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Syllabus aims:

The syllabus aims is to give candidates a knowledge and understanding of the importance to the people and country of Pakistan of its physical characteristics, human and natural resources, economic development, population characteristics, and of their inter-relationships.

The ‘Aims and Objectives’ is to include interpretation, analysis and evaluation of resources. Whilst knowledge and understanding are important, the syllabus also aims to develop skills in using resources such as maps and graphs. It also aims to stimulate discussion on the issues and a challenge raised and helps to develop resource skills and encourage the students to express opinions and make evaluations.

List of Content:

1. The land of Pakistan
   a) Location of Pakistan:
      Students should be able to identify the following on a map:
      - The Tropic of Cancer, latitudes 30°N, 36°N, longitudes 64°E, 70°E and 76°E.
      - The Arabian Sea.
      - The countries sharing a border with Pakistan, and Pakistan’s position in relation to others in South and Central Asia.
   b) Location of provinces and cities:
      Students should be able to identify the following on a map:
      - Provinces, Northern Areas (Gilgit–Baltistan) and FATA.
      - Cities: Islamabad, Muree, Rawalpindi, Gujranwala, Lahore, Faisalabad, Multan, Sialkot, Peshawar, Chitral, Gilgit, Hyderabad, Karachi, Quetta and Gwadar.
   c) The natural topography, including drainage:
      Students should be able to identify the following on a map:
      - Rivers: Indus, Jhelum, Chenab, Ravi, Sutlej, Kabul, Hab and Dasht
      - Deserts: Thar, Thal and Kharan.
      Students should be able to:
      - use appropriate vocabulary when describing the distinguishing features of mountains, plateaux, floodplains and deserts (knowledge of the formation of the natural topography of Pakistan is not required).
      - identify and name the above features on a photograph or drawing.
      - understand the influence of the natural topography on human activities.
      - steep slopes and flat land on the way that the land is used.
      - mountains and deserts on the road and rail networks.
   d) Climate:
      Students should:
      - know the distribution of temperature and rainfall, including monsoon, depressions and convective rain.
      - know seasonal and regional variations, and the factors contributing to them, including depressions, thunderstorms and cyclones (typhoons).
      - understand the causes of the monsoon (knowledge of the causes of other types of rain is not required).
      - describe and explain the characteristics of the climate of the arid, semi-arid, humid and highland regions, including seasonal variations.
      - know the influence of latitude and longitude on day length and climate.
      - understand the influence of the climate (both the benefits it brings and the problems it causes) on the economy and on the lives of the people.
      - the influence of low temperature, ice and snow on the lives of people in the mountains.
      - the influence of rain storms and flooding on agriculture, industry and communications— the problems caused by drought and shortage of water supply on agriculture and industry.
2. Natural resources – an issue of sustainability:

a) Water:
Students should be able to:
- identify on a map the Mangla, Tarbela and Warsak dams, and name two examples of barrages.
- understand the importance of water as a resource; understand how supplies for agricultural, industrial and domestic purposes are obtained, maintained and controlled as well as used;
- understand the reasons for, and consequences of, the Indus Water Treaty.
- explain and evaluate the causes of and solutions to the problems of water supply (including pollution).
- understand the value of water as a resource for development.
- explain and evaluate how water supply issues can lead to conflict.

b) Forests:
Students should be able to:
- understand the different types of forest and identify, on a map, their main locations.
- understand the physical factors that control the distribution of the different types of forest, and the human factors which have reduced their extent.
- understand the reasons for the development of plantations in the Indus Plain, afforestation on mountain slopes and plateau.
- understand the value of forests as a resource for development, and the importance of their sustainability.
- explain the effects of deforestation, such as soil erosion, silting and flooding.
- evaluate possible solutions to the problems caused by deforestation.

c) Mineral resources:
Students should be able to:
- identify the main locations of limestone, gypsum and rock salt extraction on a map, and understand their uses.
- identify the main metallic and non-metallic mineral resources of Pakistan, and in what quantities they are extracted, exist as reserves.
- understand the extent to which these can be exploited.
- describe the environmental problems caused by mineral extraction.
- evaluate the benefits of developing mineral resources and understand the sustainability of extraction.
- identify the main imported minerals, where they come from, and in what quantities.

d) Fish
Students should be able to:
- describe the fishing methods used in both marine and inland waters, including fish farms.
- give examples of the fish caught in both marine and inland waters, and of the fish reared on fish farms.
- give examples of the fishing ports on both the Balochistan and Sindh coasts.
- describe the uses of the fish caught.
- explain improvements in fishing methods and processing techniques.
- understand the problems facing the fishing industry and evaluate the possibilities for its further development and sustainability.

3. Power

a) Sources:
Students should be able to:
- describe, with the help of a simple diagram for each method, how non-renewable fuels (coal, crude oil and natural gas) are extracted coal as obtained by open cast, adit and shaft mining methods, natural gas and crude oil obtained by exploration and drilling.
- understand the difference between renewable and non-renewable sources of electricity.
explain (briefly) how electricity can be generated from renewable resources (hydel, wind, solar, and other possibilities such as wave, tidal, biofuels, geothermal).
understand the importance of power sources for development.

b) Non-renewables:
Students should be able to:
describe the quality and the amount of coal available from within Pakistan and how long reserves are likely to last, and also describe the types of coal which have to be imported for industrial purposes.
describe how coal both produced in Pakistan and imported is transported to the end users.
state how much natural gas is produced by Pakistan, and how long reserves are likely to last.
describe the extent of the natural gas pipeline network in Pakistan and explain how natural gas can be taken to those parts of Pakistan away from the pipelines, and the limitations of doing this.
state how much oil is produced by Pakistan, how long reserves will last and how much oil is imported, and explain why it is necessary to import large amounts of oil.
describe the extent of the oil pipeline network in Pakistan and describe the other methods that are used to transport both imported oil and oil produced in Pakistan.
derstand that electricity can be generated in a variety of ways. In thermal power stations by burning coal, oil, gas and waste, or with nuclear energy; or with renewable sources e.g. water (including hydel), the wind and the sun.
derstand that non-renewable power sources are running out, and are increasing in price.

c) Renewables:
Students should be able to:
explain and evaluate the advantages and disadvantages of the different methods of producing electricity from renewable resources (generated by water, wind, wave and sun).
derstand the physical and human conditions that favour the development of multi-purpose hydel schemes.
state and explain the factors, both physical and human, which promote or hinder the availability of electricity and other power resources, including the feasibility of small-scale, renewable power generation.
explain why the supply of electricity is not sufficient or reliable to develop many parts of Pakistan.

4. Agricultural development
a) Agricultural systems:
Students should be able to:
understand how small-scale subsistence farming, cash crop farming and livestock farming operate as systems made up of inputs, processes and outputs.

b) Crops and livestock:
Students should be able to:
identify on a map the main areas where cotton, rice, sugar cane and wheat are grown, and the main areas where buffalo, cattle, goats, sheep and poultry are reared.
recognise (from photographs) fields of cotton, rice, sugar cane and wheat; recognize (from photographs) buffalo, cattle, goats, sheep and poultry.
state the uses of the crops named above.
state the main products of the livestock named above and the uses of those products.
identify the main areas for the cultivation and growth of each of the following: apples, apricots, bananas, dates, maize, mangoes, millet, oilseeds, oranges, pulses, tobacco and vegetables. Know why they are grown there and state an important use of each.

c) Factors affecting production:
Natural factors: topography, climate (for both kharif and rabi crops), soils, pests and diseases.
Human factors: capital, labour, size of holdings, farming practices, irrigation (types and methods), waterlogging and salinity (including solutions), governmental actions to increase production.

Students should be able to:
- explain how natural and human factors affect production on small-scale subsistence farms, including rice grown using traditional methods of ploughing, transplanting, irrigating, harvesting and threshing on small, fragmented holdings using family labour.
- wheat grown in areas dependent upon rainfall (barani farming areas).
- dates and vegetables grown using karez irrigation in a desert oasis.
- explain how natural factors, including climatic requirements, and human factors affect the production of cotton, rice, sugar cane (kharif crops) and of wheat (a rabi crop) under the cash crop farming system.
- explain how natural and human factors affect livestock farming (poultry farming, the keeping of buffalo and cattle, the keeping of livestock) on small-scale subsistence farms and the keeping of cattle, goats and sheep on a nomadic or semi-nomadic basis, including transhumance.
- describe the different types of irrigation and explain the advantages and disadvantages of each for small-scale subsistence farming, and for the growing of cotton, rice, sugar cane and wheat, canal irrigation, karez, inundation and perennial canal, lift irrigation, Persian wheel and tube well.
- understand the roles of dams, barrages, link canals, distribution canals, field channels and bunds.
- explain the causes of waterlogging and salinity, and explain how land damaged by it can be restored.
- evaluate how agricultural practice and water management can be improved to prevent it happening.
- understand how government action has helped to increase production through land reforms, the promotion of training and the use of machinery, chemicals, improved seeds and other means.
- understand and evaluate the possibilities for and problems of the development of agriculture and its sustainability.

5. Industrial development

a) Understanding common terms:

Students should be able to:
- understand the meaning of the terms raw materials, refined, processed, manufactured and value-added.
- understand the meaning of the terms infrastructure and services.
- be able to define the terms primary industry, secondary industry, and tertiary industry.

b) Secondary and tertiary industries:

Processing and manufacturing industries to be studied: cement, cotton (from ginning to clothing), sugar refining, crafts, fertilizer, iron and steel, brick, oil refining, sports goods, surgical instruments. Tourism.

Students should be able to:
- understand the definitions used in Pakistan to distinguish between large-scale industry, small-scale industry and cottage industry.
- state the main products of the listed industries and whether they are destined for the domestic market and/or for the export market.
- state the main locations of the listed industries and explain the factors influencing location and development – capital, site, sources of raw materials, power, water, labour, communications, government policy and other means.
- understand the differences between the formal sector and informal sector of industry.
- understand the range of services provided by the informal sector, and their advantages and disadvantages to the development of Pakistan.
- understand the importance of both the formal and informal sectors, and evaluate the contributions of both sectors to the development of the listed industries.
- understand sources of capital and labour.
- state and explain how the governing authorities promote industrial growth.
- name examples of export processing zones and other industrial estates, explain the reasons for their development and describe their characteristics.
- assess the feasibility of using global communications to enhance employment opportunities in service industries, e.g. call centers.
- state and describe briefly, with an example of each, some of the natural and cultural attractions of Pakistan that are, or could be made available to tourists.
- assess the feasibility of developing tourism as a means of increasing employment, development, gross national product (GNP) and gross domestic product (GDP).

6. Trade
   a) Major exports and imports
      Students should be able to:
      - name the main exports and imports.
      - describe the changes in the types/amounts/value of goods exported and imported in recent years.
      - know and understand the meaning of GNP and GDP and the difference between them.
      - explain the effect of changing trends in exports and imports on Pakistan's balance of trade and economy.

   b) Pakistan’s trading partners
      Students should be able to:
      - name and locate Pakistan’s main trading partners, and name the goods Pakistan exported to them or imported from them.
      - understand the factors which may promote or hinder trade with other countries, and explain why it is difficult for Pakistan as a developing country to maintain or increase its share of trade with other countries.
      - understand the factors that may promote and limit trade, including trading blocs, trade barriers and currency exchange rates.

7. Transport and telecommunications
   a) Internal transport:
      Students should be able to:
      - interpret maps to describe the regional variations in the density and pattern of the road, rail and air transport networks within Pakistan.
      - explain the factors which help and hinder the location, maintenance and development of roads, railways and airports.
      - describe improvements that have recently taken place in road, rail and air communications, and consider the feasibility of new developments.
      - compare the advantages and disadvantages of road, rail and air transport within Pakistan for both goods and people.
      - evaluate the development of new transport schemes, including motorway and airport development.

   b) International transport
      Students should be able to:
      - identify on a map those roads (including the name of the pass they use, where relevant) and rail and airways which cross the international boundary and are in use for at least part of the year.
      - identify on a map the ports of Keamari, Qasim and Gwadar, and the cities with international airports.
      - explain the factors which affect the location and development of cross-border roads and railways, seaports, dry ports and airports.
      - explain what is meant by the term dry port, name an example of one and explain why they have been developed in many cities of Pakistan.
c) Telecommunications
   Students should be able to:
   - explain the importance of radio, television, phones, fax machines, emails and the internet in the fields of education, industry, services and trade.
   - understand the problems of providing telecommunications in some parts of Pakistan.
   - evaluate the role of telecommunications in the development of Pakistan.

8. Population and employment
   a) Structure and growth:
      Students should be able to:
      - understand the changing population structures (both age and sex) as shown by population pyramids for Pakistan.
      - explain and evaluate the effects of the present and projected population structures on the economy and development of Pakistan.
      - interpret graphs and statistics illustrating birth rates, death rates and the rates of natural increase in Pakistan, and identify trends in population growth.
      - explain the social, educational, economic and political factors which contribute to population growth over time.
      - explain the problems for development caused by population growth over time consider its sustainability and evaluate possible solutions to these problems.

   b) Movements of population:
      Students should be able to:
      - describe and explain, with reference to both ‘push’ and ‘pull’ factors, the main causes of population movements, including rural-urban migration, seasonal migration, emigration and immigration (including refugees).
      - describe and explain the effects of these population movements, including shanty developments in cities, tent cities and the de-population of rural areas.
      - understand the effects of population movements and evaluate the measures which may be taken to help solve the problems created, such as self-help schemes, provision of clean water and other services (including adverse outcomes such as poor housing).

   c) Distribution and density of population
      Students should be able to:
      - distinguish between distribution of population and density of population.
      - recognize the variations in both distributions of population and density of population between the Provinces (including the Northern Area) and within the Provinces (including within the Northern Area).
      - explain the physical, economic, social and political factors which contribute to these variations.

   d) Employment:
      Students should be able to:
      - define the terms primary, secondary and tertiary in relation to occupations
      - describe and explain the proportions of the workforce engaged in each of the primary, secondary and tertiary sectors, and any changes in these proportions that may have taken place or may be taking place.
      - understand and explain the causes of rural and urban unemployment and underemployment (that is, people who are not fully employed), and understand the problems for development created by underemployment and unemployment.
      - describe and explain the availability of skilled labour (people qualified for the professions, for management and as technicians, etc.) and manual labour.
      - understand that unemployment and underemployment can be factors that influence GNP and GDP.
      - understand and evaluate the importance for Pakistan’s development of literacy, education and training for both males and females, in rural as well as urban areas.
**Book List**

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<th>Edition</th>
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<th>ISBN</th>
<th>Publisher</th>
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<tr>
<td>Geography Today Pupil Book 1 Revised Edition</td>
<td>New</td>
<td>Crawford, D</td>
<td>1901458008</td>
<td>Published by Peak Publishing Ltd, UK</td>
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<tr>
<td>Geography Today Pupil Book 2 Revised Edition</td>
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<td>Crawford, D</td>
<td>1901458016</td>
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<tr>
<td>Geography Today Pupil Book 3 Revised Edition</td>
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<td>Crawford, D</td>
<td>1901458024</td>
<td>Published by Peak Publishing Ltd, UK</td>
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<tr>
<td>Oxford School Atlas for Pakistan New Edition</td>
<td>Endorsed</td>
<td>Khan, F. K.</td>
<td>9780195475807</td>
<td>Published by Oxford University Press, Pakistan</td>
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<tr>
<td>Issues in Pakistan’s Economy</td>
<td></td>
<td>Zaidi, S A</td>
<td>0195790529</td>
<td>Published by Oxford University Press, PO Box 13033, 5 Bangalore Town, Sharae Faisal, Karachi 75350, Pakistan</td>
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<tr>
<td>Pakistan: Geography, Economy and People</td>
<td>Endorsed</td>
<td>Khan, F K</td>
<td>0195471547</td>
<td>Published by Oxford University Press, No. 38, Sector 15, Korangi Industrial Area, Karachi-74900, Pakistan</td>
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<tr>
<td>The Environment of Pakistan, Pakistan Studies</td>
<td>Suggested</td>
<td>Huma Naz Sethi</td>
<td>1-901458490</td>
<td>Published in 2007. Edition: 2</td>
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**Other resources**
- Journal of the Pakistan Geographer Association (published annually)
- WWF – Pakistan Spellathon provides valuable resources on environmental issues facing Pakistan (World Wildlife Fund, PO Box 5180, 54600 Lahore)
Useful websites:

- www.pakistan.gov.pk
- Official website of the government of Pakistan – this site contains much relevant information and useful statistics: www.nssd.net/pakistan.html
- Pakistan section on the National Strategies for Sustainable Development website, from the OECD: www.finance.gov.pk/survey/survey.htm
- Link to an index of Pakistan newspapers, with hyperlinks to the homepage of each Resource are also listed on Cambridge’s public website at www.cie.org.uk. Please visit this site on a regular basis as the Resource lists are updated through the year.