Zero Draft

Single National Curriculum

GEOGRAPHY

Grade VI – VIII, 2020

ONE NATION, ONE CURRICULUM

NATIONAL CURRICULUM COUNCIL,

MINISTRY OF FEDERAL EDUCATION & PROFESSIONAL TRAINING, ISLAMABAD

GOVERNMENT OF PAKISTAN

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Geography

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Chapter 01: Introduction

The discipline of geography forms the basis of social and natural sciences. Geography is the study of the phenomenon found on and around the surface of the earth, it may be physical, biotic or Abiotic.

It is a science, which delves deep into the relationship between human beings, and the environments they live in. It explains the strength of interactions between man and nature. In the same vein, for example, students of Geography explore how people decide upon settlements, their development, and how these settlements have changed over time and are likely to change as time passes. Learners are enabled to understand not only the key factors involved in choosing the location for such settlements (for instance along riverbanks) but also their interaction with physical space and its impact on the natural environment. Therefore, geographers spend countless hours in understanding spatial patterns and relationships between different locations at various tiers. They also examine interactions between humans and nature and how different terrains and landscapes form as well as the interconnections between them.

Geography is a discipline that informs the students of the interconnection and interdependence between man and his physical environment .It is essentially the spatial (relating to space) and temporal (relating to time) study of people and places in the world. It provides a systematic framework for inquiry. Geography is divided in two main branches; PHYSICAL GEOGRAPHY, and HUMAN (or cultural) GEOGRAPHY.

There is also a third strand of study included in this curriculum called “Geographical skills and Quantitative Techniques”. PHYSICAL GEOGRAPHY is generally classified as an Earth science since it studies the physical features and various environments of the Earth. Human geography is mostly referred to as a social science since it mainly revolves around the study of how humans interact with and have an impact on each other and their surroundings.

The goal of the newly developed curriculum of geography is to bring up our students at par with the fast- changing world of today, and to prepare students to live in an increasingly complex

world. Our underlying philosophy is to help students develop the knowledge and the interpretive, reflective, and deliberative practices necessary to make sense of everyday life, as well as the political and socio-economic realities they face. This approach enables students to develop the important abilities necessary for personal development and is fundamental to growth as a whole. The newly designed curriculum incorporates knowledge, skills, and values that are essential to the understanding and appreciation of the world around us. The focus is on the learning outcomes. The curriculum encourages interactive learning by asking thought-provoking questions, enabling group discussions, and promoting group work. It includes interesting facts and various links to different resources on the internet so students can explore in their free time.

The new curriculum puts Pakistan central as the key focus of study with regard to its physical and human landscape. It also highlights important environmental issues currently faced by Pakistan, and endeavors to get students to think and formulate their standpoint in the light of suggested remedies.

1.1. Aims:

Each of our goals for the geography curriculums has equal value. They can be achieved simultaneously in a concrete, practical context through learning activities that combine the acquisition of knowledge with the application of various skills, including inquiry/research, communication, map, globe, and graphic representation. The precise, goals of the curriculum are to enable students to:

- Understand the concepts of geography, from foundational level through the preparation for advanced level studies.
- Develop the skills and strategies required for effective inquiry and communication, and for the application of the basic concepts of geography to a variety of learning tasks.
- Relate and apply the knowledge acquired through geography to the world outside the classroom.

- Acquaint the learners with the living conditions of men in various parts of the globe their natural resources and understanding of how environment and climatic factors have influenced life on Earth.
- Develop in them an understanding of basic concepts, principles and theories relating to geographical phenomena.
- Help the learners to acquire knowledge of their physical and social environment so as to broaden their outlook.
- Develop a love for nation with cosmopolitan and internationalist outlook.
- Develop the skills of reading maps and globes, drawing and measuring skills and using geographical instruments.
- Understand the characteristics and development of main economic activities.
- Compare, analyze and evaluate the given data and find solutions and conclusions.
- Join all disciplines in the academic domain on the issues of development in the social, ecological and economic aspect.
- Assess knowledge in the field of globalization, environment and social change based on scientific, societal and ethical aspects.
- Inculcate a sense of citizenship (both local and global) and an outlook of readiness to make efforts for the betterment of society (Nation and the World).

Chapter 02: Standards and Benchmarks:

Geography:

It is the study of all the stock that is available and around us in the space and on the surface of the earth. Geography deals with physical features, atmosphere and the environment- human relationship. The students will be able to know these factors and make environmental friendly decisions.

Standards:

Strand 1: Physical Geography

STANDARD-1

The students will comprehend and analyze key features of the Universe and its components. The students will be able to recognize, analyze and differentiate various physical processes on the surface of the earth and their impact on environment and man.

STANDARD-2

The Students will be able to evaluate the importance of water bodies on earth along with the major land forms and explain the creation of Natural Climatic Regions on the basis of similarities along the latitude.

BENCHMARKS

GRADE VI-VIII

- Demonstrate an understanding of Geography, Universe and its components like galaxies, stars, planets and Solar system.
- Comprehend and describe earth's movements its Natural Spheres
- Exhibit an understanding of Rocks, mineral, elements, their types and concept of rock cycle.
- Analyze and differentiate between weathering and erosion and resultant landforms.

- Distinguish between the Natural Climatic Regions on the basis of their latitudinal extent, areas included, climatic condition, vegetation and life style of people.
- Explain the presence of water bodies i.e. Hydrosphere as one of the major natural spheres of Earth.
- Define and differential the major land forms on the Earth cause and impact of a formation, their importance for human beings.
- Explain the Natural Climatic Regions on the basis of their latitudinal extent, areas included, climatic condition , vegetation and life style of people .

Strand 2: Human -Regional Geography.

STANDARD-3

The students will be able to discover and discuss the location, population structure along with their culture : Norway ,Spain , Turkey and Federating Units of Pakistan . Categorize the impact of increasing population on the environment and measures taken for the safety and prevention.

BENCHMARKS

GRADE VI-VIII

- Compare and contrast the location, culture, lifestyle and geographical facts of Norway, Spain and Turkey.
- Examine the similarities and differences between the Federating units of Pakistan (ICT, Punjab, KPK, Baluchistan, Sindh, GB and AJK) on the bases of their population, culture, bordering areas.
- Analysis and interpret the environmental issues related to increase in population, pollution and the related safety measures.

Strand 3: Geographical skills and quantitative techniques

STANDARD-4

The students will be able to explore, understand, evaluate, analyze and present data in a comprehensive systematic manner by using statistical methods of drawing.

BENCHMARKS

GRADE VI-VIII

- Classify and interpret maps their uses and related symbols and statistical
- Adapt and adopt modern tools of investigation e.g. Remote sensing images, GIS, GPS and computer based Models.

Chapter 03: Progression Matrix

3.1. PHYSICAL GEOGRAPHY

GRADE VI	GRADE VII	GRADE VIII
1. The Universe 2. The Natural Spheres of Earth 3. Internal structure of the Earth 4. Rocks	1. Earthquakes 2. Volcanism 3. Weathering and Mass Wasting 4. Major land forms of the earth	1. Work of River (An agent of change) 2. Hydrosphere 3. Natural climatic regions of the world

3.2. HUMAN GEOGRAPHY

GRADE VI	GRADE VII	GRADE VIII
5. People and Places around the world (Norway) 6. Federating Units of Pakistan [ICT, Punjab , KPK] 7. World Population 8. Environmental stress due to human activities	5. People and places around the world (Spain) 6. Federating Units of Pakistan [Balochistan , Sindh] 7. Human Settlements 8. Economic Activities 9. Environmental issues	4. People and places around the world (Turkey) 5. Federating Units of Pakistan [GB, AJk] 6. Major Environmental issues 7. Energy Resources

3.3. GEOGRAPHICAL SKILLS AND QUANTITATIVE TECHNIQUES

GRADE VI	GRADE VII	GRADE VIII
9. Mapping skills (Statistical Diagrams)	10. Mapping skills (Statistical Diagrams)	8. Maps, statistical diagrams and modern techniques

Chapter 04: Grade VI

4.1. Learning Themes and Students' Learning Outcomes

4.1.1. Section-I: PHYSICAL GEOGRAPHY

Themes	Learning Outcomes	Activities	Links
I. The Universe	The students will be able to: • Define Geography • Interpret Universe (Components) Galaxies, Stars and Planets. • Explain origin of Universe (with reference to modern concepts about the origin of Universe i.e. Big Bang Theory). • Identify Galaxy and its types according to their shapes. • Draw and explain the concept of Solar System. • Evaluate the situation of the Earth and infer why life is possible on Earth.	Activity1: Make a Model of Solar System.	https://en.wikipedia.org/wiki/Universe https://www.nationalgeographic.com/science/space/universe/origins-of-the-universe/

	• Describe the shape and size of Earth. • Analyze and describe the Earth's movement that is 'Rotation' and 'Revolution' and their impact on earth. (Solstice, Equinox, change of season, Formation of day and night).	Activity 2: Draw or make a model of earth's revolution so as to show solstices, equinox, seasons and day and night	
II. Natural Spheres of the Earth i) Atmosphere • Temperature • Air pressure • Moisture	The students will be able to: • Define the natural spheres of the earth a. Atmosphere (detail) b. Lithosphere c. Hydrosphere d. Biosphere • Analyse the composition and structure of the Atmosphere. a. Temperature b. Air Pressure and Global wind system c. Atmospheric Moisture • Classify the global wind system i.e.	Activity 3: Visit to Meteorology Department. Activity 4: Collect pictures of different meteorological instruments also write about their uses	www.cotf.edu>ess>esssspheres

	a. Planetary winds b. Seasonal winds (Monsoon winds) c. Local winds (Land Breeze and Sea Breeze etc.) • Differentiate the types of moisture present in the atmosphere e.g. rain, hail, snow fall, fog, clouds etc.		
III. Internal Structure of the Earth • Layers of the Earth • Plate Tectonics	The students will be able to: • Distinguish between the layered structure of the earth with specific depth and temperature i.e. crust, mantle, core (inner core and outer core). • Appraise the concept of “Pangaea” and "Continental Drift Theory". • Define crustal plates (Continental plates and oceanic plates). • Identify the movement of crustal plates (Plate boundaries).	Activity 5: Locate the major Continental plates and oceanic plates on the world map. Activity 6: On an outline map of Pakistan locate the two plate boundaries crossing over Pakistan.	https://www.nationalgeographic.com/science/earth/The.dynamic.earth/plate-tectonics https://youtu.be/ryrXAGY1dmE www.geology.com/nsta/earth-int-shtml www.wisegeek.com/what-is-continental-theory www.wisegeek.com/what-is--drift-theory

	• Impact of plate tectonics in Pakistan (Indo Australian plate and Eurasian plate).		www.wisegeek.com /What-is-plate-tectonics
IV. Rocks	The students will be able to: • Define Rocks , minerals and elements • Distinguish between main types of rocks and their formation : a. Igneous Rocks b. Sedimentary Rocks c. Metamorphic Rocks • Enumerate the uses of Rocks • Explain the concept of Rock cycle. • Classify different kinds of rocks found in Pakistan. • Evaluate the importance and uses of precious and semi-precious stones found in northern mountains Pakistan .	Activity 7: Draw a diagram of rock cycle. Activity 8: Collect pictures of different types of rocks also write their uses.	https://www.ucl.ac.uk>glossary>rocks

4.1.2. SECTION-II: HUMAN GEOGRAPHY

Themes	Learning Outcomes	Activities	Links
V. People and Places around the world NORWAY (The land of Midnight sun) **VI. Federating Units of Pakistan [Punjab, ICT , KPK(FATA)]**	The students will be able to: • Discover the physical location. • Discuss the interesting geographical facts. • Inspect the population Structure and density • Compare and contrast the cultural life of Norway under the following headings: a. Religions b. Ethnic groups c. Languages spoken d. Life styles and food • Analyze the map of Punjab, ICT and KPK , demarcate its boundaries by recognizing the bordering cities.	Activity 9: Identify main cities and capital city of Norway on given map. Activity 10: Search the phenomenon of Northern lights (Aurora Borealis) on internet. Activity11: Write a report on why some cities are densely populated while the others have sparse population.	https://youtu.be/uXyy7lgDj9k https://en.wikipedia.org/wiki/Norway

	• Critically analyze the distribution of population in Punjab, ICT and KPK through statistical diagrams • Compile information about Punjab, ICT and KPK i.e. ▪ Area ▪ Five main cities ▪ Economic activities ▪ Ethnic and religious groups ▪ Languages spoken ▪ Interesting geographical facts of the province ▪ Urbanization		
VII. World Population • Definition of Population and density. • Distribution of population.	The students will be able to: • Define Population. • Quantify world population (Trend of increase in population from past to present). • Apply the formula to know the density of population of an area. • Compare the distribution and density of population in the world and Pakistan.	Activity 12: With the help of given data draw a population pyramid for Pakistan.	https://en.m.wikipedia.org>wiki>world https://ourworldindata.org>world;population

• Growth of population. • Structure of population of Developed and Under developed countries. Make Population Pyramids	• Infer the term 'growth of population' with reference to Pakistan. • Examine the consequences of increase in population (Pakistan and the world) • Describe structure of Population with the help of given population pyramids of developed and under developed countries.		
VIII. Environmental Stress due to Human activities	The students will be able to: • Define Environment and its type. • Analyze the impact of population on an environment creating stress. • Infer the main issues related to Environmental stress with examples from the world and Pakistan. a. Deforestation b. Greenhouse effect c. Global warming d. Marine pollution	Activity 13: Collect pictures showing effects of environmental issues caused by human activities in their area .	http://www.everythingconnects.org/overpopulation-effects.html https://www.conserve-energy-future.com

4.1.3. SECTION-III: GEOGRAPHICAL SKILLS AND QUANTITATIVE TECHNIQUES

Themes	Learning Outcomes	Activities	Links
IX. Mapping Skills and Quantitative Techniques (Statistical diagrams) • The maps and their types. • Symbol and their types.	The students will be able to: • Define maps? • Classify maps. (Political map, thematic map, economic and resource map, physical map, road map, topographical map) • Identify the different types of symbol used on the maps. (line symbols, point symbols, area symbols and height symbols) • Analyze Pie Chart and Bar Graph	Activity 14: Draw a map of your school showing north direction along with the key showing different features (Tree, gate, water cooler etc) Activity15: Draw an outline map of Pakistan and use these symbols i.e. line symbols, point symbols, area symbols and height symbols.	www.infoplease.com/ipa/a0001769.html

Chapter 05: Grade VII

5.1. Learning Themes and Students' Learning Outcomes

5.1.1. Section-I: PHYSICAL GEOGRAPHY

Themes	Learning Outcomes	Activities	Links
I. Earthquakes	The students will be able to: • Define Earthquake. • Discuss the causes of earthquakes. • List the instrument used for measuring the intensity of earthquake. • Analyse the factors that determine the intensity of an Earthquake and its impact. • Define Tsunamis. • List the highest intensity Earthquakes and Tsunamis in the past across the world and Pakistan. • Suggest various steps to minimize the loss of lives and property (special reference to the 2005 earthquake in Pakistan).	Activity 1: Identify earthquakes' zones on the world map. Activity 2: Write a project report on the occurrence of Tsunamis.	https://en.wikipedia.org/wiki/Earth http://www.geo.mtu.edu/UPSeis/why.html https://www.nationalgeographic.com/environment/natural-disasters/tsunamis/

II. Volcanism	The students will be able to: • Define Volcanism. • Identify types of Volcanism. • Explain the risk factor of living near volcanoes. • Analyze the impact of volcanic eruption on humans and the environment. (Negative and positive).	Activity 3: On the outline map of the world show the active volcanoes with dot and lines (red color).	https://en.wikipedia.org/wiki/Volcano https://youtu.be/euGOjsoxtV0 https://www.britannica.com/science/volcanism

III. Weathering and mass wasting • Weathering • mass wasting	The students will be able to: • Explain Weathering and mass wasting. • Discuss types of Weathering (Mechanical and chemical). • Differentiate between erosion and weathering. • Identify the types of mass wasting for example a. Land Slide(slide movement)Formation of Atta Abad lake in Pakistan b. Soil creep(flow movement)(Example from KKH) c. Avalanches (fall movement) (Example from Pakistan Siachin Glacier, Baltoro glacier). Relate this phenomenon with examples from Pakistan and the world. • Examine the impact of weathering and erosion on human activities. (Positive and negative).	Activity 4: Paste pictures of weathering and mass wasting. Activity 5: Project work on Atta Abad lake its formation, changes in the land forms.	http://www.eartheclipse.com/geology/different-types-of-weathering.html https://courses.lumenlearning.com/suny-geophysical/chapter/weathering-processes/ http://www.onegeology.org/extra/kids/earthprocesses/weathering.html

IV. Major land forms of the Earth • Mountains • Plateaus • Plains • Valleys	The students will be able to: • Differentiate between a hill and a mountain. • Define folding and faulting and explain their resultant features. • Define Plateaus. • Identify the types and major plateaus of the world and specify the types found in Pakistan. • Evaluate the impact of plateaus on Human life. • Define Plains and their importance (river plains, flood plain, coastal plain etc.)(Examples to be given from Pakistan) • Define Valley and its types (River and Glacier). Give example of Swat, Kashmir, Chitral etc.) • Infer the importance of valley as livable part of the Earth.	Activity 6: On an outline of the world map show the major mountain ranges of the world. Activity 7: Research project : Why is the Himalayan range still growing (height)?	https://www.youtube.com/watch?v=BRUOAEJjp6k https://www.jagranjosh.com/general-knowledge/major-plateaus-of-the-world-1520945604-1 Exploring The Landforms of the Earth https://www.youtube.com/watch?v=7GxBe-3CG3E https://www.toppr.com/guides/geography/major-landforms-of-the-earth/some-major-landforms-of-the-earth/

5.1.2. SECTION-II: HUMAN GEOGRAPHY

Themes	Learning Outcomes	Activities	Links
V. People and places around the world • SPAIN (Southern Europe) **Vl. Federating Units of Pakistan**	The students will be able to: • Discover the physical location and discuss the interesting geographical facts. • Inspect it's population Structure and density. • Compare and contrast the cultural life of Spain (Moorish influence) under following headings: e. Religions f. Ethnic groups g. Languages spoken h. Life styles and food • Analyze the map of Balochistan and Sindh also demarcate its boundaries by recognizing the bordering cities . • Critically analyze the distribution of population in Balochistan and Sindh through statistical diagrams	Activity 8: Make a picture album of the ancient buildings found in Spain. Activity 9: Discuss (groups) Why Balochistan has sparse population.	https://en.wikipedia.org/wiki/Geography_of_Spain https://www.britannica.com/place/Spain/Agriculture-forestry-and-fishing

[Balochistan , Sindh]	• Compile information about Balochistan and Sindh i.e. ▪ Area ▪ Five main cities ▪ Economic activities ▪ Ethnic and religious groups ▪ Languages spoken ▪ Interesting geographical facts of the provinces ▪ Urbanization		
VII. Human Settlements • Definition of Settlement • Concept of site and situation • Types of Settlement	The students will be able to: • Define Settlements. • Analyse and explain site and situation (examples how settlements have emerged on favorable sites and situation with special reference to Pakistan). • Identify types of Settlements: a. Rural Settlements b. Urban Settlement	Activity 10: Collect picture postcards of large cities from all the continents. Activity 11: Research project on your own city collect information about historical importance,	http://www.jotscroll.com/forums/3/posts/202/settlement-first-human-settlement-definition-types-hierarchy.html http://archaeology.about.com/od/sterms/g/settlement.htm

○ Urban ○ Rural • Urbanization • Problems of large cities	c. Nucleated Settlements d. Dispersed Settlements • Describe the concept of Urbanization (planned and unplanned cities) with example from the world and Pakistan. • Identify the problems of large cities with reference to Pakistan.	site and situation, and its pattern	https://www.google.com/search?q=types+of+settlement+images&client=firefox-b-d&tbm=isch&source=iu&ictx=1&fir=tG8f-9rGeBoISM%252CbxMrAp0Y0QwJBM%252C_&vet=1&usg=AI4_-kRSFE-RLBJ775w_N5lBCRfWESX3Gg&sa=X&ved=2ahUKEwjqnobxypLrAhWhzIUKHeoGC9IQ9QEwAHoECAEQFw&biw=1366&bih=606#imgrc=tG8f-9rGeBoISM
VII. Economic Activities • Definition • Types	The students will be able to: • Define Economic Activities. • Classify their types on the basis of their stages.	Activity 12: Draw a map of Pakistan and show the major sea ports of Pakistan.	https://www.gktoday.in/gk/four-types-of-economic-activities/ https://www.clearias.com/sectors-of-economy-

• Primary • Secondary • Tertiary • Quaternary	a. Primary Activities (Agriculture, Mining, Stock rearing). b. Secondary Activity (Manufacturing) c. Tertiary Activity (Trade and services) brief description. d. Quaternary Activity (Services provided by Teachers, Lawyers, Bankers, Doctors) brief description.	Activity 13: Role play on different tertiary and quaternary activities. [Suggestion for Textbook writer pictures of ports and Dock yard must be given	primary-secondary-tertiary-quaternary-quinary/
VIII. Environmental issues • Land Pollution • Water Pollution (Marine pollution) • Air Pollution	The students will be able to : • Define Pollution. • Examine types of pollution and its impacts (Examples from Pakistan must be given). • List the factors contributing to environmental Pollution. • Suggest remedies and measures to reduce and overcome pollution.	Activity 14: Project work Collect information about Marine pollution also suggest preventive measures.	

5.1.3. SECTION-III: GEOGRAPHICAL SKILLS AND QUANTITATIVE TECHNIQUES

Themes	Learning Outcomes	Activities	Links
IX. Mapping skills (Statistical diagrams) • Scales. • Measuring distance. • Directions. • Types of North. • Bearing	The students will be able to: • Define scales and their types.(in words, in ratio, in line) • Use the scales to measure distance on a map i.e. (straight lines and curve lines) • Define Cardinal points (Concept of four directions and Compass direction) • Identify types of north (True north, Grid north and Magnetic north). • Define Bearing ,Shade method and Line graph	Activity 15: Measure straight line distance and curved line distance on an outline map of Pakistan.	www.infoplease.com/ipa/a0001769.html

Chapter 06: Grade VIII

6.1. Learning Themes and Students' Learning Outcomes

6.1.1. Section-I: PHYSICAL GEOGRAPHY

Themes	Learning Outcomes	Activities	Links
I. Work of River (an agent of change)	The students will be able to: • Discuss the River System a. The source of river system(tributaries, mouth, distributaries, drainage basin and water shed) b. Hydrologic cycle(precipitation, transpiration, condensation) c. A diagram for the hydrological cycle. • Describe the three stages of river course (River Indus).	Activity 1: Make a Model of hydrologic cycle.	http://www.enchantedlearning.com/geography/rivers https://www.britannica.com/science/river https://www.youtube.com/watch?v=fdMmzY7XjFo

	• Examine the work of River i.e. Erosion, transportation, deposition and related features (Discuss the Flood Plains of Pakistan). • Design safety measures taken during floods in Pakistan.		
II. Hydrosphere • Introduction • Major water bodies • Configuration of Ocean floor • Movements of ocean water	The students will be able to: • Define Hydrosphere. (Percentage of land and water). • Identify the major water bodies and land masses (World Map showing important Oceans ,Seas and sea routes) **The Oceans** a. Pacific Ocean b. Atlantic Ocean c. Indian Ocean d. Southern Ocean e. Arctic Ocean • Explain the difference between oceans and seas	Activity 2: Identify major Oceans and Continents of the World on a given map and globe. **Activity 3:** On the given map of Pakistan. Identify the adjoining seas. Activity 4: Draw a map of Pakistan and show the following :	https://www.youtube.com/watch?v=VERC-gAKmh8 https://www.researchgate.net/figure/World-Map-showing-the-World-Oceans-and-Seas_fig9_234320186 https://worldoceanreview.com/en/wor-

• Waves, currents and tides	• Analyse the importance of Arabian Sea for Pakistan **The Continents** a. Asia b. Africa c. North America d. South America e. Europe f. Australia g. Antarctica • Exhibit an understanding of the configuration of Ocean floor (cross section of Ocean floor). • Discuss the motions of the Ocean water i.e. waves, tides (Neap and Spring tides)currents (causes and effects) • Compare the major currents of Pacific and Atlantic Ocean	a)Location of Arabian Sea b) Countries around Arabian Sea For Textbook writer (Information Box : importance of Arabian Sea and resources) (Do you know , What are land lock countries)	1/climate-system/great-ocean-currents/

III. Natural Climatic Regions of the world	The students will be able to: • Define Natural Climatic Regions and explain the deciding factors in the making of Natural Climatic Regions and their location(Latitudinal extent) • Compile information of the Natural climatic regions under the required headings(Location, (latitudinal extent),Countries, Climate with respect to temperature and rainfall, Natural vegetation, Human activities) a. Tropical Rainforest Region b. Monsoon Region(Pakistan) c. Hot desert Region d. Mediterranean Region e. Temperate Grassland Region f. Tundra Region	Activity 5: Make the models of different houses built by local people in the Natural Region. (Find it out on the net).	http://www.yourarticlelibrary.com/geography/13-major-natural-regions-of-the-world/12723 http://www.physicalgeography.net/fundamentals/7v.html

6.1.2. SECTION-II: HUMAN GEOGRAPHY

Themes	Learning Outcomes	Activities	Links
IV. People and Places around the world **TURKEY** **V. Federating Units of Pakistan [GB,AJK]**	The students will be able to: • Identify the physical location • Enlist the interesting geographical facts. • Inspect population Structure and density • Compare and contrast the cultural life of Turkey under following headings: a. Religions b. Ethnic groups c. Languages spoken d. Life styles and food • Analyze the map of GB and AJK and demarcate its boundaries by recognizing the bordering cities and physical features.	Activity 6: Research work: Find the original map of Asia Minor and then outline the area or the boundary of modern day Turkey.	A trip in Istanbul explaining Turkish Culture and Habits (Part 2) VLOG &EDUCATIONAL https://www.youtube.com/watch?v=wQ3iGcBqgfc

	• Critically analyze the distribution of population in GB and AJK. • Compile information on GB and AJK i.e ▪ Area ▪ Five main cities ▪ Economic Activities ▪ Ethnic and religious groups ▪ languages spoken ▪ Interesting geographical facts of the two Units ▪ Urbanization	Activities7: Make a power point presentation / picture book about the traditional dresses , touristic sites and historical places also mention the unique geographical and manmade features in the region.	
VI. Major Environmental issues • Desertification • Soil erosion • Marine pollution	The students will be able to: • Discuss the major environmental issues e.g. a. Desertification(cutting of trees, overgrazing, salinity)	Activity 8: Make a poster to create awareness about sustainable environment.	https://www.sustainablesanantonio.com/practices-technology/reduce-reuse-recycle/

• Disposal of all wastes • Concept of ''3R's'' Principle	b. Soil Erosion (types of soil erosion, impact on human life) c. The main sources of marine pollution and how to prevent it. d. Disposal of waste (industrial waste, domestic waste, commercial waste) the steps taken for the disposal of these wastes. e. What measures are taken for the disposal of various wastes in Pakistan? • Evaluate the concept of 3 R's principle (Reduce, Reuse and Recycle).	Activity 9: Project work Use Recycle materials to Make new useful things	https://www.epa.gov/recycle/reducing-waste-what-you-can-do https://en.wikipedia.org/wiki/Environmental_issues_in_Pakistan
VII. **Energy Resources** • Natural Resources • Renewable Resources:(Hydroelectric energy,	The students will be able to: • Define Natural Resources. • Interpret the difference between Renewable and Non-Renewable resources. • Explain the uses of these resources and how they are obtained. • Describe the uses of solar energy and wind energy.	Activity 10: Make working models using different energy resources.	https://www.ducksters.com/science/environment/renewable_energy.php https://www.youtube.com/watch?v=wMOpMka6PJI

solar energy, wind energy, Geothermal energy, Biomass energy) • Non-Renewable Resources: (Coal, petroleum, natural gas, Nuclear power) • Use of Energy resources and their impact on environment	• Describe the impact of these resources on human and natural environment. a. Identify the steps for the development and conservation of these natural resources.		https://en.wikipedia.org/wiki/Renewable_energy_in_Pakistan

6.1.3. SECTION-III: GEOGRAPHICAL SKILLS AND QUANTITATIVE TECHNIQUES

Themes	Learning Outcomes	Activities	Links
VII. Maps, Map skills, Statistical Diagrams and Modern Techniques in Geography • Showing relief :Contours • Distribution Maps ○ Dot Maps ○ Choropleth Maps • Statistical Diagrams	The students will be able to: • Identify at least four methods of showing heights • Draw contours of some physical features as a major skill with the help of given examples. • Show the distribution of population with the example from given methodology and data(Choropleth map) a. Dot method b. Shade Method • Learn the uses of the statistical diagrams of the following: a. Line graph(climatic data of Pakistan) b. Bar graph (climatic data of Pakistan) c. Pie graph(area under major crop production of Pakistan)	Activity11: Build a computer based model with the help of given geographical data.	www.infoplease.com/ipa/a0001769.html

• Modern Techniques in Geography ○ GPS ○ GIS ○ Remote Sensing ○ Computer based model	• Define and explain the importance of GPS and GIS • Explain the uses of Remote Sensing a. Satellite images b. Aerial photographs • Computer Based Models.		

Chapter 07: Teaching Strategies

7.1. Teaching Approaches for Geography:

The study of Geography deals with the characteristic of a place, its physical features and the changes it goes through over passage of time. It also explains the human – environment relationship and their interaction with each other along with their interdependence.

The discipline of geography has a wide range of studies, various teaching methodologies, it synthesize at two levels: first by bringing together the different traditions and themes within the fields second by stressing the synthesizing role of geography as a whole in relation to neighboring fields.

Geography often starts with the following questions:

- Where is it?
- What is it?
- When did it happen?
- When will it happen?
- What is its impact?
- What are the positive & negative impacts? And so on.

To answer these questions geography needs its tools of investigation like location, situation, interaction, spatial distribution and other various features.

Geography is uniquely relevant to current concerns both with the environment, ecology, regional contrasts and imbalances in human welfare.

The teaching objectives of geography may be achieved by determining and evaluating the prior knowledge and aptitude of students. Group discussion on a particular topics

open new windows of understanding and knowledge interactive learning through questions and feedback promotes reflective thinking. Focus of learning should be curriculum content.

7.1.1. Learning through fieldwork:

Fieldwork is real life application of geography in student's life. It helps build a global perspective.

Fieldwork is a key factor in the learning of geography, it provides an opportunity to the students to apply their knowledge, it can be a case study on global or local issues. This builds new concepts and the students gain awareness of mapping and land plotting skills. The focus of fieldwork is to develop three balanced skills i.e:

a. **Map and globe (using longitude and latitude) to estimate time and distance. It helps to read and interpret any particular map.**

- Interpreting time zone maps.
- Interpreting Remote Sensing images- Analyzing cartograms.
- Interpreting weather maps and predicting weather conditions.
- Interpreting topographic maps etc.

b. **Geography / Social Studies**

The theoretical literacy is an important skill in fieldwork. This helps to interpret and analyze statistical diagrams on any given project or issue, it helps in making decisions e.g. (population, timeline, bar graphs, line graphs etc)

c. **Critical thinking and problem solving:**

This helps to identify central issues, determines the relevance of the issue. It also helps to distinguish fact from opinion, false from accurate images, perceives cause effect

relationship. It plays a key role in making conclusions by giving reasoned judgment through inferences.

Fieldwork should not be limited to visits and tours where students play a passive role but it should be conducted in such a way by the teachers that students become active participants and a high level of target should be achieved.

Information technology allows the teacher to customize or make specific lesson plans according to their schedule. It helps the teacher to create tests, print material from teacher guides and help their students to become a global student. This information and communication technology provides students with a structure for learning the key concepts and also increases their vocabulary. They can search various web – links and websites.

The use of internet in making presentation through computer and multimedia gives confidence to the students. Use of personal computers, whiteboards and laptops can engage a greater number of students. The information technology broadens the horizons of students' knowledge and perceptions of an issue. The skill of information technology is one of the biggest tool in understanding geography.

Geographic information system:

Today computer software known as Geographic information system allows the geographers to rapidly process huge amounts of data that is obtained through censuses and remote sensing images. They are able to examine the world in great detail. In most cases GIS is combined with maps to identify relationships between different information data. Presently GIS is used by market analysts, engineers, urban planners in order to do their work efficiently.

7.1.2. Learning through the use of resources:

Geography is the study of place and space across the surface of the earth. The teacher of geography asks many questions, e.g. what are different places like? How do places change overtime? How do people change the world around them? To answer all these questions, teachers and students of geography need to collect information, analyze it and to display their findings for others to check and see.

Collecting information through various sources:

To gather data different sources and tools are used i.e. worksheets, textbooks reference books, models, computer software, interactive games, internet links, newspaper, laboratory instruments and so on. The latest forms for source is remote sensing images that can reveal many different views of the earth's surface.

Analyzing Information:

After collecting information, geographers must analyze. They study the information looking for patterns as well as possible causes and consequences of the information they gather.

Displaying Information:

To share the findings of the information gathered with other students, the best way is to display it by using or drawing maps, statistical diagrams with various meaningful shades or statistical tables and graphs.

7.1.3. Learning through the use of games and simulations:

The concept behind this teaching methodology is to encourage children and students to think critically, analyze the probable consequences and take decisions for themselves whether right or wrong. The modern technology of the present world helps students to delve deep into an issue, to look at it in a broader picture by using images on computer, powered by various satellites in the space. This inquiry based approach develops the skills of students e.g. they can determine

cause and effect, relevance, anticipate reactions, determine the alternative measures by evaluating the potential positive and negative course of any action.

These skills strengthen the mental and physical capabilities of the students. These approaches lead the students from lower level to higher level of their caliber. The concepts and knowledge clarify all the tangles of the phenomenon of the earth & space.

Chapter 08: Assessment and Evaluation

8.1. Assessment:

Assessment is the process of gathering and evaluating information using a variety of tools, techniques that are easy to understand and interpret. Assessment for learning (AFL) is an approach to gather feedback on teaching and learning which is then used to improve students' performance. Students become more involved in the learning process and from this they gain confidence in what they are expected to learn and achieve.

8.2. Purpose of Assessment:

The main purpose of all assessments is to provide a clear evidence that a certain level of learning and knowledge has been achieved by the learner in various ways:

A. Demonstration of understanding of the curriculum content and achievement of learning outcomes
B. Achievement of expected standard and performance
C. Clear indication to assess learner's strength and weakness
D. A collective indication of all learners output

The assessment of learners in a classroom is made through various ways and a variety of sources e.g.

i. Examination and tests in the form of quiz and papers

ii. Assignments and presentations

iii. Projects and field work etc.

These assessments serve as a guideline for the teacher to adopt new teaching methodologies to improve the potential of learners in achieving the highest bench marks of the curriculum.

8.3. Types of Assessments:

Assessment and its various patterns should be in accordance with the needs of the curriculum and designed in such a manner that they inculcate and improve in learners' various skills such as observations, curiosity, creativity and application. The main source of assessment is evaluation made on the assessment data formed by the teacher where the weaknesses gaps and deficiencies are marked. The evaluation always follows a certain design or a pattern that is a component of a systematic process of assessment.

There are **three basic types** of assessment through which we can evaluate students learning;

Formative Assessment (assessment for learning): Formative assessment is the basic tool of assessment where both teacher and learners' level of achievement can be gauged. The teacher may use a variety of methods to process evaluation for a learners need of:

a. Comprehension

b. Academic progress

The primary focus of a teacher in formative assessment is to identify areas that needs improvement for the learner and the teacher herself. It is basically taking an informed decision to determine teaching effectiveness and learners progress.

Summative Assessment (assessment of learning): Summative assessment is basically an end final or summation of all types of evaluation made in a given period of time for achievement of set targets standard and the learning outcomes of the curriculum content.

Summative assessment is made at the end of a learning sequence and is a record and report of a learners' overall progress, they are graded to measure the level of achievement

Assessment as Learning: The third type of assessment is the process of learning that is inculcated in the learners to develop their skills, aptitude for learning and addition in their knowledge. This form of assessment is the recognition of learners own self of absorbed and gained knowledge. Learning in this case is not measured or graded but is related in such a way that a learner becomes a lifelong learner and it's wish to gain knowledge from any source may it be a teacher, peer or any other tool that can be used to improve and change a learners perspective.

Chapter 09: Guidelines for Authors

9.1. GUIDE LINES FOR AUTHOR

- Structure is a key aspect of author's work. It defines how well the content is displayed .It should be consistent throughout the text book.
- Whilst writing textual material, it is essential that the standards for quality textbooks included in the Minimum National Standards for Quality Education be kept as the guiding framework.
- The introduction should be thorough, clear and stimulating. It should clearly indicate the significance of the subject, its objectives and should orientate the learner to previously acquired knowledge and skills in relation to the new.
- Sequencing of chapters should be as per the curriculum. These should be organized and structured in a logical and consistent way. The content covered should be coherent and self-contained.
- The most important guideline for the author is to use authentic knowledge and latest developments of the discipline.
- Interesting Facts in Federating Units of Pakistan should be authentic.
- Chapter opening material (Outlines, learning objectives, Key terms and definitions).
- Chapter closing material (Discussion or study questions , In-class activities and project, Problem-solution, Summary or conclusion and further reading or research)
- Appropriate use of language which is subject specific is very important .All terminologies and material should be subject based.
- It is advised that the language of the subject should be comprehensive, clear and interesting for the students.
- Help may be taken from subject base authentic writers and their books.

- The convention of languages used in the discipline must be followed to ensure adherence to international standards (read in conjunction with the bullet on standards for Quality Textbooks).
- There should be consistency in spellings (where difficulty can arise from quotations in which a word is spelt otherwise than in the adopted way), the use of capital letters, punctuation, abbreviations, hyphenation, italicization and bibliographical references.
- In setting out facts and in developing arguments and conclusions, the author must take great care not to use words, concepts or terms which are likely to be unknown to the learner. However the correct technical word is always the best word to use, and therefore it must be introduced, with suitable example or illustration, by definition in the text rather than in a footnote or appendix **.**
- Reference books may be used in particular cases .Most updated information latest Journals and Economic Survey reports should be used.
- The textbook should include visual aids like clear conceptual diagrams, maps and information boxes.
- Ensure that Illustrations (photos or other visual elements) that are being used are relevant/salient to understanding concepts or topics, and refer to these elements in the text. All maps must be approved by the Government of Pakistan.
- Unnecessary details may be avoided keeping the content and text precise and efficient in conveying the concepts
- All topics must be dealt in a progressive language with the given references for the help of teachers.
- All information provided must be precise and correct.
- Glossary and references should be provided.

Curriculum Review Committee for Geography (VI-VIII)

S. No	Name	Organization
1	Ms. Fauzia Mujahid	Principal, Islamabad Model College for Girls, I-10/4, Islamabad.
2	Mrs. Lubna Siddiqui	Associate Professor, Islamabad College for Girls, F-6/2, Islamabad.
3	Ms. Shazia Kamran	'A' Level teacher and trainer, The City School Rawal Campus, Rawalpindi.
4	Ms .Mehr Asad	Cluster convener and Principal Metropolitan Campus G11 ,Islamabad .Beaconhouse School System
5	Ms. Farzana Hashmi	Teacher, Wellington Campus, Roots International School, Islamabad.
6	Ms. Saima Abbas	Desk officer, National Curriculum Council Secretariat