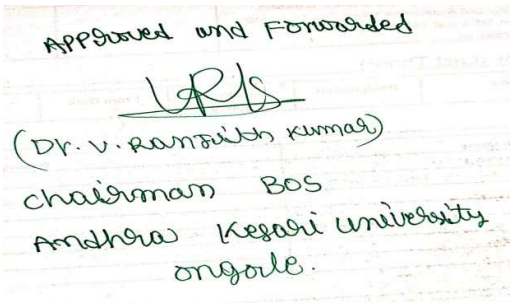
Ex: 3 Profiles: Serial, Superimposed, Projected, Composite.

Ex: 4 Slope Analysis: Smith's Method.

Ex: 5 Slope Analysis: Wentworth's Method.

References:

1. Misra, R.P. and Ramesh, A.: Fundamentals of Cartography, concept, New Delhi, 1989.
2. Monkhouse, F.J .H.R. and Wilkinson: Maps and diagrams; Methuen and Co., London, 1984.
3. Peter Toyne& Peter Newby, T.: Techniques in human geography; MacMillan, London, 1972.
4. John Byogott: An introduction to map work and practical geography, university Tutorial press Ltd., London.



SEMESTER - IV

Minor Theory – 3: Fundamentals of Remote Sensing and GIS

Course Objective

- To provide knowledge on history and evolution of Remote sensing.
- To provide knowledge on the platforms and sensors and instruments used for remote sensing.
- To understand the evolution of GIS.
- To explain the types of data collection with respect to time and terrain and Data base management and retrieving the data from different sources.

Course Outcomes

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

- Develop knowledge on history and evolution of remote sensing.
- Understand knowledge on the platforms and sensors and instruments used for remote sensing Understand the evolution of GIS.
- Focus on collection, analysing, interpretation and Presenting the data related to Earth.
- Differentiate the types of data collection with respect to time and terrain and Database management and retrieving the data from different sources

UNIT I

Introduction to Remote Sensing: History, Development and Principles Stages in Remote sensing Process. Stages in Remote Sensing Process.

Unit II

Energy Sources and Radiation Principles-Energy Interaction in the Atmosphere. Atmospheric Windows. Energy Interaction with Earth Surface features. Electromagnetic Spectrum. Spectral reflectance patterns of Earth surface features in different wavelength.

UNIT III

Characteristics of Indian Remote Sensing Satellites (I.R.S), LANDSAT, etc. Principles of Image Interpretation: Elements of Image Interpretation, Digital Image Processing. Applications in Land use Land Cover Mapping and Urbanisation.

UNITIV

GIS:DefinitionsandDevelopment–ComputerComponentsofGIS(HardwareandSoftware)– GeneralDataBaseconceptsofSpatialandNon-spatial data - Elements of Spatial data-Sources of Spatial data– DataqualityforGIS–ErrorsandErrorvariationsinGIS.

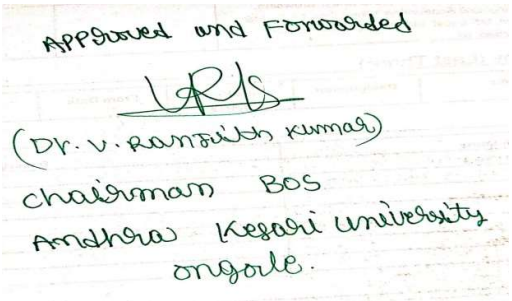
UNITV

GIS Data Management: Data Base Management Systems (DBMS) Data BaseModels.Datainputmethods–SpatialDatastructures:Rasterdataand Vectordata– Structures –GISDataAnalysis:SpatialmeasurementmethodsReclassification–Buffering– OverlayAnalysis.

References:

1. Lillisand T.M and Keifer R.W, (1994), Remote Sensing and Image Interpretation, Jhon Willey & sons, New York.

2. Rampall, K.K. (1999), hand book of Aerial Photography and Interpretation, Concept Publishing Co., New Delhi.
3. Sabins, F.F. Jr, (1987), Remote Sensing; Principles and Interpretation, W.h. Freeman & Co., New York.
4. Jenson R. Jhon, (2003), Remote Sensing of the Environment-An Earth Resource Perspective, Pearson Education Pvt. Ltd., Indian Branch, Patparganj, Delhi, India.
5. LRA Narayanan, Remote sensing and its Applications, (1999), Universities Press (India) Ltd., Hyderabad.
6. http://rst.gsfc.nasa.gov/Front/tofc.html.
7. http://earthobsevatory.nasa.gov/Library/RemoteSensing
8. AronoffS.GeographicInformationSystem:AManagementPerspective,DDLPublication,Ottawa.1989.
9. BurroughP.A.PrinciplesofGeographicInformationSystemsforLandResourceAssessment.OxfordUniversityPress,NewYork,1986.
10. FraserTaylorD.R.GeographicInformationSystem.PergamonPress,Oxford, 1991.
11. MaquireD.J.M.F.GoodchildandD.W.Rhind(eds.)GeographicInformationSystems:PrinciplesandApplication.Taylor&Francis,Washington,1991.
12. MarkS.Monmonier.Computer–assistedCartography.Prentice–Hall,EnglewoodCliff,NewJersey,1982.
13. PeuquetD.J.andD.F.Marble,IntroductoryReadinginGeographicInformationSystems.Taylor&Francis,Washington,1990.
14. StarJ.AndJEstes. Geographic Information Systems : An Introduction. Prentice Hall, Englewood, Cliff, NewJersey,1994.



SEMESTER - IV

Minor Theory –4: Regional Geography of India

Course objectives:

- To conceptualize the regional approaches and to examine regional differentiation in the study of Indian Geography.
- To expose to historical, economic, cultural, social and physical characteristics of India.
- To provide an introduction to the regions of the India in terms of both their uniqueness and similarities. .

Course Outcomes

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

- Developed the art of regionalization technique while focusing about diversity of Indian region.
- Visualized and recognized about regional identities and socio-cultural dimension of regionalization to address the issues and concern needed for regional planning.

UNIT – I:

Major Physiographic divisions. Himalayas, Great Plains, Plateaus, Coastal Plains and islands

UNIT - II

Major and Minor River Systems and their drainage pattern. Climate: Temperature and Rainfall. Trewartha's Climatic Regions of India.

UNIT-III:

Soils: Types, Characteristics and Distribution. Forest types and distribution and economic significance. Agriculture: Irrigation and Power projects. Major Food grain crops: Rice and Wheat. Major commercial Crops: Sugarcane and Cotton. Plantation Crops: Coffee and Tea. Animal Husbandry

UNIT-IV:

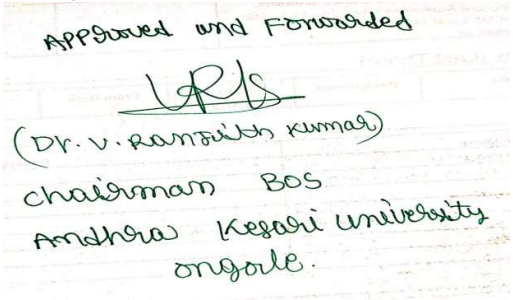
Mineral Resources: Coal, Iron ore, Petroleum and Natural gas. Locational pattern of Industrial Activity. Weber's theory of industrial location. Major Industries: Iron and Steel, Cotton textiles and Ship Building. Industrial Regions of India and their characteristics.

UNIT-V:

Population: Distribution, Density, Growth and problems. Urban and Rural Population – Distribution and Trends. Development and patterns of Transport Networks (railways, waterways, airways and pipelines).

References:

1. Spate, O.H.K. and Learmonth, A.T.A. (1972): India and Pakistan, B.I. Publication, Madras.
2. Sharma and Coutino (1980): Economic and Commercial Geography of India, Vikas Publications, New Delhi.
3. Singh, R.L. (1976): Regional Geography of India, National Geographical Society of India, Banaras.
4. Memoria, C.B. (1970): India's Population Problems, KitabMahal, Allahabad.
5. Wadia, D.N. (1961): Geography of India, Mc.Millan, London.
6. Tirtha, Geography of India, 2nd Edition
7. Chaudhuri, Development Regional Planning



SEMESTER – IV

Major 3-Practical - Visual Image Interpretation and GIS Data Management

Course objectives:

- To explain practical knowledge on Remote sensing applications.
- To help to understand Visual and digital interpretation of satellite Images.
- To illustrate interpretation of Aerial photos.
- To acquaint knowledge on allocation of RS in different fields and sectors.

Course Outcomes:

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

- Explain practical knowledge on Remote sensing applications.
- Understand Visual and digital interpretation of satellite Images.
- Illustrate interpretation of Aerial photos.
- Acquaint knowledge on allocation of RS in different fields and sectors.

Ex: 1 Techniques of Visual Interpretation.

Ex: 2 Marginal Information of Satellite Imageries.

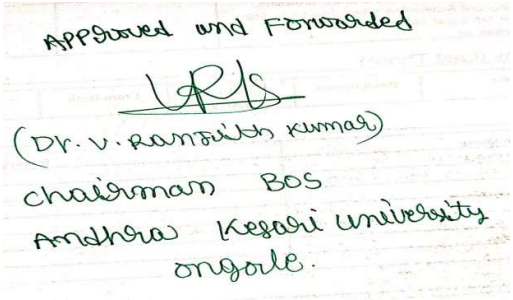
Ex: 3 Visual Interpretation of Water Resources and Lineaments,

Ex: 4 Visual Interpretation of Landforms–Waste Land

Ex: 5 Visual Interpretation of Land use / Land cover and change detection

References:

1. Curran,Paul,J.:Principles ofRemoteSensing:Longman,London,1985.
2. GautamN.C.etal.SpaceTechnologyandGeography; NationalRemoteSensingAgency,Hyderabad,1994.
3. Thomas M. Lillesandand Ralph, W.Keffer; Remote Sensing and image interpretation, JohnWilley&Sons, NewYork, 1994.



SEMESTER – IV

Major -4 Practical: Map Projections

Course Objective

- To apprise the students about the art and science of map making and representation.
- To explains the usage of different types of projections.
- 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, Students will be able to

- Explain the concept of map, scale and projection.
- Student can explain the purpose of projection.
- The main outcome of this course is students can able to select different projection for different geographical areas.

Ex: 1 Maps and scales-types, Conversion of Scales,Introduction to Map projections; Choice of Map Projection and UTM.

Ex: 2 Conical Projections: One Standard Parallel, Two Standard Parallel; Bonne's and Polyconic

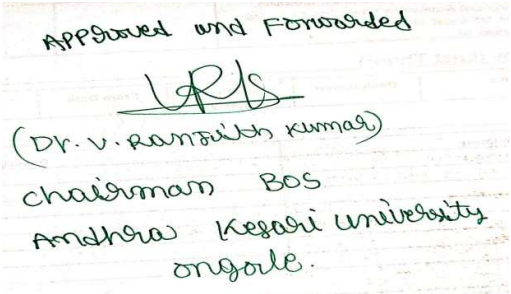
Ex: 3 ZenithalPolar Projections: Stereographic and Gnomonic

Ex: 4 Cylindrical Projections: Equi -Distant, Equal Area and Mercator,

Ex: 5 International map projection: Sinusoidal andMollweideprojection.

References:

1. Khan, Z.A.: Text bookof practical geography: concept; New Delhi, 1998.
2. Misra, R.P. and Ramesh, A.: Fundamentals of Cartography, Concept, New Delhi,1989.
3. Singh, R.L.: Map work and practical geography; central book depot; Allahabad, 1972.
4. Steers, J.A.: Map projections, University of London Press,London.



SEMESTER - V

Minor Theory–5: Cartography

Course Objective

- To apprise the students to various aspects of cartography.
- To introduce the basic concepts and key theoretical approaches in Advanced Cartography.
- To describes the art and science of map making and map analysis.
- To teach the representation and conversions of scales.
- To provide the knowledge on map design, layout, lettering, toponomy, drawing surface and equipment.
- To give the clear picture on the changing process of map making from analogue to digital.
-

Course Outcomes

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

- Explain the importance of advanced cartography in map making and presenting.
- Acquire good knowledge about different procedure of map making and various projection system of map making by developing broad knowledge about latitude, longitude, meridians, parallels etc.
- Developing their quantitative application in geographical study which gives more accuracy in any geographical enquiry which can further helps students in conducting research activities.
- Perform map layout and map interpretation for any geographical area.

UNIT I

Cartography –Definition. Cartography is a science of human communication;Scales – Methods of representation &conversions.

UNIT II

Map projections –classification and choice of projections. Merits and demerits of cylindrical, conical, zenithal and conventional projections.

UNIT III

Semiology – Kindsof symbols– Mapping qualitative and quantitative point, Line and Area symbols. Types of maps and their uses. Topographical maps: Elements of topographical maps, scales and numbering of Toposheets.

UNIT IV

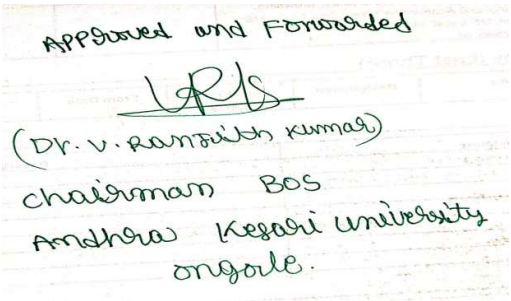
Map designandlayout – Theory ofvisualperception constraints and Restrictions in map design. Lettering and Toponomy. Mechanics of map construction:Drawingsurfaces – DrawingEquipment.

UNIT V

Mapping the qualitative and quantitative data. Thematic mapping; concept of map base, map compilations &generalizations. Concepts of Geographical Information System (GIS).

References:

1. Khan, Z.A.: Textbook of practical geography, concept, New Delhi, 1998.
2. Monkhouse, F.J. &Wilkinson, H.R. : Maps and Diagrams, Methuen, London, 1994
3. Steers,J.A.:MapProjections,UniversityofLondonPress,LondonBurrough,P.A.: Principles of geographic information systems for land resource assessment, Oxford University Press, New York,1986.
4. Fraser Taylor D.R.:Geographic InformationSystems, PergamanPress, Oxford, 1991.
5. Star J and J.Estes: Geographicinformation systems. An introduction, Prentice Hall, Englewood Cliff, New Jersey, 1994.
6. Misra, R.P. and Rames, A.: Fundamentals of Cartography, McmillanCo., New Delhi,1986.



SEMESTER - V

Minor Theory–6: Economic Geography

Course Objectives

- To acquire knowledge about the concepts of resources, classification, models of natural resource processes, their use and misuse, conservation and management of resources for sustainable development.
- To provide a comprehensive introduction to basic concepts and key theoretical approaches in economic geography.
- To introduce economic geography as a dynamic, diverse and contested body of knowledge.

Course Outcomes

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

- Explain the importance of economic geography in analyzing the societies and economies work.
- Explain and apply key concepts and theoretical approaches in economic geography.
- Discuss and critically evaluate these concepts and theoretical approaches.
- Students will become sensitized to concept of resources.
- Students will become sensitized the classification of resources.

UNIT I

Scope, content and recent trends in economic geography, relation of economic geography with economics and other branches of social sciences, classification of economies; sectors of economy (Primary, secondary and tertiary).

UNIT II

Natural resources: Nature and classification – renewable and non - renewable, biotic and abiotic, conservation of resources, changing nature of economic activities; mining, forestry, agriculture, industry, trade and transport.

UNIT III

Agricultural Resources: Spatial distribution of major food and cash crops of the world (rice, wheat, coffee, tea).

UNIT IV

Minerals resources- Classification of minerals (ferrous and non- ferrous).Major industries: Iron and Steel, Textiles, ship -building and their distribution.

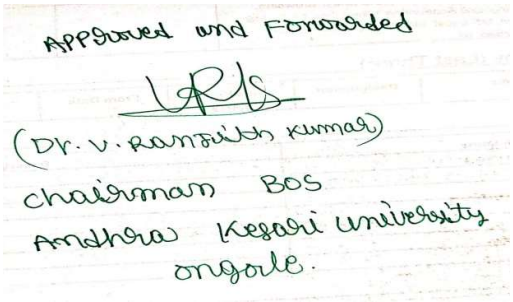
UNITV

Theories of Industrial location: Alfred Weber and Smith: Geographical factors in the development of major industries. Industrial policy of state and central government.

References:

1. Boesch, H.: A Geography of World Economy, D. Van NostrandCo., New York, 1964.
2. Chapman, J.D.: Geography and Energy, Longman, London,1989.
3. Gregor,H.F.:GeographyofAgriculture,PrenticeHall,NewJersey,USA,1970.

4. Griggs, D.B.: The Agricultural Systems of the World, Cambridge University Press, New York,1974.
5. Hartshorne, T.N. and Alexander, J.W.: Economic Geography, Prentice Hall, New Delhi,1988.
6. MillarE.: Geography of Manufacturing, Prentice Hall, New York, 1962.
7. Raza, M. and Agrawal, Y.: Transport Geography of India, Concept, New Delhi, 1986.
8. Smith, D.M.:IndustrialLocation– An Economic Geographical Analysis, John Willey, New York,1971.



SEMESTER – V

Minor Practical –5: Map Making

Course objectives:

- To understand how make maps.
- To assist, select and complete map making.

Course Outcomes:

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

- Develop skill of Map making.
- Understand Selection, complete Map making.

Ex. 01: Appreciation of SOI Toposheet

Ex. 02: Appreciation of NATMO Maps

Ex. 03: Appreciation of Census Atlas of India

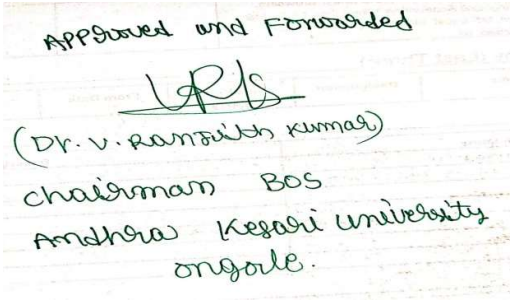
Ex. 04: Appreciation of NBSS & LUP Maps

Ex. 05: Appreciation of Resource Atlas of Andhra Pradesh

Ex. 06: Appreciation of GSI Maps

References:

1. Archer J.E. &dalton T.H. (1968): The fields work in Geography, E.t. Batsford Ltd., London.
2. Haring, Lloyed (1975): Scientific Geographic Research W C. Brow Company USA.
3. Johnes, P.A. (2008): Field Work in Geography, Longman.
4. Kothari C.R.(1996): Research Methodology, VishwasPrakashan, New Delhi
5. Misra R.P. (1991): Research Methodology in Geography, concept pub. New Delhi.



SEMESTER – V

Minor Practical – 6: Map Analysis

Course Objectives:

- To help to understand how to analyse maps.
- To assist, select and complete map analysis.

Course Outcomes:

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

- Develop skill of map analysis.
- Understand Selection, complete Map analysis.

Ex. 1: Interpretation of SOI 1:2, 50,000 Sheets

Ex. 2: Interpretation of SOI 1" to 1 Mile Sheets

Ex. 3: Interpretation of SOI 1:50,000 Sheets

Ex. 4: Interpretation of SOI 1:25,000 Sheets

Ex. 5: Interpretation of SOI OSM Sheets

References:

1. Archer J.E. &dalton T.H. (1968): The fields work in Geography, E.t. Batsford Ltd., London.
2. Haring, Lloyed (1975): Scientific Geographic Research W C. Brow Company USA.
3. Johnes, P.A. (2008): Field Work in Geography, Longman.
4. Kothari C.R.(1996): Research Methodology, VishwasPrakashan, New Delhi
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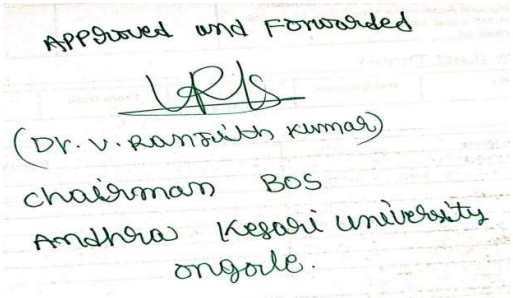

ANDHRA KESARI UNIVERSITY - ONGOLE

BA DEGREE (UG-REGULAR) EXAMINATIONS 2023-24

B.A. Honors in Geography (Minor)

II-YEAR, III & IV-SEMESTER - MODEL QUESTION PAPERs

MAX.TIME: 03 HOURS MAX.MARKS: 75

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SECTION-A (10 MARKS QUESTIONS):: 5Qx10M=50M

ANSWER ANY FIVE OF THE FOLLOWING QUESTIONS

1. ?

2. ?

3. ?

4. ?

5. ?

6. ?

7. ?

8. ?

9. ?

10. ?

SECTION-B (05 MARKS QUESTIONS) :: 2Qx05M=10M

ANSWER ANY TWO (02) OF THE FOLLOWING QUESTIONS

11. ?

12. ?

13. ?

14. ?

15. ?

SECTION-C (1 MARK MCQs) :: 5Qx1M=5M

ANSWER ALL OF THE FOLLOWING QUESTIONS

16. A. B. C. D.

17. A. B. C. D.

18. A. B. C. D.

19. A. B. C. D.

20. A. B. C. D.

SECTION-D (1 MARK FILL IN THE BLANKS):: 5x1=5

ANSWER ALL OF THE FOLLOWING QUESTIONS

21. _____.

22. _____.

23. _____.

24. _____.

25. _____.

SECTION-E (1 MARK MATCH THE FOLLOWING) :: 5x1=5

26. Match the following

A.	( )	1.
B.	( )	2.
C.	( )	3.
D.	( )	4.
E.	( )	5