

CHOICE BASED CREDIT SYSTEM (CBCS)
SCHEME BY SEMESTERS
 Department of Geography,
 Tumkur University
 Under Graduate Degree Programme
 2016 onwards

1. New Syllabus for Geography (UG) with effect from 2016 onwards (CBCS)
2. Course structure.

| Semester | Paper No. | Title | No. of teaching hours per week | Duration of Semester end examination | Max Marks for Semester end examination | Minimum Passing marks for Semester end examination | Internal assessment marks |
|-------------------------|-----------|--|--------------------------------|--------------------------------------|--|--|---------------------------|
| I Sem Theory Paper | 1.3 | Physical Basis of Geography-I | 4hrs | 3hrs | 90 | 32 | 10 |
| I Sem Practical-Paper | PCT L-1.4 | Cartography | 4hrs | 3hrs | 50 | 20 | 00 |
| II Sem Theory Paper | 2.3 | Physical Basis of Geography-II [Atmosphere and Hydrosphere] | 4hrs | 3hrs | 90 | 32 | 10 |
| II Sem Practical-Paper | PCT L-2.4 | Weather instruments and study of Indian Daily Weather Reports. | 4hrs | 3hrs | 50 | 20 | 00 |
| III Sem Theory Paper | 3.3 | Human Geography | 4hrs | 3hrs | 90 | 32 | 10 |
| III Sem Practical-Paper | PCT L-3.4 | Representation of Statistical Data | 4hrs | 3hrs | 50 | 20 | 00 |
| IV Sem Theory Paper | 4.3 | Regional Geography of Karnataka | 4hrs | 3hrs | 90 | 32 | 10 |
| IV Sem Practical-Paper | PCT L-4.4 | Representations of Landforms and Study of Topographical Maps. | 4hrs | 3hrs | 50 | 20 | 00 |
| | | Total | 32hrs | | | | |
| V Sem Theory Paper | 5.1 | Geography of India Part-I (Compulsory Paper) | 3hrs | 3hrs | 90 | 32 | 10 |
| V Sem Practical-Paper | 5.2 | (A) Regional Geography of Asia (Optional Paper) (B) Geography of Tourism (Optional Paper) | 3hrs | 3hrs | 50 | 20 | 00 |

| | | | | | | | |
|------------------------------|----------------------|--|-------------|-------------|-----------|-----------|-----------|
| VSem Practical Paper | 5.3 | Map Projections-I [Cylindrical and Conical groups] | 3hrs | 3hrs | 90 | 32 | 10 |
| VSem Practical-Paper | 5.4 | Basic Statistics | 3hrs | 3hrs | 50 | 20 | 00 |
| VISem Theory Paper | 6.1 | Geography of India Part-II [Compulsory paper] | 3hrs | 3hrs | 90 | 32 | 10 |
| VISem Theory Paper | 6.2 | (A) Economic Geography of the World. (Optional Paper) (B) Environmental Geography (Optional Paper) | 4hrs | 3hrs | 90 | 32 | 10 |
| VISem Practical-Paper | 6.3 | Map projections-II [Zenithal and Conventional Groups] | 4hrs | 3hrs | 50 | 20 | 00 |
| VISem Practical-Paper | PCT L-6.4 | Fundamentals of GIS, Remote Sensing and Computer Graphics. | 4hrs | 3hrs | 50 | 20 | 00 |

)

SEMESTER AND TITLE OF THE PAPERS

I Semester

Theory-Paper-1.3 Physical Basis of Geography-I

Practical-Paper-PCTL-1.4 Cartography (Maps, Scales and Graphs)

II Semester

Theory-Paper-2.1 Physical Basis of Geography-II [Atmosphere and Hydrosphere]

Practical-Paper-PCTL-2.2 Weather instruments and study of Indian Daily Weather Reports.

III Semester

Theory-Paper-3.1 Human Geography

Practical-Paper-PCTL-3.2 Representation of Statistical Data

IV Semester

Theory-Paper-4.1 Regional Geography of Karnataka

Practical-Paper- PCTL-4.2 Representation of landforms and study of top sheets.

4.3 Open elective paper geography, fourth semester

– Applied geography–

Applications of remote sensing and G.P.S(Global positioning system)

V Semester

1) Theory-Paper-5.1 Geography of India Part-I (Compulsory Paper)

1) Practical-Paper-PCTL-5.2 Map Projections-I [Cylindrical and Conical groups]

2) Theory-Paper- 5.3 A Regional Geography of Asia (Optional Paper)

Theory-Paper - 5.4 B Geography of Tourism (Optional Paper)

2) Practical-Paper-PCTL-5.5 Basic Statistics

VI Semester

1) Theory-Paper--6.1 Geography of India Part-II [Compulsory paper]

1) Practical-Paper-PCTL-6.2 Map projections-II [Zenithal and Conventional Group]

2) Theory-Paper- 6.3 A Economic Geography of the World. (Optional Paper)

Theory-Paper- 6.4 B Environmental Geography (Optional Paper)

2) Practical-Paper-PCTL-6.5 Fundamentals of GIS, Remote Sensing and Computer Graphics.

Note: 1. there will be a compulsory study tour to the places of Geographical Interest for the students of final semester only.

I-SEMESTER

THEORY-PAPER-1.3 –PHYSICAL BASIS OF GEOGRAPHY-I

[GEOMORPHOLOGY]

60hrs

| | | |
|----------|--|-------|
| Unit-I | 1. Field and scope of Physical Geography. 2. Evolution of the Earth- Theories-Nebular, and Big Bang. | 13hrs |
| Unit-II | 1. Solar system 2. Movements of the earth-rotation, Revolution and their effects. -Latitudes and Longitudes, Longitude and time; International Date line | 12hrs |
| Unit-III | 1. Earth's interior - structure and Composition 2. Rocks - Formation and types | 8hrs |
| Unit-IV | 1. Major landforms-Mountains, plateaus and plains. 2. Earthquakes and Volcanoes | 12hrs |
| Unit-V | 1. Weathering -Physical, Chemical and biological 2. Agents of denudation-River, Glacier, and wind-Functions and Their resultant landforms. | 15hrs |

Reference:

1. Earth's Science - Strahler, A.N
2. Principles of Physical Geogrphy -Dass Gupta A and Kapoor A.N
3. Geomorphology - Savindra Singh.
4. Principles of Geomorphology - thornbury W D
5. Physical Geography - Philip Lake
6. Physical Geography - Dr. Tikka R N
7. Physicla Geography - Mounkhouse F J
8. Fundamentals of Physical Geography - Majid Hussain
9. Physical Geography - Longman W
10. Physical Geography - Dr. Shanti

Kannada Version

- 1) PRAKRUTIKA BHOOGOLASHASTRADA MOOLATATWAGALU- Dr. RANGANATH
- 2) PRAKRUTIKA BHOOGOLASHASTRA.-Prof. P.Mallappa
- 3) BHOUTHIKA BHOOGOLASHASTRA-Prof.M.B.GOWDARA
- 4) PRAKRUTIKA BHOOGOLASHASTRA Prof.S.S.NANJANAVARA
- 5) BHOUTHIKA BHOOGOLASHASTRA -Prof.S.R.NIDAGUNDI

Model Question Paper(I Semester)

I Semester B.A Examination Oct/Nov
Geography

Physical basis of Geography-I Paper 1.1

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps
Wherever Necessary 3) Answer Should be written either in
kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.
{ 10x2=20 }

- a) Who is the father of Geography?
- b) Mention the importance of Physical Geography.
- c) What is Solar System?
- d) What are the movements of the earth?
- e) What are Latitudes?
- f) Expand Sima, Sial and Nefe.
- g) What are metamorphic rocks?
- h) Give the meaning of Plateaus.
- i) Define Richter scale.
- j) Explain volcanic Crater (Crater).
- k) What is weathering?
- l) Mention the Causes for biological weather.
- m) How are deltas formed?
- n) What are Barchans?

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks. {5x5=25}

2. Explain the Scope of Physical Geography.
3. Explain the “Big-Bang theory”.
4. What are the effects of rotation?
5. Explain the International Date Line.
6. Explain the igneous rocks with examples.
7. Describe the types of Mountains.
8. Explain the Causes and distribution of earth quakes.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. Describe the field of physical Geography.
10. Explain Solar System with neat diagram.
11. Briefly explain the revolution of the earth.
12. Give an account of interior of the earth with diagram.
13. Describe the work of Glacier as an agent of denudation.

I SEMESTER
Practical-PCTL 1.4 Cartography
45hrs

| | | |
|-----------|---|-------|
| Unit-I | Cartography-Maps, definitions, classification and importance. | 15hrs |
| Unit-II | Scales-Methods of Representation - Statement, Graphical, Representative Fraction and Conversion of Scales. - | 15hrs |
| Unit -III | Graphs-a) Line Graph- Single and Double Line Graph. b) Bar Graph- Single and Double Bar Graph c) Compound Bar Graph | 15hrs |

Reference:

1. Elements of practical Geography-Singh R L
2. Practical Geography-Negi BS
3. Practical Geography-Tiwari N
4. Elements of Practical Geography-Singh R Land Rana Singh P B
5. Map work and practical Geography-Gopal Singh.
6. A text book of Practical Geography- Dr. Karennar and Nanjannavar S S
7. Fundamentals of Cartography - Mishra R P
8. Practical Geography -Singh R Land Dutta P K
9. Practical Geography - A Systematic Approach - Ashish Sarkar.

Kannada Version

10. Mysore and Karnataka University Prasara Publications (Prayogika Bhoogola shastra)
11. Prayogika Bhoogola shastra By Prof. M F Kavennar and Prof. S S Nanjannavar.
12. Prayogika Bhoogola shastra - Dr. Ranganath.

II SEMESTER
THEORY-PAPER-B 2.3 PHYSICAL BASIS OF GEOGRAPHY-II ATMOSPHERE AND
HYDROSPHERE

60hrs

| | | |
|----------|--|-------|
| Unit-I | 1. Atmosphere - Structure and composition, Elements of Weather and climate. 2. Temperature- Insulation- Controlling factors, horizontal and vertical distribution. | 12hrs |
| Unit-II | 1. Atmospheric pressure - Controlling factors: Global pressure belts. 2. Wind system - Determining factors- planetary, periodic and local winds. | 12hrs |
| Unit-III | 1. Humidity- Absolute and Relative, clouds and their types. 2. Precipitation – Factors, Rainfall and its types | 12hrs |
| Unit-IV | 1. Hydrosphere-Distribution of oceans and their significance, configuration of ocean floor- continental shelf: continental slope, ocean plain and ocean deeps. 2. Distribution of salinity of oceans and seas. | 12hrs |
| Unit-V | 1. Circulation of ocean water - Ocean currents Atlantic, pacific and Indian;, Tides. 2. Coral reefs- Formation and types. | 12hrs |

Reference:

1. Physical Geography - Strahler A H and Strahler A N
2. Climatology - Lal P
3. General Climatology - Cratchfield H J
4. Introduction to Climate - Trewartha G T and Horn L A
5. Earth's Science - Strahler A N
6. Elemental Geo-System: A Foundaton in physical Geography-
Christophereson RW
7. Climatology - Lal D S
8. Physical Geography - Dr. Tikka R N
9. Essentials of Oceanography - Garrison T
10. Oceanography for geographers - Vittal and Sharma.
11. Oceanography - Pinet D R
12. An introduction to Physical Geography - Von Arx. W S

Kannada version:

- 1) PRAKRUTIKA BHOOGOLASHASTRADA MOOLATATWAGALU- Dr. RANGANATH
- 2) PRAKRUTIKA BHOOGOLASHASTRA.-Prof. P.Mallappa
- 3) BHOUTHIKA BHOOGOLASHASTRA-Prof.M.B.GOWDARA
- 4) PRAKRUTIKA BHOOGOLASHASTRA Prof.S.S.NANJANNAVARA
- 5) BHOUTHIKA BHOOGOLASHASTRA –Prof.S.R.NIDAGUNDI

Model Question Paper(II Semester)

II Semester B.A Examination April/may
Geography

Physical basis of Geography-II Paper 2.1

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps
Wherever Necessary 3) Answer Should be written either in
kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.
{ 10x2=20 }

- a) What is Atmosphere?
- b) What are isotherms?
- c) What is inversion of temperature?
- d) Give the meaning of isobar.
- e) Explain wind vane.
- f) What is absolute humidity?
- g) What are clouds?
- h) Mention the types of Precipitation.
- i) Explain the meaning of Hydrosphere.
- j) What is Fathom meter?
- k) Give the meaning of Salinity of ocean.
- l) Mention the types of ocean currents with examples.
- m) Spring tide.
- n) What are Coral reefs?

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks. {5x5=25}

2. What is Weather and Climate?
3. Explain the horizontal distribution of atmospheric temperature.
4. Point out the Controlling factors of atmospheric Pressure.
5. Explain the types of clouds.
6. Mention the distribution and Significance of the oceans.
7. Explain the distribution of Salinity of oceans and seas.
What are the types of Coral reefs with examples?

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. Briefly explain the Structure and Composition of atmosphere.
10. Describe the factors affecting the distribution of insolation.
11. What are winds? Explain their types.
12. Write about the Configuration of ocean floor.
13. Explain the Currents of Atlantic Ocean.

WEATHER REPORTS

45hrs

| | |
|---|--------|
| Unit-I Weather Instruments - Working principles of Fahrenheit, centigrade and six's or maximum and minimum thermometers, mercurial and aneroid barometers, wet and dry bulb thermometer, rain gauge, wind vane. | 18 hrs |
| Unit-II Relevance of the study of Indian Daily weather Reports, Weather symbols | 10 hrs |
| Unit-III Observations and Interpretations of Indian Daily Weather Reports of different seasons [in particular July and January months] Forecasting of weather. - | 17hrs |

Reference:

1. Elements of practical Geography - Singh R L
2. Practical Geography - Negi BS
3. Practical Geography - Tiwari N
4. Elements of Practical Geography - Singh R Land Rana Singh P B
5. Map work and practical Geography - Gopal Singh.
6. A text book of Practical Geography - Dr. Karennaar and Nanjannavar S S
7. Fundamentals of Cartography - Mishra R P
8. Practical Geography -Singh R Land Dutta P K
9. Practical Geography - A Systematic Approach - Ashish Sarkar.

Kannada Version

10. Mysore and Karnataka University Prasara Publications (Prayogika Bhoogola shastra)
11. Prayogika Bhoogola shastra By Prof. M F Kavennar and Prof. S S Nanjannavar.
12. Prayogika Bhoogola shastra - Dr. Ranganath.

| | | |
|-----------|---|--------|
| Unit-I | content and Scope of human geography - | 6 hrs |
| Unit-II | Human Races - classification and distribution Man and environment relationship - Primitive Societies - Eskimos, Kirgiz Pygmies. - | 16 hrs |
| Unit- III | Distribution of World's Population - Factors affecting the distribution of population in the world. Population regions- Growth of population in the World. - | 10 hrs |
| Unit-IV | Human Migration - Nature of early and present day migration Causes and consequences of migration, internal and international migration. - | 12 hrs |
| Unit-V | Human settlements, Origin, growth and distributional pattern of rural and urban settlements. Their functions and characteristics, problems and measures of rural and urban settlements. - | 16 hrs |

Reference:

1. Principles of Human Geography - Huntington.
 2. Human Geography - Perillou A V
 3. Human Geography - Brunhes.
 4. Man and his habitation - Singh R L
 5. Principles of human geography-Vidal-de-Ia-Blache
 6. Human Geogrpny - Majid Hussain.
 7. Geography and Man's Environment - Strahler A H and Strahler A N
 8. Human and Economic Geography - Harm D Blij.
 - 10
 9. Introductio to Human Geography - Dickens and Pitts.
 10. An Introduction to Human Geography - Rubenstein J B
 11. Human Geography, People, culture and Landscape- Neilson, Gabler and vining.
- Kannada Version**
12. Manava Bhugolashastrada mula tatvagalu - Dr. Ranganath
 13. Manava Bhugolashatra - P Mallappa
 14. Manava Bhugolashatra - Nanjannavar S S

Model Question Paper(III Semester)

III Semester B.A Examination Nov/Dec
Geography

Human Geography Paper 3.1

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps Wherever Necessary 3) Answer Should be written either in kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.
{ 10x2=20 }

- a) Write the Meaning of Human Geography.
- b) Who is the father of Human Geography?
- c) What is Human race?
- d) What are the Criterias for Classification of Human race.
- e) Define term 'Tribe'.
- f) What is Demography?
- g) What is growth of Population?
- h) Name the four Populated countries of the world.
- i) Give the meaning of 'Migration'.
- j) What is internal migration?
- k) What is international Migration?
- l) What do you mean by Settlement?
- m) What is Rural Settlement?
- n) Point out the factors determining urban fringe.

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks. {5x5=25}

2. Explain the Scope of Human Geography.
3. Point out the external traits for classification of Human race.
4. Mention the Social life of Eskimo's'.
5. Discuss the growth of world Population.
6. Explain the nature of early and present day migration.
7. Describe the origin and growth of the human Settlement.
8. Discuss the Problems of urban Settlement.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. Give an account of Caucasoid race.
10. Describe the tribe of Pygmies.
11. Critically examine the factors affecting the distribution of Population in the world.
12. Explain the causes and consequences of Migration in detail.
13. Discuss the functions, Characteristics and Problems of rural Settlements.

III SEMESTER

PRACTICAL PAPER- 3.4 REPRESENTATION OF STATISTICAL DATA

45hrs

| | |
|---|--------|
| Unit-I Types of Cartographic symbols and their uses –Point Symbols- dots, circle, spheres & cubes | 15hrs |
| Unit-I 1 Distributional maps - Isopleth, choropleth, pyramids, bars, graphs, line graphs. | 15 hrs |
| Unit- III Hythergraph, climograph, Ergograph | 15 hrs |

Reference:

1. Elements of practical Geography - Singh R L
2. Practical Geography - Negi BS
3. Practical Geography - Tiwari N
4. Elements of Practical Geography - Singh R Land Rana Singh P B
5. Map work and practical Geography - Gopal Singh.
6. A text book of Practical Geography - Dr. Karennar and Nanjannavar SS
7. Fundamentals of Cartography - Mishra R P
8. Practical Geography -Singh R Land Dutta P K
9. Practical Geography - A Systematic Approach - Ashish Sarkar.

Kannada Version

10. Mysore and Karnataka University Prasaranga Publications (Prayogika Bhoogola shastra)
11. Prayogika Bhoogola shastra By Prof. M F Kavennar and Prof. S S Nanjannavar.
12. Prayogika Bhoogola shastra - Dr. Ranganath.

IV - SEMESTER

THEORY-PAPER- 4.3 REGIONAL GEOGRAPHY OF KARNATAKA

60hrs

| | | |
|----------|--|--------|
| Unit-I | 1. Location, size and extent, relief features, drainage system and climate. 2. Resources - soils and forests. | 14 hrs |
| Unit-II | 1. Irrigation - Major and minor irrigational schemes, multi purpose projects - Tungabhadra, Upper Krishna and KRISHNA RAJA SAGAR. 2. Agriculture - Major Crops (i) Food crops - Paddy, Ragi, Jowar (ii) Industrial crops - Cotton and Sugarcane (iii) Beverage crop - Coffee | 12 hrs |
| Unit-III | 1. Mineral Resources - Iron ore, Manganese and Gold 2. Power Resources - Hydroelectricity, Thermal Power, Kaiga nuclear plant | 12 hrs |
| Unit-IV | 1. Industries - Iron and Steel, Sugar, Cement and Information Technology 2. Transportation- (i) Roadways, Railways, Airways (ii) Ports and harbours | 12 hrs |
| Unit-V | 1. Population - Growth, density and distribution 2. Major urban centres - Bangalore, Mysore, Hubli, Dharwad and Mangalore | 10 hrs |

Reference:

1. Geography of Mysore State - Mishra R.P.
 2. Regional Geography of Karnataka - Reddy N.B.K., and Murthy
 3. Geography of Karnataka- Ramachandra Rao
 4. Geography of Karnataka - Mallappa P.
 5. Geography of Karnataka- Nanjannavar S.S.
 6. Karnataka Economy - Gamber S.G. and Nanjannavar S.S.
 7. Planning Regions of Karnataka- Achyuthi Rao T.N.
 8. Geography of Karnataka- Dr. Ranganath
- Kannada Version**
9. Karnataka Bhoogolashastra- Prof.M.B.Gowdara
 10. Karnataka Bhoogolashastra Prof.P.Mallappa
 11. Karnataka Bhoogolashastra Dr.Ranganath

Model Question Paper(IV Semester)

IV Semester B.A Examination April/may
Geography

Geography of Karnataka Paper 4.1

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps Wherever Necessary 3) Answer Should be written either in kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.
{ 10x2=20 }

- a) Write the Geographical area of Karnataka.
- b) Mention the frontiers of Karnataka.
- c) Point out the total and new districts of Karnataka.
- d) Name the tributaries of river Cauvery.
- e) Mention the major west flowing rivers in Karnataka.
- f) What is irrigation? Mention its types.
- g) What is multipurpose river Project?
- h) Name the major districts of sugar cane crop in Karnataka.
- i) Kaiga nuclear plant.
- j) Point out the distribution of cement industries in Karnataka.
- k) Write about information Technology in Karnataka.
- l) New Mangaluru port.
- m) What is the total population of Karnataka?
- n) Mysore is a major urban center of Karnataka.

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks. {5x5=25}

2. Explain the distribution of rainfall in Karnataka.
3. Mention the distribution of Soils of Karnataka.
4. Give an account of upper Krishna River Project.
5. Write about coffee cultivation in Karnataka.
6. Describe the distribution of Manganese in Karnataka.
7. Write about the road transportation of Karnataka.
8. Explain the growth and distribution of Population in Karnataka.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. Describe the relief features of Karnataka.
10. Give an account of Ragi and Jowar Cultivation in Karnataka.
11. Explain the distribution and of production iron ore and Gold in Karnataka.
12. Describe the rail and Air transportation of Karnataka.
13. Discuss Bengaluru a major urban centre of Karnataka.

\

**PRACTICAL PAPER-PCTL 4.4 -REPRESENTATIONS OF LANDFORMS AND
STUDY OF TOPOSHEETS**

45hrs

| | | |
|-----------------|--|-------|
| Unit-I | Contours, Hachure, Bench mark, Spot height Contour diagrams - Conical hill, plateaus Kinds of slope - uniform, undulating, concave and convex Kinds of valleys - 'U' shaped and 'V' shaped, ridge and cliff | 18hrs |
| Unit-II | Importance of the study of topographical maps, Conventional symbols | 09hrs |
| Unit-III | Interpretation of Survey of India topographical maps in respect of (a) Relief (b) Drainage, (c) Vegetation (d) Transportation, communication and settlements. | 18hrs |

Reference:

1. Maps and diagrams - Monkhouse F.J. and Wilkinson
2. Fundamentals of Practical Geography - Singh R.L.
3. Fundamentals of Cartography - Mishra R.P.
4. Map Interpretation - Ramamurthy K.
5. Cartography - Robinson
6. Practical Geography - Ashish Sarkar
7. Practical Geography - Negi
8. Elements of Practical Geography - Singh and Dutta
9. Practical Geography - Gopal Singh

Kannada Version

10. Mysore and Karnataka University Prasaraanga Publications (Prayogika Bhoogola shastra)
11. Prayogika Bhoogola shastra By Prof. M F Kavennar and Prof. S S Nanjannavar.
12. Prayogika Bhoogola shastra - Dr. Ranganath.

4.9 Open Elective Paper- Geography
Fourth Semester
Applied Geography
Applications of Remote Sensing and GPS

- | | |
|--|-----------------|
| 1. Remote Sensing: Definition, Development and types | 5 Hours |
| 2. Aerial Photography: Principles, types | 4 Hours |
| 3. Satellite Remote Sensing: Principles, types of Satellite | 4 Hours |
| 4. Applications and Interpretation of Indian Remote Sensing: a) Land use: Agriculture, Transportation, Settlements. b) Land cover: Relief features, River Systems, Climate, Soils, Forest Resource. | 16 Hours |
| 5. Global Positioning system (GPS): Meaning, Principles And Uses. | 6 Hours |

Reference:

1. Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press.
2. Jensen J.R., 2004: Introductory Digital image Processing: A Remote Sensing Perspective, Prentice Hall.
3. Joseph, G.2005: Fundamentals of Remote Sensing United Press India.
4. Lille sand T.M., Kiefer R.W. and Chip man J.W., 2004: Remote Sensing and Image interpretation, Wiley. (Wiley Student Edition).
5. Nag P. and Kudra, M., 1998: Digital Remote Sensing, Concept, New Delhi.
6. Rees W.G., 2001: Physical Principles of Remote Sensing, Cambridge University Press.
7. Singh R.B. and Murai S., 1998: Space-informatics for Sustainable Development, Oxford and IBH Pub.
8. Wolf P.R. and Dewitt B.A., 2000: Elements of Photo grammetry: With Applications in GIS, McGraw-Hill.

V - SEMESTER
THEORY-PAPER- 5.1 GEOGRAPHY OF INDIA - PART - I
(Compulsory Paper)

60hrs

| | |
|--|-------|
| Unit-I Location, size and extent, frontiers, political divisions and Physical features. | 10hrs |
| Unit-II Drainage system, Climate, Soil and forest resource's | 15hrs |
| Unit-III Irrigation - Types, Multipurpose river Valley projects - Bhakra Nangal, Hirakud, Damodar Valley Corporation, Nagarjunasagar | 10hrs |
| Unit-IV Agriculture - Importance, Types, Characteristics Green revolution and Dairy farming | 10hrs |
| Unit-V AGRICULTURAL CROPS a) Major food crops - i) Rice ii) Wheat b) Major Industrial crops - i) Sugarcane ii) Cotton c) Major Beverage crops - i) Tea ii) Coffee d) Major Commercial crops - i) Jute ii) Tobacco | 15hrs |

Reference:

1. Economic and Commercial Geography of India - C. B. Mamoria
2. Economic Geography of India- Dubey and Negi
3. Geography of India- Gopal Singh
4. Economic Geography- Prithvish Nag Roy.
5. A New Approach to Economic Geography - Ghua and Chatteraj
6. Economic and Commercial Geography of India- Sharma and Countiho
7. Economic geography of India- Kamlesh patiwal
8. Regional Geography of India- Singh R.L

Kannada Version:

1. Bharathada Arthika Bhugola Shashtra-P. Mallappa
2. Bharathada Arthika Bhugola Shashtra- Nanjannavara.S
3. Bharathada Arthika Bhugola Shashtra- Dr. Ranganath

Model Question Paper(V Semester)

V Semester B.A Examination Nov/Dec

Geography

Geography of India Part-I Paper 5.1

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps Wherever Necessary 3) Answer Should be written either in kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.
{ 10x2=20 }

- a) Write the Geographical location of India.
- b) Mention the length/width and total area of India.
- c) Name the Neighboring countries of India.
- d) Write about Islands of India.
- e) Write note on river Sutlez.
- f) What are the monsoon winds?
- g) What are the Bhangar and Khadar Soils?
- h) What is multipurpose river Project?
- i) What is irrigation? Mention its importance in India.
- j) Nagarjuna Sagar River Project.
- k) Mention the importance of Indian agriculture.
- l) What is Green revolution?
- m) What are the Geographical factors required for Cotton cultivation?
- n) Point out the distribution of Tea Cultivation in India.

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks. {5x5=25}

2. Explain the west Coast of India.
3. Write about the river System of Ganga.
4. Write note on forest resource of India.
5. Briefly explain the types of irrigation in India.
6. Write note on Damodar valley Project.
7. Mention the nature and importance of Dairy farming in India.
8. Examine the jute Cultivation of India.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. What are the Physical features of India? Explain any two of them in detail.
10. Briefly explain the river System of Peninsular India.
11. Describe the Climate of India.
12. Critically examine the types and Characteristics of agriculture in India.
13. Write note on Rice Cultivation of India.

THEORY-PAPER- 5.2 A 'REGIONAL GEOGRAPHY OF ASIA EXCLUDING INDIA (OPTIONAL Paper)

60hrs

| | | |
|-----------------|---|--------|
| Unit-I | 1. Asia in the context of the World. | |
| | 2. Physical features climate, major river system and vegetation | 12 hrs |
| Unit-II | 1. Mineral resources – Iron/ore, Manganese | |
| | 2. Power Resources - Coal, Petroleum, Bauxite | 10 hrs |
| Unit-III | 1. Agriculture - Geographical distribution and production of Crops - Rice, Sugarcane, Tea, Cotton, Rubber | |
| | 2. Industries - Factors of Location, distribution and production of - Iron and Steel, cotton textile | 14 hrs |
| Unit-IV | 1. Transport - Modes of transport and their network of roads, Railways, - Trans- Siberian; and Airways | |
| | 2. Major international ports- Karachi, Colombo, Rangoon, Jakarta, Shanghai and Tokyo | 12 hrs |
| Unit-V | Geographical account of the countries | |
| | a) China b) Japan | |
| | c) Srilanka d) Pakistan | 12 hrs |

Reference:

1. Geography of Asia .•Dudley Stamp
2. Asia's Land and People - Cressey
3. The pattern of Asia - Ginsbury N.
4. Japan - Trewartha.
5. Far East - Nall
6. South East Asia - Fisher C.A .
- .7. The Middle East - Fisher W.B.
8. Geography of Asia - Shivakumar Tiwari
9. Monsoon Lands of Asia - Rawson B.C.
10. South Asia - Jpseph, B.L.C.

Kannada Version:

11. Asia Pradeshika Bhoogolashastra- Dr.Gangaranath
12. Asia Pradeshika Bhoogolashastra –Prof.Mahadevappa

Model Question Paper (V Semester)

V Semester B.A Examination Nov/Dec
Geography

Regional Geography of Asia Paper 5.3

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps Wherever necessary 3) Answer should be written either in kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.
{ 10x2=20 }

- a) Write the Geographical location and extent of Asia.
- b) What are the frontiers of Asia?
- c) Mention the major mountain Knots of Asia.
- d) Name the major mountain Shrines of Asia.
- e) Point out the major is lands of Asia.
- f) Mention the distribution of Manganese in Asia.
- g) Write the production of Bauxite in Asia.
- h) Point out the Geographical factors of Rubber cultivation.
- i) Mention the development of road transport in Asia.
- j) Trans-Siberian railway.
- k) Write the distribution of Air transport in Asia.
- l) Name the major urban centers of China and Japan.
- m) Explain the Climatic Conditions of Pakistan.
- n) Name the rivers of Srilanka.

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks. {5x5=25}

2. Mention the types of Climate in Asia.
3. Write note on Natural vegetation of Asia.
4. Explain the distribution and Production of Petroleum in Asia.
5. Point out the distribution of Tea cultivation in Asia.
6. Explain the distribution of cotton textile industries in Asia with locational factors.
7. Briefly explain the relief features of china.
8. Point out the Climatic conditions of Japan.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. What are the physical features of Asia?
10. Write short note on river system of Asia.
11. Describe the distribution, Production and trade of Iron ore in Asia.
12. Explain the Geographical distribution and production of rice in Asia.
13. Describe the major international ports of Asia.

V - SEMESTER, -
THEORY-PAPER-5.2 B GEOGRAPHY OF TOURISM (OPTIONAL Paper)
60hrs

| | | |
|-----------------|--|--------|
| Unit-I | 1. Tourism - Meaning, Origin, Development and Significance of Tourism 2. Types of tourists - Domestic and Foreign | 10 hrs |
| Unit-II | Factors influencing Tourism a) Physical factors b) Economic, Commercial and Socio-Cultural factors c) Role of Government | 12 hrs |
| Unit-III | Tourism Infrastructure Accommodation, Transport and Communication and Supporting Services | 12 hrs |
| Unit-IV | Tourism in Karnataka a) Growth b) Major Tourist Centers | 10 hrs |
| Unit-V | Tourism Development in India (Excluding Karnataka) a) Tourism Potential- Major tourist centers of India b) Importance of Tourism in the Economy of India c) Impact of Tourism on Environment in India | 16 hrs |

Reference:

1. Tourism Development - Principles and Practices - Bhatia A.K.
2. A Geography of Tourism - Robinson H.,
3. Tourism in India. History and Development - Bhatia A.K.
4. Successful Tourism Planning and Management, New Delhi, - Cross Section Publications, Seth P.N.
5. 'Tourism Blessing or Blight - Young George
6. 'Hindu' Survey of Indian Environment' Since 1991, Hindu Annual Publications, Chennai,

Kannada Version:

7. Karnataka Pravasodyama- Ondu Bhoogolika chinthane- Dr.Vodayar.A.K.
8. Parisara-Dr.Shivarama karantha
9. Bharathada Pravasodyama Ithihasa-Prof.P.Phalaksha.
10. Bharathada Pravasodyama Ithihasa-Dr.Shivarudraswamy.

Model Question Paper(V Semester)

V Semester B.A Examination Nov/Dec
Geography

Geography of Tourism Paper 5.4B

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps
Wherever necessary 3) Answer should be written either in
Kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2
marks. { 10x2=20 }

- a) What do you mean by Tourism?
- b) What are the elements of Tourism?
- c) Define Tourism?
- d) Who is Tourist?
- e) Point out the factors influencing on Tourism.
- f) Explain the role of Government in development of Tourism.
- g) What are the infrastructures of Tourism?
- h) Give the meaning of resorts.
- i) Expand K.S.T.D.C.
- j) Mention and two National Parks of Karnataka.
- k) Name the major beaches of Karnataka.
- l) Name the hill Stations of Himalaya's.
- m) Mention any two world Heritage Centers of India.
- n) Which are the Tourist Spots of Delhi?

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks. {5x5=25}

2. Write about origin and development of Tourism.
3. Explain the Significance of Tourism.
4. Examine the physical factors influencing Tourism.
5. Explain the role of accommodation in Tourism.
6. What are Supporting Services? Mention their importance.
7. Explain the growth and Significance of Tourism in Karnataka.
8. Point out the development and Potentiality of Tourism in India.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. Discuss the Significance of transport and communication as the Tourism infrastructure.
10. Describe the major tourist centers of Karnataka.
11. Locate the following places in given out line map of India and write their tourist importance.
a) Belur b)Jaipur c)Kanyakumari d)Konark e)Agra.
12. Examine the importance of Tourism in the economy of India.
13. Explain the impact of Tourism on Environment in India.

45hrs

| | | |
|----------|--|----------|
| Unit. I | Definition, Classification and Importance | 9 hours |
| Unit. II | 1 Cylindrical projections. a. Simple cylindrical equidistant b. Cylindrical equal area c. Mercator's | 18hours |
| Unit.III | 1. Conical projections a. 'One' standard parallel b. 'Two' standard parallel c. Bonne's projection d. Polyconic projection | 18 hours |

Note: [above projections to be dealt with construction properties and uses]

Reference:

1. Map Projection-Salar Masood. M
2. Map Projection- George P. Kellaway
3. Map Projection - Enyat Ahmed
4. Map Projection- Streers J.A
5. Map Projection - Methuen and Co. London
6. Practical Geography - Nanjannavar and Karennavar
7. Practical Geography - R.L. Singh
8. Practical Geography - Negi

Kannada version:

Prayogika Bhugola Shastra - Nanjannavar and Karennavar
Prayogika Bhugola Shastra - Mallappa.P

PRACTICAL- PAPER-PCTL5.4 BASIC STATISTICS

45hrs

| | | |
|----------|---|-------|
| Unit –I | 1. Definition, Scope and importance of Statistics. 2. Methods of data collection a. Primary and Secondary b. Census and Sampling | 20hrs |
| Unit-II | Measures of Central Tendency a. Mean b. Median c. Mode | 12hrs |
| Unit-III | Measures of Dispersion. a. Mean Deviation.[both for grouped and ungrouped data] b. Standard Deviation | 13hrs |

Reference:

1. Statistical Methods in Geographical studies- Rajesh Publications, New Delhi, 1977, Aslam Mohamod.
2. Elements of Practical Geography- Kalyani Publishers, 1992- Singh R.L
3. Techniques of Map- Toyin, P and Newby.
4. Fundamentals of Statistics- Elhance D.N
5. Statistical Methods and Geographer- Gegory S.
6. A text book of Practical Geography-M Istiq
7. P. Quantitative Techniques in Geography- Hammond Rand Macallagh.
8. Quantitative Measures in Human Geography-Yeates M.
9. Moola Sankya Sastra- Renukarya.C.N
- 10.Moola Sankya Sastra-Nanjannavar.S.S

THEORY-PAPER- 6.1 GEOGRAPHY OF INDIA PART-II
[Compulsory Paper)

60hrs

| | | |
|-----------|---|--------|
| Unit-I | 1. Mineral Resources- Iron ore, Manganese, Mica Bauxite 2. Power Resources- Coal, Petroleum Atomic Energy [distribution, production, and trade] | -12hrs |
| Unit-II | 1. Industries- Iron and Steel, Cotton Textile, Sugar Fertilizers, Paper and Cement. | -12hrs |
| Unit –III | 1. Transport System- Roads, Railways, Airways, Inland Water Ways | -12hrs |
| Unit-IV | 1. Foreign Trade- Recent Trends, Major imports and Exports 2. Major Ports- Kandla, Mumbai, Cochin, Kolkatta, Vishakapatna, Chennai | -12hrs |
| Unit-V | 1. Population - Growth, Density and Distribution, Problems Of population and Remedial measures. | -12hrs |

Reference:

1. Economic and Commercial Geography of India - C.B. Mamma
2. Economic Geography of India- Dubey and Negi
3. Geography of India- Gopal Singh
4. Economic Geography- Prithvish Nag Roy.
5. A New Approach to Economic Geography 0- Ghua and Chatteraj
6. Economic and Commercial Geography of India- Sharma and Countiho
7. Economic geography of India- Kamlesh patiwal
8. Regional Geography of India- Singh R.L

Kannada Version:

1. Bharathada Pradeshika Bhugola Shasthra-P, Mallappa
2. Bharathada Arthika Bhugola Shasthra- Nanjannavara.S
3. Bharathada Arthika Bhugola Shasthra- Dr. Ranganath

-

Model Question Paper(VI Semester)

VI Semester B.A Examination April/may
Geography

Geography of India Part-II Paper 6.1

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps Wherever Necessary 3) Answer Should be written either in kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.
{ 10x2=20 }

- a) Mention the uses and ores of manganese.
- b) Give the distribution of mica in India.
- c) Name the atomic energy Producing Centers of India.
- d) What are the locational factors of Chemical fertilizer industry?
- e) Write the raw materials of cement industry.
- f) Point out the Significance of road transport in India.
- g) Examine the Problems of Indian railway.
- h) Name the major inland water ways of India.
- i) What is foreign trade?
- j) What are Ports? Mention their importance.
- k) Cochin Port.
- i) What is human resource?
- m) What is growth of Population?
- n) What is Population density? Mention the density of Population in India.

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks.
{ 5x5=25 }

2. Explain the distribution of Bauxite.
3. Write Short note on distribution, Production and trade of coal in India.
4. Point out the locational factors, distribution and Problems of cotton textile industries.
5. Write note on National Highways of India.
6. Explain the Air transportation of India.
7. Critically examine the recent- trends in foreign trade of India.
8. Write note on East Coast Ports of India.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. Describe the distribution, Production and trade of iron ore in India.
10. Write note on locational factors, distribution and recent trends of iron and steel industries.
11. Point out the development, Characteristics and distribution of Indian railway.
12. Explain the locational factors, distribution, Production and problems of sugar industries in India.
13. Discuss the growth, distributions and Problems of Population in India.

VI SEMESTER
THEORY – PAPER- 6.2A-ECONOMIC GEOGRAPHY OF THE WORLD
[OPTIONAL PAPER]

60hrs

Unit-I 1. Field and Scope of Economic Geography

2. Man and Environment - Study of Environmental factors and their Influence on. the. economic activities. 10 hours

Unit-II 1. Forest resources- Types, Distribution, Conservation

2. Marine Resources- Major Fishing groups of the world, production and trade. 10 hours

Unit III 1. Mineral Resources- Distribution, Production, and Trade of Iron ore, Manganese.

2. Power Resources- Distribution, Production and Trade of Coal, Petroleum, atomic minerals 15 hours

Unit IV 1. Agricultural Resources- Distribution, Production and trade of wheat, Sugar-cane and coffee.

2. Major Manufacturing Industries, Iron and steel, and Cotton Textile 15 hours

Unit-V Major ocean routes- North Atlantic Ocean routes Suez and Panama canals.

- Major Ports- Singapore, Sydney, New York, London and Cape Town 10 hours

Reference:

1. Economic Geography- Alaxander, J.V
2. Economic Geography - Jones C.F and Darkenwald E.B
3. Economic and Commercial Geography- Khanna and Gupta.
4. A new Approach to Economic Geography- Guha and Chatteraj
5. Fundamentals of Economic Geography- Bangston and Van Royen
6. Handbook of Economic Geography- Chisolm
7. Economic and industrial Geography- Smith and Russel.
8. World Resources and Resource Trade- Khanna and Gupta
9. Economic and Commercial Geography- Chowdhari M. R

Kannada Version:

1. Prapancha Arthika Bhugolashastra- S.S.Nanjannavara
2. Prapancha Arthika Bhugolashastra- P. Mallappa

Model Question Paper(VI Semester)

VI Semester B.A Examination April/may

Geography

Economic Geography of the world Paper 6.2

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps Wherever Necessary 3) Answer Should be written either in kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.

{10x2=20}

- a) Give the meaning of Economic Geography.
- b) Who is the father of Economic Geography?
- c) What is environment?
- d) What are forests?
- e) What do you mean by Marine resources?
- f) Name the types of iron ore in the world.
- g) Mention the uses of Manganese.
- h) What are atomic Minerals?
- i) Give the types of coffee in the world.
- j) Point out the Geographical factors for sugar cane cultivation.
- k) What are the importance of iron and steel industries?
- l) What is Ocean transportation?
- m) Panama canal.
- n) Point out the Significance of Ports.

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks.

{5x5=25}

2. Briefly explain the field of economic Geography.
3. Examine the relationship between man and cultural environment.
4. Explain the major fishing grounds of the world.
5. Mention the distribution of Manganese in the world.
6. Write short note on distribution and production of petroleum in the world.
7. Point out the importance and locational factors of cotton textile industries of the world.
8. Explain the North Atlantic Ocean route.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. Discuss the influence of physical environmental factors on the economic activities of human being.
10. Describe in 'brief' the types, distribution and conservation of forest in the world.
11. Explain the types, distribution and trade of coal in the world.
12. Explain the distribution, production and trade of Wheat of the world.
13. Write note on major ports of the world.

**VI SEMESTER
THEORY – PAPER- 6.4B ENVIRONMENTAL GEOGRAPHY
[OPTIONAL PAPER]**

60hrs

Unit-I 1. Definition, Scope and content of Environmental Geography
2. Components of Environment

6 hours

Unit-II 1. Concept of Eco- System, Structure and Functioning of Ecosystem

| | | |
|----------|---|----------|
| | 2. Biogeochemical cycles- Hydrological cycle, Nitrogen Cycle and Carbon Cycle | 12 hours |
| Unit III | Biomes- Meaning and types. Distribution of major Biomes in the World [equatorial to polar] | 12 hours |
| Unit IV | 1. Environmental pollution- Air, water, land and noise 2. Environmental Hazards- floods, drought, earthquake and volcanoes, Natural Disaster Management | 15 hours |
| Unit-V | 1. Human Impact on atmospheric environment- depletion and maintenance of ozone layer, Greenhouse effect, Global warming, Acid rain 2. Environmental awareness- Education and acts | 15 hours |

Reference:

1. Environmental Geography- Savindra Singh
2. Geography and Man's Environment-Strahler A.N and Strahler A.H
3. Environmental Geography- Sexena H.M
4. Fundamentals of Ecology- Odum E.P
5. An Introduction to our Earth and Environment-Singh .J and Singh D.N
6. Man and his environment- An Ecosystem Approach- Smith R.L, Harper and Row.
7. Bio- Geography- Robinson. A
8. Environment Geography- Sinha.S.P
9. Environment Pollution- Consequences and measures- Chaurasia, B.P
10. Environmental Pollution-Katyal.T

Kannada version

11. Parisara Adhyayana- K. Bhairappa
12. Parisara Bhugoloashastra-M.B.Gowdara
13. Pari sara Bhugolashastra- S.S.Nanjannavara
14. Pari sara- Shivaramakarantha
15. Hasiru Namma Usiru- Veerappa, K.M
16. Kannada Publications of Karnataka Council for Science and Technology. ITSC, Bangalore
17. Hasiru Honnu- Swamy. B.G.L

Model Question Paper(VI Semester)

VI Semester B.A Examination April/may Geography Environmental Geography Paper 6.2

Time: 3 Hours

Max, Marks: 90

Instructions: 1) Answer all Sections 2) Draw diagrams/ Maps Wherever Necessary 3) Answer Should be written either in kannada or in English.

SECTION-A

1. Answer any ten of the following each question Carries 2 marks.
{10x2=20}

- a) Give the meaning of environment?
- b) Define Environmental Geography.
- c) What are the components of environment?
- d) What is eco-system?
- e) What are producer?
- f) What is food chain?
- G) Write the meaning of biogeochemical cycle.
- h) Write Short note on Carbon cycle.
- i) What do you mean by Biomes?
- j) What is pollution?
- k) What is noise pollution? Mention any two effects.
- l) Point out the Significance of Disaster management,
- m) What is Green house effect?
- n) Mention any four effects of Acid rain.

SECTION-B

Answer any Five of the following. Each Question Carries 5 marks.
{5x5=25}

2. Explain the content of Environmental Geography.

3. Write note on Nitrogen cycle.
4. Briefly explain the major biomes in the world.
5. Explain the causes and consequences of Land pollution.
6. Write a Short note on earthquake.
7. Explain the causes and consequences of Global warming.
8. Point out the role of education in environment protection.

SECTION-C

Answer any three of the following. Each Question Carries 15 marks. {3x15=45}

9. Describe the biotic and a biotic component of environment.
10. Explain the Structure and functioning of Eco-System.
11. Critically examine the causes and consequences and remedial measures of Air pollution.
12. Discuss the floods and droughts as an environmental hazard.
13. Explain the Creation, depletion and Maintenance of ozone layer.

VI SEMESTER
PRACTICAL-PAPER-PCTL 6.3 MAP PROJECTION-II
[ZENITHAL AND CONVENTIONAL GROUPS]

45hrs

- Unit.I Zenithal Projection [polar cases]
- a. Zenithal equidistant
 - b. Zenithal equal area
 - c. Zenithal Gnomonic

| | |
|---|----------|
| d. Zenithal Orthographic e. Zenithal Stereographic | 24 hours |
| Unit.I Conventional projections. a. Sinusoidal projections d. Mollweide's projections | 15hrs |
| UnitIII choice of map projection | 6 hours |

Note: [above projections to be dealt with construction properties and uses]

Reference:

1. Map Projection-Salar Masood. M
2. Map Projection- George P. Kellaway
3. Map Projection - Enyat Ahmed
4. Map Projection- Streers J.A
5. Map Projection - Methuen and Co. London
6. Practical Geography - Nanjannavar and Karennarar
7. Practical Geography - R.L. Singh
8. Practical Geography - Negi

Kannada version:

Prayogika Bhugola Shastra - Nanjannavar and Karennavar
Prayogika Bhugola Shastra - Mallappa.N

**VI SEMESTER
PRACTICAL – PAPER-PCTL6.4 FUNDAMENTALS OF GIS, REMOTE SENSING AND
COMPUTER GRAPHICS**

45hrs

| | |
|---|----------|
| Unit-I Fundamentals of GIS, Meaning of GIS, Components of GIS, Recent trends in GIS | 18 hours |
| Unit-II Remote Sensing- Meaning, Definition, Principles of Remote Sensing, Stages in Remote Sensing. | 15 hours |
| Unit III Representation of Socio-Economic Data its means of Computer Graphics | |

- a) Line Graph b) Bar Graph
- c) Pie Graph d) Compound bar graph

12 hours

Reference:

1. Principles of Geographic Information System for Land Resources assessment- Burroughs P.A
2. The ABC's of Internet- Cristian Crumtish
3. Computers Today- Sanders B.H
4. Terrain Analysis in Remote Sensing- John R.G.& Townshed
5. Internet for everyone- Leon Vikas Publication
6. Fundamentals of Computer- Raja R!lman V
7. Introduction to Environmental Remote Sensing- Barret E.G
8. Manual of Remote Sensing-Reemios Riffer (ed.)
9. Remote Sensing and its applications- 001 .R.D
10. Remote Sensing in Geographic Information System- Anji Reddy. M:
11. Concepts and Techniques of Geographic Information system - C.P.LO, Albert K.W.Yeung.