GEOGRAPHY

Revised Syllabus

2015

B.A. Honours and Subsidiary

refeffillitiellitiellities

12/x/2015

12/01/2015

12/01/2015

12/01/2015

12/01/2015

12/01/2015

12/01/2015

12/01/2015

GEOGRAPHY

B.A. Honours, Part – I

PAPER - I (A) - (Full Marks - 75)

PHYSICAL GEOGRAPHY

Ten questions will be set in all selecting two questions from each Unit. Examinees will be required to answer five questions selecting one question from each Unit

Origin of solar system (Theories of Kant and Laplace, Jeans & Jeffrey's & Big Bang Unit - 1: Theory).

Internal structure of the earth

Isostasy: Pratt's and Airy's views

Earthquake and Vulcanism

Unit - 2: Kober's and Holme's views on mountain building

Wegener's theory of Continental Drift

Plate Tectonics

Folded Topography

Faulted Topography

Unit - 3: Normal Cycle of Erosion

Arid Topography

Glacial Topography

Karst Topography

Unit - 4: Composition and Structure of Atmosphere

Classification of Air masses

Fronts

Cyclones

Koppen's and Thornthwaite's Scheme of classification of Climate

Climatic changes - causes and evidences

Unit - 5: Salinity of Ocean water

Relief of Ocean Floor: Continental Shelf, Slope and Deep Sea plain

Relief of the Indian and Atlantic Ocean

Ocean currents

Tides

Vhr. 15

12/10/15 Cualay. 15 10/15 (12/10/15 Cualay. 15.15

Books Recommended:

- 1. William, D. Thornbury Principles of Geomorphology
- 2. Savindra Singh Geomorphology
- 3. Enayat Ahmed Geomorphology
- 4. P. Dayal- Geomorphology
- 5. Wooldrige and Morgan An Outline of Geomorphology
- 6. R. N. Tikka Physical Geography
- 7. D. S. Lal Physical Geography, Climatology and Oceanography
- 8. पी० दयाल भूआकृति विज्ञान
- 9. सविन्द्र सिंह- भूआकृति विज्ञान
- 10. डी० एस० लाल जलवायु विज्ञान
- 11. अलका गौतम जलवायु एवं समुद्र विज्ञान
- 12. Sharma & Vatal Oceanography for Geographers

PAPER - II (A)

ASIA: REGIONAL STUDY

Full Marks - 75

Ten questions will be set in all selecting two questions from each Unit. Examinees will be required to answer five questions selecting one question from each Unit.

SECTION - A

Asia: Physical aspects Unit - 1:

- Structure
- Physiography
- Drainage
- Climate
- Natural Vegetation

Asia: Economy and Human Resources Unit - 2:

- Characteristics of Agriculture
- Mineral resources Iron ore, Manganese, Tin and Bauxite
- Power resources Coal, Petroleum and Hydel Power
- Population and its Problems

(in 10-15

SECTION - B

China

- Physiography
- Climate and Agricultural regions
- Industrial Development
- Industries Iron and Steel, Cotton Textile
- Population

<u>Japan</u>

- Physiography
- **Fisheries**
- Industries Iron & Steel and Automobile
- Industrial Regions
- Population

Unit - 4: Unit - 5: Books Rec 1. 2. 3. 4. 5. 6. 7. 8. **Neighbouring Countries**

A balanced Geographical account of Bangladesh, Nepal, Pakistan, Sri Lanka, Bhutan

Books Recommended:

- L. D. Stamp Asia (Hindi & English)
- Cressey Asia's Lands and People (Hindi & English)
- Ginsberg Pattern of Asia
- Robinson Monsoon Lands
- Dobby Monsoon Asia
- Kasi Nath Singh and others Monsoon Asia (Hindi)
- Mamoria and Agrawal Asia Ka Pradeshik Bhugol (Hindi)
- Tirtha Geography of Asia

(59x/2015

4 12.10.15 Man. 10.15 Whome Real and 15 12 10 15

PAPER - I (B) & II (B)

PRACTICAL - 50 MARKS

Unit – 1 : . Scales : Simple, Comparative and Diagonal	15 Marks
Enlargement and reduction of maps	
Unit – 2 :	10 Marks
Interpretation of Topographical maps	
 Cartograms : Bar diagram – Simple and Compound, Pie Diagram 	
	45 Marks
Unit – 3 : Map Projections	15 Marks
Cylindrical Equi-distant	
Cylindrical Equal area	
Zenithal Equi-distant	
Zenithal Equal Area	
Simple Conical with one standard parallel	
Conical with two standard parallels	
Unit – 4 : Record of Practical work and Viva – Voce	10 Marks

Books Recommended:

- 1. Singh and Dutta Elements of Practical Geography
- 2. Singh and Kanaujia Practical Geography
- 3. Jagdish Singh and others Prayogik Bhugol (Hindi)
- 4. L. R. Singh Fundamentals of Practical Geography
- 5. Ashish Sarkar Practical Geography A Systematic approach

12/x/2015

5. 12.10.15 12.10.15 Quales 12.10.15 (2.10)15 Quales 12.10.15 (2.10)15

GEOGRAPHY

B.A. Honours Part - II

PAPER - III (A) – (Full Marks – 75)

GEOGRAPHY OF INDIA

Ten questions will be set in all selecting two questions from each Unit. Examinees will be required to answer five questions selecting one question from each Unit

Unit - 1: Physical Aspects

ks

- Structure
- Physiography
- Drainage systems Himalayan and Peninsular
- Origin and Characteristics of Indian Monsoon
- Natural Vegetation

Unit - 2: **Agriculture**

- Soil types, erosion & conservation
- Characteristics of Agriculture
- Major Crops Rice, wheat, sugarcane, cotton
- Importance and means of irrigation

Unit - 3: Minerals and Industries

- Mineral Resources Iron ore, Manganese, Mica
- Power Resources Coal, Petroleum and Hydel Power
- Selected industries Iron and steel, Cotton textile and Sugar

Unit-4: **Population**

- Growth and Distribution
- Population problems and policies
- Types and Patterns of rural settlements
- Rural Urban Migration

Unit - 5 : Geography of Bihar

- Structure and Physiography
- Agricultural Crops: Rice, Wheat, Maize, Pulses
- Agricultural regions
- River Valley Projects: Gandak, Kosi, Son
- Flood and Drought Problems
- Population

looks Recommended:

- Spate and Learmonth India and Pakistan 1.
- Wadia Geology of India 2.
- Singh, R.L. India: A Regional Geography 3.
- Gopal Singh Geography in India 4.
- Sharma and Coutinho Economic and Commercial Geography of India 5.
- Mamoria Bharat Ka Bhugol (Hindi) 6.
- Khullar-India: A Comprehensive Geography 7.
- R. C. Tiwari Geography of India 8.
- M. Ataullah & Ad. Muslimuddin Bihar Ka Adhunik Bhugol (Hindi) 9.
- Barhu Pandit & A. K. Gupta Bihar Ka Bhaugolik Adhyaan (Hindi) 10.
- Ahmad, E. Bihar: A Physical and Economic Geography 11.
- Singh and Kumar A Monograph of Bihar 12.
- Dr. L. N. Ram edited A Systematic Geography of Bihar 13.
- V. N. P. Sinha & L. K. P. Singh Jharkhand Land and People 14.

GEOGRAPHY

B.A. Honours, Part – II

PAPER - IV (A) - (Full Marks -75)

ECONOMIC AND RESOURCE GEOGRAPHY

Ten questions will be set in all selecting two questions from each Unit. Examinees will be require answer five questions selecting one question from each Unit

SECTION - A

ECONOMIC GEOGRAPHY

Agriculture Unit - 1:

- Subsistence farming
- Commercial grain Farming
- Plantation agriculture
- Dairy Farming
- Mediterranean Agriculture

Unit - 2: **Industries**

- Industrial Location Theory of Weber
- Agricultural Location Theory of Von Thunen
- Iron and Steel industry
- Cotton Textile industry
- Sugar Industry

Indust

Λit – 3 : Transport and Trade International trade with reference to WTO Globalization and its impact on economy Trade routes - Suez and Panama canals SECTION - B RESOURCE GEOGRAPHY Concept of Resources Unit - 4: Meaning, Concept and Classification of resources Soil, water and forest resources - their distribution, Utilization and Conservation Fisheries of the World 2222222222333333 Unit - 5: Mineral and Power Resources Distribution and Production of the following resources: Coal in USA and China, Petroleum in Middle East Iron ore in Russia and Australia Manganese in Russia and USA Books Recommended: 1. Jones and Darkenwald - Economic Geography 2. Zimmerman – World resources and industries Alexander - Economic Geography 3. 4. Alexander - Geography of Manufacturing 5. Buchanan and Estall – Economic Geography 6. Miller - Geography of Manufacturing 7. Kashi Nath Singh - Arthik Bhugol (Hindi) 8. Guha and Chattoraj – Economic Geography 9. Negi - Resources Geography (English & Hindi) 10. Kaushik and Sharma - Sansadhan Bhugol (Hindi) 11. Mamoria - Arthik Bhugol (Hindi) 12. Haggett - Geography, A Modern Synthesis 13. Prithwish Roy - Economic Geography - A Study of Resources 14. Goh Cheg Leong & Gilliam C. Morgan – Human and Economic Geography 12/X/2015

PAPER - III (B) & IV (B)

PRACTICAL - 50 MARKS

15 Marks Cartograms Unit -1: Proportionate Circles Climograph Hythergraph Isopleth and Choropleth Age and Sex Pyramid 15 Marks **Projections** Unit - 2: Bonne's Projection Polyconic, Sinusoidal and Mercator's Projection Polar cases of Gnomonic, Stereographic and Orthographic 10 Marks Simple Statistical Techniques Unit -3: Mean Median Mode Quartile and Standard Deviation 10 Marks Record of Practical work and viva - voce Unit - 4:

Books Recommended:

- Singh and Dutta Elements of Practical Geography 1.
- Singh and Kanaujia Practical Geography 2.
- Jagdish Singh and others Prayogic Bhugol (Hindi) 3.
- Monkhouse and Wilkinson Maps and Diagrams 4.
- L. R. Singh Fundamental of Practical Geography 5.
- Ashish Sarkar Practical Geography A Systematic approach 6.

Costans

GEOGRAPHY

B.A. Honours Part - III

PAPER - V (Full Marks - 100)

GEOGRAPHICAL THOUGHT AND HUMAN GEOGRAPHY

Ten questions will be set in all selecting two questions from each Unit. Examinees will be required to answer five questions selecting one question from each Unit.

SECTION - A

GEOGRAPHICAL THOUGHT

Unit - 1: Meaning, and Definition of Geography

Its relationship with other sciences

Contribution of Ancient Geographers: Eratosthenes, Ptolemy

Contributions made by Humboldt, Ritter, Ratzel, Vidal de la Blache and Mackinder in the field of Geography

Dualism in Geography: Determinism Vs Possibilism and Neo-determinism, Physical Vs Human Geography, Systematic Vs Regional Geography

Unit - 2 ;

Quantitative Revolution in Geography Humanistic Geography, Gender Geography

SECTION - B **HUMAN GEOGRAPHY**

Unit - 3: Meaning, Definition and Scope of Human Geography

Evolution of man

Cultural realms of the world

Human activities in Mountain environment, Monsoon lands, Equatorial regions, Temperate Grasslands

Unit - 4: Growth and distribution of population

Theories of Demographic transition, Optimum Population

Distribution, habitat and economy, mode of life and socio-cultural organizations of the following tribes - Eskimo, Bushmen, Santhal, Oraon

Unit - 5: Urbanization and related problems

Growth Pole theory

Christaller's Central Place Theory

Migration – Internal and International

1 12/10/15 PM 10.15 (2/10/15)

calcs Recommended:

- 1. Hartshorne Nature of Geography
- 2. R. Minshull Changing Nature of Geography
- 3. Freeman A hundred years of Geography
- 4. Hussain M. Geographical Thought
- 5. Kaushik Bhaugolik Chintan
- 6. Adhikari S. -- Human Geography
- 7. Robinson Human Geography
- 8. Emery Jones Human Geography
- 9. S. D. Kaushik Manav Bhugol Ke Siddhanta (Hindi)
- 10. Chandna and Sidhu Geography of Population (Hindi and English)
- 11. Bansal Nagriya Bhugol (Hindi)

Part - VI (Full Marks - 100)

ENVIRONMENTAL GEOGRAPHY & REMOTE SENSING

Ten questions will be set in all selecting two questions from each Unit. Examinees will be required to answer five questions selecting one question from each Unit.

SECTION A

ENVIRONMENTAL GEOGRAPHY

Unit - 1: Introduction to environmental Geography

- Meaning, Concept, and scope of environmental Geography
- Factors affecting environment
- Ecology and Eco system
- Major Ecosystems of the world
- Ecological balance and imbalance

Unit - 2: Biogeography

- Nature, scope and significance of Biogeography
- Bio-energy cycles
- Concept of Zoogeography
- Biodiversity and Hotspots

Unit - 3: Environmental degradation and Management

- Natural Disasters: Drought, Flood and Earthquakes Causes, effects and Mitigation
- Rain water harvesting
- Watershed Management
- Sustainable Development
- Eco-Tourism

12/XPOIS

11 /7/117/15/2.10.15 April 12/10/15 (July 10/15)



SECTION - B

REMOTE SENSING

Unit - 4	2	•	Meani
O1110 .			

- ng and Scope of Remote Sensing
- History of Remote Sensing
- Process and stages of Remote Sensing
- Properties of electromagnetic energy –wave length, frequency and velocity

Unit - 5:

- Difference between air photography and image
- Electro magnetic spectrum
- Interaction of electromagnetic energy in the atmosphere
- Interaction of electromagnetic energy with earth surface features
- Meaning, concept and objectives of GIS

Books Recommended:

- 1. Singh Savindra – Environmental Geography (Hindi, English)
- 2. Sharma P. D. - Ecology and Environment
- 3. Bhattacharya – Biogeography
- 4. Prasad G. - Environmental Geography
- 5. Chandana – Environmental Geography
- 6. Henry and Kainke - Environmental Science and Engineering
- 7. Srivastava V. R. – Paryavaran and Paristhitiki
- 8. Saxena H. M. - Environmental Geography
- 9. H. Robinson – Biogeography
- 10. Cunninghum - Environmental Science
- 11. Odum - Fundamentals of Ecology
- 12. Thomas M. Lillesand - Remote Sensing and Image Interpretation
- 13. John R. Jenson – Remote Sensing of Environment – an earth resource Perspective
- 14. Dr. Devi Dutt Chauniyal – Remote Sensing and GIS (Hindi)
- 15. Keith C. Clarke - Getting Started with GIS
- 16. Siddhiqui M. - Introduction of GIS
- 17. Burrough & Mcdonell - Principles of GIS

12/X/2015

Main 15 publo.15 watay
12.10.15 publo.15 (watay)
12.10.15

Part - VII (Full Marks - 100)

QPTIONAL PAPERS

Students are required to opt any one group out of Groups A, B, C and D.

GROUP - A POPULATION GEOGRAPHY

Ten questions will be set in all selecting two questions from each Unit. Examinees will be required answer five questions selecting one question from each Unit.

Unit – 1: • Meaning and scope of population Geography

Science of Demography

Recent trend of Population growth with special reference to developed and developed countries

Methods of population projections

Unit – 2: • Fertility measures and determinants

Mortality measures and determinants

Internal and international migrations

Malthusian Theory of Population

Unit – 3: • Growth patterns of world population

Distribution of world population

Problems caused by differential population pressure

Population policies of Russia and China

Unit – 4 : • Population composition in India :

Occupational structure

Literacy

Age and Sex

Major religions

Languages

Unit – 5: • Growth of population in India

Distribution and Density

Urbanization in India

Problems of urbanization

Population Policy in India

(2/x/201)

12/10/15 12.10.15 Whom I

ooks Recommended:

- J. Clarks Population Geography 1.
- 2. B. Garnier - Geography of Population
- 3. G. Trewartha - A Geography to Population Geography
- W. Zelinski A prologue to population Geography 4.
- 5. Agarwal - India's population problems
- Mamoria India's population problems 6.
- 7. Chandana and Sindhu - Geography of Population (English & Hindi)
- A Bose Pattern of population Growth in India 1951-61 8.
- A Bose A Study in India's Urbanization 1961-71 9.
- 10. S. D. Kaushik - Manav Bhugol Ka Sidhanta (Hindi)
- R. C. Chandana Geography of Population 11.

Part - VII (Full Marks - 100)

OPTIONAL PAPER

GROUP - B

GEOLOGY OF INDIA

Ten questions will be set in all selecting two questions from each Unit. Examinees will be required to answer five questions selecting one question from each Unit

- Unit 1: Nature and Scope of Geology
 - Standard Stratigraphical Scale
 - Indian Stratigraphical Scale
 - Principles of co-relation of standard and Indian stratigraphical scale
- Unit 2: Classification, Mode of occurrence and distribution of
 - Iron ore, Copper, Mica, Manganese, Coal, Petroleum and Atomic Minerals
- Unit 3 : Petrological characteristics, Classification, Distribution, and economic importance of Dharwar, Vindhyan, Gondwana and Tertiary Systems
- Unit 4: Origin, mode of occurrence and distribution of
 - Igneous, Sedimentary, Metamorphic rocks
 - Metamorphism

12/x/2013

/nit - 5 :

- Geological Evolution of
- Himalayas
- Chotanagpur plateau
- Rajmahal highlands
- Deccan Trap
- Aravalli

Books Recommended:

- Wadia Geology of India
- Krishnan Geology of India
- 3. P. K. Mukherjee A Textbook of Geology
- Brown and Dey Mineral Wealth of India
- 5. Tyrrol Petrology
- M. Wadia Minerals of India
- Bateman Economic Meneral Deposits

Part - VII (Full Marks - 100)

OPTIONAL PAPER

GROUP - C

CARTOGRAPHY AND MAP MAKING

Ten questions will be set in all selecting two questions from each Unit. Examinees will be require answer five questions selecting one question from each Unit.

Unit - 1 : •

Definition and explanation of astronomical terms

Unit - 2 :

- Determination of latitude with the help of meridian altitude of star
- Longitude and solar time
- Sidereal time

Unit - 3: Definition and classification of map projections

- Mathematical construction, Properties and use of the following map projections (bi co-ordinates)
- Zenithal Equal Area and Gnomonic (polar case)
- Conical Simple conical projection with one standard parallel and Bonne's projection
- Constant of Cone
- Cylindrical Equal area, Mercator's Projection

C 2 X 3015 15

ion 12/11/15 Days 15 /2/

- Jnit 4:
- Acquaintance with Theodolite,
- Principle of Sextant
- Shape and Size of the earth
- Scales and their types
- Scale of spheres and circles
- Vernier scale
- Modern techniques of map making
- Survey of India maps
- Format and Symbols of map
- Acquaintance with photogrammetry
- Types and Interpretation of aerial photographs

- Unit 5:

 Type

 Books Recommended:

 1. Jamesor

 2. Singh

 3. R. P

 4. Ka Jameson and Ormsby – Mathematical Vol. I and II
 - Singh and Dutta Practical Geography
 - R. P. Mishra Fundamentals of Cartography
 - Kanetkar Surveying

es sold

(21011) Migo. 15 12.16

Part - VII (Full Marks - 100)

OPTIONAL PAPER

GROUP - D

URBAN GEOGRAPHY AND PLANNING

Ten questions will be set in all selecting two questions from each Unit. Examinees will be requ answer five questions selecting one question from each Unit.

Unit - 1:

- Concept and scope of Urban Geography
- Origin and Evolution of towns
- Site and Situation
- Locational Classification of towns
- Functional classification of towns

Unit - 2:

- Urban Population growth in India
- Morphological characteristics of Indian towns
- Urban growth concept: Theories of Burgess, Hoyt, Harris and Ullman

Unit - 3:

- Urban Land use
- Urban functions
- Urban Morphology
- Urban Land use planning

Unit - 4:

- Town country relationship
- City region and Umland concept
- Rural Urban Fringe
- Metropolitan region
- Conurbation

Unit - 5:

- Urban and Regional Survey
- Metropolitan planning and regional planning
- Towns and cities as central places
- Master Plan of Patna
- Concept of Smart City

2/x/2015

PAPER VIII

PRACTICAL (Full Marks - 100 Marks)

Unit – 1 :	PAPER VIII PRACTICAL (Full Marks – 100 I SECTION - A (50 Marks) Surveying	
Po	Plane Table Survey	15 Marks
	Resection with Plane Table	
	Open and Closed Traverse with Prismatic Compass	
•	• Levelling	
Unit – 2 ;	Geological section and Interpretation of Geological ma	15 Marks
Unit – 3:	Identification of Rocks and Minerals	40.14
	Record of Practical work and viva – voce	10 Marks 10 Marks
	SECTION - B (50 Marks)	
Unit – 4:		20 14
	 Project Report : A short analysis with map based on field collection of data on any topic approved by the Head or 	30 Marks eld study and f the Department
Unit 5 :	Tour Report	

SECTION - B (50 Marks)

Unit - 5 : Tour Report

20 Marks

- A geographical account written by the students after visiting any of the following regions with appropriate maps, diagrams and data (to be approved by the H.O.D.) Duration – a maximum of 15 days
 - (a) Deccan region
 - (b) Delta regions in India
 - (c) Chotanagpur plateau
 - (d) Central India
 - Northern and Eastern Himalayan regions (e)
 - (f) Rajgir

OR any other region

Books Recommended:

- 1. Singh and Dutta - Elements of Practical Geography
- 2. Singh and Kanaujia – Practical Geography 3.
- Jagdish Singh and Other Prayogik Bhugol 4. DD Satpathi - Ganitik Bhugol I and II
- 5. Platt - Geological Sections

() 15 Min 18 12:10:15

() 10:15 Min 18 () 2 | 12:10:15

B.A. - I GEOGRAPHY (SUBSIDIARY)

PAPER - I (A) (Full Marks - 75)

SECTION - A

PHYSICAL AND ECONOMIC GEOGRAPHY

Ten questions will be set in all selecting two questions from each Unit. Examinees will be required t answer five questions selecting one question from each Unit

Unit - 1: Origin of the Earth Internal structure of the Earth, Isostasy, Continental drift, Kober's and Holme's theory of mountain building.

Unit - 2: Normal Cycle of Erosion, Arid topography, Volcanic topography, Karst topography

Unit - 3 : Salinity of Ocean water, Relief of the Ocean floor, Ocean currents. Composition and Structure of Atmosphere, Rainfall and clouds

SECTION - B

Unit - 4: Agriculture - Subsistence, Commercial grain farming, Plantation, Minerals - Coal, Petroleum, Iron- ore.

Unit - 5: Selected industries - Iron and steel in USA and Japan., Cotton textile of U.S.A. and China Major trade routes – Suez Canal, Panama Canal

Books Recommended:

1.

- P. Dayal Bhautik Bhugol (Hindi) 2. Savindra Singh – Bhu Akriti Vigyan (Hindi) 3. C. B. Mamoria – Bhautik Bhugol (Hindi) 4. Balbir Singh Negi - Climatology and Oceanography (Hindi) 5. P. Dayal – A Text Book of Geomorphology
- R. N. Tikka Physical geography 6. 7. Jones and Darkenwald – Economic Geography
- Zimmerman World Resources and Industries. 8.

July 12/10.15 12.10.15 12.10.15 111 () sahad

Alexander – Economic Geography
 Kashi Nath Singh – Arthik Bhugol (Hindi)
 Guha and Chattoraj – Economic Geography
 Negi – Resources Geography (English & Hindi)
 Mamoria – Arthik Bhugol (Hindi)

PAPER - I (B) (Subsidiary)

PRACTICAL

Full Marks - 25

Unit -1:

(a) Cartograms – Simple and Compound Bar diagrams
Pie diagrams

10 Marks

(b) Enlargement and reduction of maps, Interpretation of weather maps

10 Marks

Unit - 2: Record of Practical work and viva - voce

5 Marks

CROST 12/2015

12:10:15 12:10 NS: 10. Supply (sealog) 15



Full Mai

PAPER - II (A)

GEOGRAPHY OF INDIA

Ten questions will be set in all selecting two questions from each Unit. Examinees will be requanswer five questions selecting one question from each Unit.

- Unit 1 : Physiography, Drainage, Climate, Soil, Natural Vegetation
- Unit 2 : Crops Rice, Wheat, Tea
 Industries Iron and Steel, Cotton textile, Sugar
- Unit 3: Mineral and Power resources Coal, Petroleum, Iron ore,
 Manganese and Mica Production and distribution
- Unit 4 : Population Growth, Distribution & Problems,Types of Rural settlement, Trends of Urban growth
- Unit 5: Bihar –Physiography, Climate, Agriculture, Population, Floods and Droughts.

Books Recommended:

- Spate and Learmonth India and Pakistan
- 2. Wadia Geology of India
- 3. Singh, R. L. India: A Regional Geography
- 4. Gopal Singh Geography in India
- 5. Sharma and Coutinho Economic and Commercial Geography of India
- 6. Manoria Bharat Ka Bhugol (Hindi)
- 7. Khullar India : A Comprehensive Geography
- 8. R. C. Tiwari Geography of India
- 9. M. Attaullah & Md. Muslimuddin Bihar Ka Adhunik Bhugol (Hindi)
- 10. Singh and Kumar A Monograph of Bihar
- Dr. L. N. Ram edited A Systematic Geography of Bihar

100 x/2015

PAPER - II (B) (Subsidiary)

PRACTICAL

Full Marks - 25

Unit - 1:

(a) Simple Statistical Methods – Mean, Median and Mode, Standard Deviation

10 Marks

(b) Map projections : Zenithal equi-distant, Simple Conical with one standard parallel, and Cylindrical equal area

10 Marks

Unit - 2 : Record of Practical Work and Viva - Voce.

5 Marks

C12/x/2015

M. 10.13
29.10.13

12.10. 15 W. 10. 12.10.15