

# Contents

## PART ONE : NATURE OF GEOGRAPHY

<b>1. Introduction to Geography</b>	<b>1–19</b>
1. Meaning and Definition of Geography .....	1
2. Scope of Geography.....	3
3. Nature of Geography .....	4
(1) <i>Geography is the study of earth's surface</i> .....	4
(2) <i>Geography is an interdisciplinary science</i> .....	4
(3) <i>Geography is the study of empirical science</i> .....	5
(4) <i>Geography is the study of interrelationship</i> .....	6
(5) <i>Geography is a sythesising science</i> .....	6
4. Aims of Geography.....	7
5. Branches and sub-branches of Geography .....	9
(A) <i>Branches of physical geography</i> .....	9
(B) <i>Branches of Human Geography</i> .....	12
6. Relations of Geography with other sciences .....	14
(A) <i>Relations of geography with physical sciences</i> .....	14
(B) <i>Relations of geography with social sciences</i> .....	16
<i>References</i> .....	19
<b>2. Fundamental Concepts of Geography and Its Branches</b>	<b>20–44</b>
1. Fundamental Concepts of Geography .....	20
(1) <i>Concept of earth's surface</i> .....	20
(2) <i>Concept of location</i> .....	20
(3) <i>Concept of areal differentiation</i> .....	21
(4) <i>Concept of landscape</i> .....	22
(5) <i>Concept of scale</i> .....	23
(6) <i>Concept of spatial interaction</i> .....	24
(7) <i>Concept of region or regional concept</i> .....	24
(8) <i>Concept of temporal change</i> .....	25

2. Fundamental Concepts in Physical Geography .....	26
(1) <i>Concept of uniformitarianism</i> .....	26
(2) <i>Concept of natural landscape</i> .....	26
(3) <i>Concept of landform</i> .....	27
(4) <i>Concept of geological structure</i> .....	27
(5) <i>Concept of geomorphic process</i> .....	28
(6) <i>Concept of geomorphic stage</i> .....	28
(7) <i>Concept of cycle of erosion</i> .....	29
(8) <i>Concept of ecosystem</i> .....	29
(9) <i>Concept of biome</i> .....	30
3. Concepts of Human Geography.....	30
(1) <i>Concept of inter-relationship</i> .....	31
(2) <i>Concept of temporal change</i> .....	31
(3) <i>Concept of human adaptation</i> .....	32
(4) <i>Concept of determinism</i> .....	33
(5) <i>Concept of possibilism</i> .....	34
(6) <i>Concept of neo-determinism</i> .....	35
(7) <i>Concept of probabilism</i> .....	35
(8) <i>Concept of cultural landscape</i> .....	35
4. Fundamental Concepts of Economic Geography.....	36
(1) <i>Concept of economic activity</i> .....	36
(2) <i>Concept of economic landscape</i> .....	37
(3) <i>Concept of location of economic activity</i> .....	37
(4) <i>Concept of resource</i> .....	37
(5) <i>Concept of resource management</i> .....	38
(6) <i>Concept of economic development</i> .....	38
(7) <i>Concept of sustainable development</i> .....	39
5. Fundamental Concepts is Settlement Geography .....	39
(1) <i>Concept of settlement</i> .....	39
(2) <i>Concept of town and urban areas</i> .....	40
(3) <i>Concept of rural-urban continuum</i> .....	40
(4) <i>Concept of central place</i> .....	41
(5) <i>Concept of urban economic base</i> .....	41
(6) <i>Concept of rural-urban fringe</i> .....	42
(7) <i>Concept of umland or city region</i> .....	42
(8) <i>Concept of urbanization</i> .....	43
<b>References</b> .....	43

<b>3. Approaches of Geography</b>	<b>45–58</b>
1. Systematic Approach .....	45
2. Regional Approach .....	46
3. Historical Approach .....	47
4. Environmentalistic Approach .....	48
5. Possibilistic Approach.....	49
6. Ecological Approach.....	50
7. Spatial/Locational Approach .....	51
8. Behavioural Approach .....	52
9. Humanistic Approach.....	54
10. Welfare Approach.....	55
<b>References</b> .....	<b>56</b>

## PART TWO : HISTORY OF GEOGRAPHY

<b>4. Geographical Knowledge in Ancient India</b>	<b>59–81</b>
1. Evolution of Geographical Knowledge.....	59
(1) <i>Age of Indus Valley Civilization</i> .....	60
(2) <i>Vedic age</i> .....	61
(3) <i>Age of Epics and Puranas</i> .....	63
(4) <i>Post Epic age</i> .....	64
2. Geographers of Ancient India.....	65
3. Main Aspects of Geographical Knowledge in Ancient India.....	67
(A) <i>Astronomical knowledge</i> .....	67
(B) <i>Descriptions of physical geography</i> .....	70
(C) <i>Descriptions of human geography</i> .....	76
<b>References</b> .....	<b>81</b>
<b>5. Geographical Knowledge in Ancient China</b>	<b>82–86</b>
1. Historical Background .....	82
2. Extent of Ancient Chinese World .....	83
3. Foreign Trade and Trade Routes .....	84
4. Development of Religions in China .....	84
5. Economic and Cultural Achievements .....	85
6. Application of Scientific Methods in Geographical Studies .....	85
7. Application of Cartographic Techniques.....	85
<b>References</b> .....	<b>86</b>

<b>6. Ancient Greek and Roman Geography</b>	<b>87–105</b>
(A) <b>Greek Contribution to Geography</b> .....	87
(1) <i>Greek Geographers : 1. Homer, 2. Thales, 3. Anaximander, 4. Hacataeus, 5. Herodotus, 6. Plato, 7. Aristotle, 8. Eratosthenes, 9. Hipparchus, 10. Pesidonius</i> ) .....	88
(2) <i>Contribution of Greeks to Mathematical and Physical Geography</i> .....	95
(B) <b>Roman Contribution to Geography</b> .....	97
1. Roman Geographers (1. Strabo, 2. Plini, 3. Ptolemy) .....	98
2. Major Aspects of Geographical Study in Roman Period. ....	103
<b>References</b> .....	105
<b>7. Dark Age in Europe and Contributions of Arab Geographers</b>	<b>106–119</b>
(A) <b>Dark Age in Europe</b> .....	106
1. Geographers of Dark Age ( <i>1. Solinus, 2. Firmianus, 3. Pomponius Mela, 4. Cosmos</i> ) .....	107
2. Map-making in Dark Age. ....	108
(B) <b>Contributions of Arab Geographers</b> .....	109
1. Arab Geographers ( <i>1. Mohammad Abdul Qasim, 2. Al-Masudi, 3. Al-Biruni, 4. Al-Idrisi, 5. Ibn-Batuta, 6. Ibn-Khaldun, 7. Other significant Arab geographers</i> ).....	110
2. Main Contributors of Arab Geographers .....	117
(1) <i>Astronomical and Mathematical geography</i> .....	117
(2) <i>Physical geography</i> .....	118
(3) <i>Human geography</i> .....	118
(4) <i>Regional geography</i> .....	118
(5) <i>Cartography</i> .....	119
<b>References</b> .....	119
<b>8. Renaissance Period : Age of Explorations and Discoveries</b>	<b>120–137</b>
1. About the Renaissance Period .....	120
2. Main Explorers of Renaissance Period .....	120
( <i>1. Marco Polo, 2. Christopher Columbus, 3. Vasco da Gama, 4. Ferdinand Magallan, 5. Other explorers</i> )	
3. Inventions of Renaissance Period .....	132

4. Geographers of Renaissance Period.....	133
<i>(1. Peter Apian, 2. Sebastian Munster, 3. Gerhard Mercator, 4. Philip Cluverius, 5. Nathaniel Carpenter, 6. Bernhard Varenius)</i>	
5. Geographical Achievements in Renaissance Period .....	136
(1) <i>Discoveries of new areas and routes</i> .....	136
(2) <i>Development of cartographies and map-making</i> .....	136
(3) <i>Publication of general geography and world geography</i> .....	136
<b>References</b> .....	137
<b>9. Geography in the Eighteenth Century</b>	<b>138–144</b>
1. Prominent Geographers of Eighteenth Century .....	138
(1) <i>Philip Buache</i> .....	138
(2) <i>Comte de Buffon</i> .....	139
(3) <i>Anton Friedrich Busching</i> .....	139
(4) <i>Christoph Gatterer</i> .....	140
(5) <i>Reinhold Forster</i> .....	140
(6) <i>George Forster</i> .....	140
(7) <i>Immanuel Kant</i> .....	141
2. Geographical Achievements of Eighteenth Century .....	143
(1) <i>Rise of politico-statistical school of geography</i> .....	143
(2) <i>Reine geography (pure geography)</i> .....	143
(3) <i>Practical and scientific method</i> .....	143
(4) <i>Universal geography</i> .....	144
(5) <i>Philosophical foundation of scientific geography</i> .....	144
<b>References</b> .....	144
<b>10. Founders of Modern Geography : Humboldt and Ritter</b>	<b>145–157</b>
(A) <b>Alexander von Humboldt</b> .....	145
1. Life History of Humboldt.....	145
2. Adventures and Explorations .....	147
3. Writings of Humboldt.....	148
4. Methodology of Humboldt.....	149
5. Geographical Concepts of Humboldt.....	150
6. Terms Coined by Humboldt.....	151
(B) <b>Carl Ritter</b> .....	152
1. Life History of Ritter.....	152
2. The Works of Ritter .....	153

3. Methodology of Ritter .....	154
4. Ritter's Thought.....	154
5. Comparison of Humboldt and Ritter .....	156
<b>References</b> .....	157
<b>11. Post Classical German Geography</b>	<b>158–178</b>
1. German Geographers of Post-classical Period.....	159
(1) <i>Oscar Peschel</i> .....	159
(2) <i>Friedrich Ratzel</i> .....	160
(3) <i>Ferdinand von Richthofen</i> .....	164
(4) <i>Alfred Hettner</i> .....	166
(5) <i>Albrecht Penk</i> .....	168
(6) <i>Otto Schluter</i> .....	169
(7) <i>Other German Geographers</i> .....	170
2. German Geographical Thoughts .....	173
3. Branches of Geography development by German Geographers.....	176
<b>References</b> .....	178
<b>12. Modern French Geography</b>	<b>179–195</b>
1. French Geographers .....	179
(1) <i>Elisee Reclus</i> .....	180
(2) <i>Vidal de la Blache</i> .....	180
(3) <i>Jean Brunhes</i> .....	183
(4) <i>Lucien Gallois</i> .....	185
(5) <i>Albert Demangeon</i> .....	185
(6) <i>Emmanuel de Martonne</i> .....	186
(7) <i>Raoul Blanchard</i> .....	187
(8) <i>Andre Siegfried</i> .....	188
(9) <i>Henri Baulig</i> .....	188
(10) <i>Maximilien Sorre</i> .....	188
(11) <i>Pierre Deffontaines</i> .....	189
(12) <i>Andre Cholley</i> .....	189
(13) <i>Roger Dion</i> .....	190
(14) <i>Pierre George</i> .....	190
(15) <i>Gean Gottmann</i> .....	190
2. French Geographic Thoughts .....	191
3. Branches of Geography developed in France .....	192
<b>References</b> .....	195

<b>13. Modern British Geography</b>	<b>196–212</b>
1. Establishment of Geography in Britain .....	196
2. British Geographers .....	197
(1) <i>Halford John Mackinder</i> .....	197
(2) <i>Patrick Geddes</i> .....	200
(3) <i>A.J. Herbertson</i> .....	201
(4) <i>Herbert John Fleure</i> .....	203
(5) <i>Lawrence Dudley Stamp</i> .....	204
(6) <i>Peter Haggett</i> .....	205
(7) <i>Other British Geographers</i> .....	206
3. Major Branches of Geography developed in Britain .....	207
4. Current Trends in British Geography.....	209
<i>References</i> .....	211
<b>14. New Geography in Anglo America</b>	<b>213–236</b>
1. Establishment of Geography in Anglo America .....	213
2. American Geographers.....	214
(1) <i>William Morris Davis</i> .....	214
(2) <i>Rollin D. Salisbury</i> .....	216
(3) <i>Mark Jefferson</i> .....	216
(4) <i>Ellen Churchill Semple</i> .....	217
(5) <i>Ellsworth Huntington</i> .....	219
(6) <i>Isaiah Bowman</i> .....	221
(7) <i>Griffith Taylor</i> .....	223
(8) <i>Carl O. Sauer</i> .....	226
(9) <i>Recharad Hartshorne</i> .....	228
(10) <i>Other American Geographers</i> .....	230
3. Various Dimensions of American Geography.....	231
4. Recent Trends in American Geography .....	234
<i>References</i> .....	235
<b>15. Modern Russian Geography</b>	<b>237–246</b>
1. Establishment of Geography in Russia .....	237
2. Prominent Russian Geographers.....	238
(1) <i>K.I. Arsenyev</i> .....	238
(2) <i>Peter Petrovich Semenov</i> .....	238
(3) <i>M.V. Lomonosov</i> .....	239
(4) <i>Alexander Ivanovitch Vocikov</i> .....	239

(5) <i>Peter Kropotkin</i> .....	240
(6) <i>V.V. Kokuchaiev</i> .....	241
(7) <i>D.N. Anuchin</i> .....	242
(8) <i>N.N. Baransky</i> .....	242
(9) <i>I.P. Gerasimov</i> .....	243
2. Dimensions of Russian Geography .....	244
<b>References</b> .....	246

**16. Modern Indian Geography 247–275**

1. Progress of Geography in India .....	247
(1) <i>The formative stage (before 1950)</i> .....	247
(2) <i>The informative stage (1950-60)</i> .....	249
(3) <i>The conformative stage (1960-70)</i> .....	249
(4) <i>The reformative stage (since 1971)</i> .....	250
2. Founders of Geography in India .....	251
3. Promoters of Geography in India.....	255
4. Development of Various Branches of Geography in India .....	263
(1) <i>Human geography</i> .....	263
(2) <i>Economic geography</i> .....	267
(3) <i>Physical geography</i> .....	268
(4) <i>Regional geography</i> .....	270
(5) <i>Geographical thought</i> .....	270
(6) <i>Historical geography</i> .....	271
5. Contribution of Indian Geographical Societies/Associations .....	271
<b>References</b> .....	275

**PART THREE : GEOGRAPHICAL IDEAS AND  
METHODOLOGIES**

**17. Philosophical Background of Geographical Thought 276–293**

1. Teleology .....	276
2. Positivism .....	277
3. Darwinism.....	278
4. Pragmatism .....	279
5. Functionalism.....	280
6. Idealism .....	281
7. Realism .....	283
8. Existentialism.....	284
9. Exceptionalism.....	284



10. Structuralism .....	287
11. Phenomenology .....	288
12. Behaviouralism .....	289
13. Marxism.....	291
<b>References</b> .....	293
<b>18. Dualism and Dichtomies in Geography</b>	<b>294–307</b>
1. Systematic Geography <i>versus</i> Regional Geography .....	294
2. Physical Geography <i>versus</i> Human Geography .....	299
3. Determinism <i>versus</i> Possibilism.....	303
4. Historical Geography <i>versus</i> Contemporary Geography .....	305
<b>References</b> .....	307
<b>19. Determinism, Possibilism, Neodeterminism and Probabilism</b>	<b>308–317</b>
1. Determinism or Environmentalism.....	308
2. Possibilism.....	312
3. Neodeterminism.....	315
4. Probabilism.....	316
<b>References</b> .....	316
<b>20. Regional Concept</b>	<b>318–333</b>
1. Definition of Region .....	318
2. Evolution of Regional Concept.....	318
3. Characteristics of Region .....	321
4. Types of Regions.....	322
5. Major Generic Regions .....	323
(A) Formal or Uniform Regions .....	323
(1) Physiographic regions .....	223
(2) Natural regions .....	324
(3) Geographical regions .....	324
(4) Climatic regions.....	325
(5) Vegetation regions .....	325
(6) Cultural regions .....	326
(7) Economic regions .....	328
(8) Agricultural regions .....	329
(9) Industrial regions .....	330
(10) Political regions .....	330
(B) Functional or Nodal Regions .....	331

6. Regionalism .....	332
<b>References</b> .....	333
<b>21. Changing Philosophy or Paradigms of Geography</b>	<b>334–349</b>
1. Meaning of Paradigm.....	334
2. Paradigm shift.....	335
3. Changing Philosophy or Paradigms of Geography .....	337
(1) <i>Teleological descriptive paradigm</i> .....	338
(2) <i>Romantic analytical paradigm</i> .....	340
(3) <i>Environmentalist paradigm</i> .....	341
(4) <i>Possibilist paradigm</i> .....	342
(5) <i>Chorological paradigm</i> .....	343
(6) <i>Positivist paradigm</i> .....	344
(7) <i>Behavioural paradigm</i> .....	345
(8) <i>Radical/Marxist paradigm</i> .....	346
(9) <i>Humanist paradigm</i> .....	347
(10) <i>Welfare paradigm</i> .....	348
<b>References</b> .....	349
<b>22. Models in Geography</b>	<b>350–360</b>
1. Definition of Model .....	350
2. Characteristics of Model .....	351
3. Significance of Models in Geography.....	351
4. Quantitative Revolution and Model-Building in Geography .....	352
5. Types of Models .....	353
6. General Classification of Models.....	354
(1) Scale models .....	354
(2) Map models .....	355
(3) Analogue model.....	355
(4) Mathematical models .....	356
(5) Simulation models.....	357
(6) Historical models .....	358
(7) Locational analysis and landuse models.....	359
7. Merits and Demerits of Models .....	359
<b>References</b> .....	360
<b>23. Scientific Explanations in Geography and System Analysis</b>	<b>361–372</b>
(A) <b>Scientific Explanations in Geography</b> .....	361
1. Cognitive Descriptions.....	362

2. Morphometric Analysis .....	362
3. Cause and Effect Analysis .....	362
4. Temporal or Historical Analysis.....	363
5. Functional and Ecological Analysis .....	364
6. Systems Analysis.....	364
<b>(B) Systems Analysis .....</b>	<b>365</b>
1. Bases of Systems Analysis.....	365
2. Meaning of a System .....	365
3. Structure of a System.....	366
4. Types of System based on Structure.....	367
5. Systems Analysis in Geography .....	371
<b>References .....</b>	<b>371</b>
<b>24. Post Modernism and Feminist Geography</b>	<b>373–381</b>
<b>(A) Post Modernism .....</b>	<b>373</b>
1. Meaning of Post-modernism .....	373
2. Forms of Post-modernism .....	374
(1) Post-modernism as a style.....	374
(2) Post-modernism as method .....	374
(3) Most-modernism as epoch .....	374
3. Nature of Postmodernism.....	375
<b>(B) Feminist Geography .....</b>	<b>377</b>
1. Nature of Feminist Geography .....	377
2. Aims and Views of Feminism .....	378
3. Role of Phenomenology and Humanistic Approaches in the Development of Feminist Geography .....	378
4. Prospects of Feminist Geography .....	380
<b>References .....</b>	<b>381</b>
<b>Bibliography .....</b>	<b>382–398</b>
<b>Index .....</b>	<b>399–404</b>
<b>Appendix 1 – Important Books and their Authors .....</b>	<b>405–411</b>
<b>Appendix 2 – Important Concepts and Theories with     their Propounders / Introducers .....</b>	<b>412–413</b>
<b>Appendix 3 – Objective Questions .....</b>	<b>414–429</b>