### Dawood Public School
### Course Outline 2016-2017
### Geography
### Class: VII

**Book:**

<table>
<thead>
<tr>
<th>Month</th>
<th>Contents</th>
<th>Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Basic Skills</td>
<td>Geography Today Book 1 by Doreen Crawford.</td>
</tr>
<tr>
<td></td>
<td>Fresh Water</td>
<td>Geography Today Book 2 by Doreen Crawford.</td>
</tr>
<tr>
<td>September</td>
<td>Natural Vegetation</td>
<td>Geography Today Book 1 by Doreen Crawford.</td>
</tr>
<tr>
<td>October</td>
<td>Trade and Transport.</td>
<td>Geography Today Book 2 by Doreen Crawford.</td>
</tr>
<tr>
<td>November</td>
<td>Revision for Mid-Term Exam</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>Mid-Year Examination 2016</td>
<td>----</td>
</tr>
<tr>
<td>January</td>
<td>Agriculture</td>
<td>Geography Today Book 1 by Doreen Crawford.</td>
</tr>
<tr>
<td>February</td>
<td>Settlements and their industries</td>
<td>Geography Today Book 1 by Doreen Crawford.</td>
</tr>
<tr>
<td>March</td>
<td>Weather and Climate</td>
<td>Geography Today Book 2 by Doreen Crawford.</td>
</tr>
<tr>
<td>April</td>
<td>Revision for Final Exam</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>Final Examination 2017</td>
<td></td>
</tr>
</tbody>
</table>
Chapter: Basic Skills

Page# 66-109

Reference Book:


Topics:

- **Maps.**

  A map is a visual representation of an area – symbolic depiction highlighting relationships between elements of that space such as objects, regions, and themes. Map can be read or interpreted with the help of its Title, Scale, North sign, Legend or Key, Scale, Grid lines.

  a) Political maps: Map showing individual countries, each separated by national boundary.
  b) Thematic Maps: A thematic map is a type of map especially designed to show a particular theme related to a specific geographic area. These maps can portray physical, social, political, cultural, economic, sociological, agricultural, or any other aspects of a city, state, region, nation, or continent.
  c) Climatic or Weather maps: A climatic map gives general information about the weather condition, temperature and precipitation (rain and snow) of a region. Representation of data can be done by choropleth or symbols.
  d) Physical or Topographical maps: A physical map shows all the natural and manmade features on the earth’s surface. Topographical maps can be choropleth or contour.

- **Photograph Interpretation**

  Photographs are the important source of data for geographical analysis. Photographs can be interpreted using a structural method of division into three vertical and three horizontal directions. Photographs can be ground photograph or aerial photograph.

- **Graphs.**

  Graph is a diagram showing the relation between variable quantities, typically of two variables, each measured along one of a pair of axis at right angles. It is also an important tool for a geographer, for instance in order to know precipitation received by an area in the course of month or year, or to know the population growth of a town or a country.

- **Diagrams.**

  Diagrams can be of two types, Cross sectional and block diagrams. Cross sectional diagrams represent interior of the object, while block diagram is a three-dimensional drawing representing a block of the earth’s crust, showing geological structure.

- **Statistics.**

  The collection, organization, and interpretation of numerical data especially the analysis of population characteristics by inference from sampling or weather data.
Key Words: Political map, Dot map, Thematic map, Choropleth, Cross section, Statistical data, Mean, average, Grid, Latitudes, Longitudes.

(Refer to glossary given on Page no#220-223)

Model Questions:

1. Differentiate between a ground and an aerial photograph.
2. Interpret the following photograph.

3. Find out the position of alphabets A-J on map1.

Projects, Assignments and Activity:

- Work Sheet and handouts will be provided.
- Multimedia presentation related to basic skills of interpreting will be screened for students.

Surf I.T:

- http://www.slideshare.net/adeshipp/photographs-geography

August:

Chapter: Fresh Water

  Page# 29-39

Topics:

- What is Water?
  Water is made up of tiny particles called molecules. Each molecule of water contains even tinier particles called atoms. In one molecule of water there are 2 atoms of hydrogen (H2o), 1 atom of oxygen (o) so the chemical symbol for water is H2O.
• **Where is all the Earth's Water?**
  There is a fixed amount of water on the Earth. We can’t make any more. 97% is salty water in the seas and oceans. We cannot drink it. 3% is fresh. Water is found in rivers, lakes, rainfall, clouds, water vapors and is also underground and trapped in ice and snow.

• **The Importance of Fresh Water.**
  The United Nations declared the Year 2003 to be the International year of Fresh water. Water is needed for many purposes e.g. agriculture and industries, but this water does not have to be so safe. Despite this, there are still serious shortages in many countries for these purposes other than drinking.

• **Shortage of Fresh Water – A World Problem**
  There are many reasons which are the increase in population, industries and irrigation, the pollution of fresh water supplies and the problems of the supply of fresh water.

• **What are the Results of Shortages of Fresh Water**
  A shortage of fresh water has serious results. It can lead to problems within a country. It can also lead to disputes between countries and to serious damage being caused to the environment.

• **Desalination of Sea Water - A Solution for Water Shortage.**
  There are also a few desalination plants in USA and Singapore is planning to build two. Saudi Arabia desalinates by far the largest quantity. Its lack of water results from its hot desert climate but for Pakistan and other developing countries this project is very expensive.

• **Possible Solutions for the Water Shortages in Pakistan.**
  Treatment of sewage: It has been suggested that water suitable only for industry and agriculture could be provided by treating sewage. Desalination of sea water was rejected up to 2004 because of the high cost of building the desalination plants. However, in 2004 plans were announced to build Pakistan’s first desalination plants at Korangi Creek in Karachi and near Port Qasim.

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**Key Words:** Nun

**Model Questions:**

1. Discuss the merits and demerits of desalination plant shown in the following photograph.

2. Sort out the information about problems of water supplies in Karachi
   a) description of the problems
   b) The reasons for the problems
   c) The attempt to solve the problems.

**Projects, Assignments and Activity:**

- Worksheets and handouts will be provided
- Assignment on major dams of Pakistan will be given.

**Surf I.T**

- [http://www.planetseed.com/laboratory/drinking-water-sea](http://www.planetseed.com/laboratory/drinking-water-sea)
- [http://www.treehugger.com/clean-water/how-desalination-works.html](http://www.treehugger.com/clean-water/how-desalination-works.html)
Chapter: Natural Vegetation

- **What is Natural Vegetation?**
  Natural vegetation consists of plants which grow naturally and have not been planted by people for examples scrub, creepers, and lichens. Each type of natural vegetation has its own variety of plants. Differences in the amounts of rainfall and in the temperature are the reasons for this.

- **World Distributions of Natural Vegetation.**
  Natural vegetation is grouped into three main types: Forest, Grassland and Desert vegetation which is further divided according to world temperature zones such as Tropical Rain Forest, Coniferous Forest, and Cold and Hot Desert vegetation.

- **Tropical Rainforest:**
  It lies both north and south of the Equator and between the Tropic of Cancer and Tropic of Capricorn. The high temperatures and heavy rainfall throughout the year are the reasons for the trees growing so tall and close together. These trees are evergreen. The vegetation consists of multiple layers such as upper layer, middle layer and undergrowth.

- **Cold Temperate Coniferous Forest:**
  This type of forest is found only to the north of the Equator. These trees have special features such as flexible branches, thick bark and needles instead of leaves which help them to survive in temperatures below freezing point.

- **Tropical Grassland:**
  Tropical grassland consists of grasses and scattered trees between the tropical regions especially where the rain falls seasonally. Near the semi-desert areas the grasses are quite short. Near the tropical rainforest, where there is more rainfall, the grasses grow tall to over 0.5m.

- **Hot Desert Vegetation:**
  The existence of such vegetation is the result of low rainfall and high temperatures. Most of the hot deserts have some plants and they are all adapted to surviving long period of drought. Various types of cactus, e.g. the prickly pear have long roots, which widely near the surface so that they can catch any rainfall.

- **Tundra Vegetation:**
  The tundra vegetation can survive under the snow during the long winter when the temperature remains below freezing point for about nine months of the year. This vegetation consists of lichens. All these plants are small and close to the ground.

- **The Natural Vegetation of Pakistan:**
  Pakistan consists of variety of natural vegetation because of diverse topography and variant climatic conditions. We can see mangroves near the coast at south and coniferous at the north while Indus plain consists of scrub vegetation.
The Use of Natural Vegetation:
Natural vegetation consists of hardwoods and softwoods. Hardwood is hard and strong and has always been important for construction of boats and building. Coniferous trees are softwood and mostly used for paper making. Forests are the habitat of wildlife, provide grazing ground for herds and attract tourists to enjoy natural features.

The Destruction of Natural Vegetation:
The destruction of natural vegetation increased greatly, partly because of the increase of population in most countries. A large number of people require more places in which to live, more food, firewood and goods. Overgrazing is also one of the factors for the destruction of natural vegetation.

Key Words: Tropic of Cancer and Capricorn, dense vegetation, evergreen, conifer trees, deciduous, tundra vegetation, scrub, shrubs, cultivated vegetation, deforestation, overgrazing, soil erosion, conservation, desertification, endangered species, extinct.
(Refer to glossary given on Page no # 111-112)

Model Questions:
1. Identify the type of vegetation shown in the following figure and explain the features which help it to adapt itself to the environment.

2. Discuss why is it necessary to conserve natural vegetation?

Projects, Assignments and Activity:
- Worksheets and handouts will be provided
- Students will prepare charts on types of vegetation and its features.

Surf i.T

October:

Chapter: Chapter: Trade and Transport
  Page# 66-109
Topics:

- **Trade- Introduction**
  Trade is the flow of goods and services. Trade is the act or an instance of buying and selling goods and services either on the domestic (wholesale and retail) markets or on the international (import, export) markets.

- **Why do People Trade?**
  Every country or town is not self-sufficient in all the necessities of a life, in order to fulfill their needs people trade on domestic and International levels. Trade activities are carried out in order to satisfy people’s need for basic commodities and luxuries and to improve country’s economic and social condition.

- **How do we Trade?**
  Trade is carried out using different modes of transport depending upon the cost, availability of natural routes, feasibility, nature and size of product.

- **Dimensions of Trade**
  There are seven dimensions of trade, internal trade, International trade, visible trade, invisible trade, imports, exports and barter trade.

- **Difference between A Container Ship and an Oil Tanker**
  Container and oil ships are used to transport bulk quantities of products across the sea. Oil tankers are designed specifically to transport large quantities of oil from the source to destinations around the globe.

- **Description of An Oil Terminal and an Container Terminal**
  Docking of an oil tanker requires different set up on port such as tankers, pumps and connected pipes etc. to unload oil and store it on the port while container terminals requires cranes and warehouses.

- **Pakistan’s main Imports and Exports**
  Pakistan’s major exports comprise of agricultural products that are comparatively low in cost while imports are high value products such as oil and motors.

- **Why does Pakistan have a Negative Balance of Trade?**
  Pakistan has agro-based economy due to which the major exports are agricultural products such as cotton and rice. Due to political instability, lack of technology, energy crisis, offered incentives, government policies and investments from foreign and local investors Pakistan is facing negative balance of trade as its imports are higher than exports.

- **Role of Export Processing Zones and Export Promotion Bureau.**
  EPB and EPZ can play a vital role in boosting economic condition of a country. EPZ are the areas designated specifically to export oriented industries, where investors are offered incentives from the government, while EPB search markets for the country’s product, create brand awareness, hold fairs and exhibitions at local and international levels to improve exports.

- **Pakistan’s Trading Groups.**
  Pakistan main trading agreements include ECO, SAARC, and ATTA etc.
**Key Words:** Exports, imports, GDP, GNP, balance of trade, balance of payment, visible trade, invisible trade, internal trade, international trade, capital goods, consumer goods, barter system, oil depot, container terminal, hinterland, sheltered harbor, transit trade, land-locked country.

(Refer to handout)

**Model Questions:**

1. Describe the seven dimensions of trade with examples.
2. Describe the features of the port and vessel shown in Figure 1.

![Figure 1](image)

**Projects, Assignments and Activity:**

- Work Sheet and handouts will be provided.
- A documentary on Trade activities at Karachi Port vs Trade activities at Singapore will be screened.
- Lap book of import and exports of Pakistan and features of container ship and oil tanker will be displayed in the class for students.
- Assignment on Tasman Spirit, Oil Spills will be given.

**Surf I.T:**

- [http://www.economywatch.com/international-trade/benefit.html](http://www.economywatch.com/international-trade/benefit.html)

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**NOVEMBER-REVISION FOR MID TERM EXAMINATION 2016**

**DECEMBER-MID TERM EXAMINATION 2016**

**January:**

Chapter: Agriculture

  Page# 39-69


**Topics:**

- **The Importance of Agriculture in Pakistan.**
  Agriculture includes the cultivation of land and the rearing of animals. It is the livelihood for a large number of people in Pakistan. 75% of the population depends in some way on farming for their living. They provide food to people and to farm animals. It provides raw materials for industries in Pakistan that make goods to sell in Pakistan and to other countries. Wheat, cotton, rice and sugar-cane are the most important crops grown in Pakistan.

- **Agriculture as a System**
  Types of agriculture can be divided into 3 parts:
  **Input:** These are all the things necessary to create a particular type of agriculture.
  **Processes:** These are all the activities necessary to make the crops grow and to look after animals.
Outputs: These are all the things that are produced

• **Types of Crops:**
  In Pakistan agriculture activities continue throughout the year due to its favorable climatic condition. The crops that are sown in summer and harvested in early winter are known as Kharif crops for example rice, sugar cane, millets, maize and cotton. The crops that are sown at the beginning of the winter season and harvested in early summer are known as Rabi crop.

• **Subsistence Farming and Cash Crop Farming:**
  Subsistence farming means small scale farming by the poor farmer who grows crops for himself and for his family. A crop which is grown for sale is called a cash crop. Farmer sells the crop to receive cash.

• **Shift Cultivation:**
  It is a farming system where crops are grown for a few years in a clearing. This type of farming is practiced by tribes in forests round the world. Shift cultivation is also one of the reasons for deforestation.

• **Soilless Cultivation:**
  Soilless cultivation is practiced in Singapore which is a very small country and a very small area is left for farming due to growing population and industrialization. This involves high-tech methods to grow a lot of vegetation in a small area.

**Key Words:** Agriculture, export, tributaries, arable land, plantation, hydroponic and aeroponic.
(Refer to glossary given on Page no # 111-112)

**Model Questions:**

• Discuss the importance of agriculture for the economy of Pakistan.
• Identify the following processes of farming.

**Projects, Assignments and Activity:**

• Worksheets and handouts will be provided
• Assignment on Cannabis farming in Peshawar, its advantage and disadvantages will be given.

**Surf I.T**

- [http://www.neok12.com/Agriculture.htm](http://www.neok12.com/Agriculture.htm)
- [http://www.kidsgardening.org/node/3760](http://www.kidsgardening.org/node/3760)
- [https://www.towergarden.com/what-is-tower-garden/how-it-works/aeroponics](https://www.towergarden.com/what-is-tower-garden/how-it-works/aeroponics)

**February:**

Chapter: Settlements and their industries
Topics:

- **SETTLEMENTS:**
  A settlement is any form of human dwelling, from the smallest house to the largest city.

- **TYPES OF SETTLEMENTS**
  **Temporary**
  Temporary settlements are where people move their settled places to very temporary once.

  **Permanent**
  A permanent settlement is a community which is planned to remain in one place for a long time. One example of permanent settlement is a city, where even though people come and go, the buildings remain in use.

  **Nucleated**
  Nucleated settlements are ones where the houses are grouped closely together, often around a central feature like a church, pub or village green. New settlements that are planned often have a nucleated pattern.

  **Scattered / DISPERSED**
  Dispersed settlements are ones where the houses are spread out over a wide area. They are often the homes of farmers and can be found in rural areas.

  **Rural**
  A rural settlement is any settlement in the areas defined as rural by a governmental office, e.g., by the national census bureau. This may include even rural towns. In some others, rural settlements traditionally do not include towns. Common types of rural settlements are villages, hamlets and farms.

  **Urban**
  An urban area is a location characterized by high human population density and many built environment features in comparison to the areas surrounding it. Urban areas may be cities, towns or conurbations.

  **Linear**
  Linear settlements are settlements where the buildings are constructed in lines, often next to a geographical feature like a lake shore, a river or following a road. Where linear settlements follow a road, the road often predates the settlement.

- **PLANNED AND UNPLANNED CITIES**
  **Unplanned cities:** An unplanned city means that its physical appearance in the form of structures and roads networks are not in its Geographical plans thus leading to congestion causing floods and impact of other natural hazards.

  **Planned cities:** A planned community, or planned city, is any community that was carefully planned from its inception and is typically constructed in a previously undeveloped area. This contrasts with settlements that evolve in a more ad hoc fashion.

- **INDUSTRIES AND THEIR TYPES**
Manufacturing industries: Manufacturing industry refers to any business that transforms raw materials into finished or semi-finished goods using machines, tools and labor. Manufacturing sectors include production of food, chemicals, textiles, machines and equipment.

Service industries: A business that does work for a customer, and occasionally provides goods, but is not involved in manufacturing.

Key Words: urban zone, residential zone, nucleated settlement, consolidation, service, household industries, sanitation, squatter settlements.

Model Questions:

1. Identify the settlements.

2. Why do settlements vary from place to place?

Projects, Assignments and Activity:
- Work Sheet and handouts will be provided.
- A Power Point presentation on Settlement types in different countries will be screened.
- Flash cards will be shown to the children to identify the types of settlement.
- Assignment on the life style of different tribes such as e.g Eskimos, Masai, Kelashi, Ibens, Yanomami, Red Indian, Gypsies will be given.

Surf I.T:
- [http://www.3dgeography.co.uk/#!settlement-geography/c11j](http://www.3dgeography.co.uk/#!settlement-geography/c11j)

March:

Chapter: Weather and Climate

Topics:

- What is Weather?
  Weather is the state of the atmosphere at a particular place and at a particular time. Weather is recorded by measuring different elements such as temperature, air pressure, wind direction, rainfall, and humidity.

- How is Air Heated and get Cool:
  The air is headed by radiation, conduction and by convectional current. The air gets cool by ascending, when warm air and cold air mixes and by convectional current.

- The Composition of the Atmosphere
The atmosphere is composed of 78% nitrogen, 21% oxygen 1% other gases such as carbon dioxide. Variable quantities of water vapors i.e. tiny droplets of water which are invisible and also described as a gas are also part of the atmosphere.

- **Sea Breezes and Land Breezes:**
  During the summer season the coastal regions experience sea breezes while during winter season they experience land breezes. These winds blow over thousands of miles due differences in temperature and air pressure between land and sea.

- **Types of Rainfall:**
  Types of rainfall determine the way the air gets cool. When the moist air gets cool due to ascending of air because of high temperature, conventional rainfall occurs. When the moist air gets cool due to ascending because of high relief, relief rainfall occurs. Cyclonic rainfall occurs due when the moist air gets cool because of mixing of warm and cold air mass.

- **Climate:**
  Climate is the average weather condition of the weather over many years. There are different types of climate throughout the world depending on the latitudinal position such as equatorial climate which remain same throughout the year because it receives overhead sun throughout the year. Polar climate which remains very cold due to six months day and six months night. The Monsoon Climate which brings rainfall in South and South- East Asia during summer seasons. During winter seasons it blows in opposite direction. There are other factors too which determine the types of climate such as altitudinal factor, distance from the sea, direction of the wind, ocean currents etc.

**Key Words:** Troposphere, water vapour, barometer, wind vane, Beaufort scale, evaporation, condensation
(Refer to glossary given on Page no # 111-112)

**Model Questions:**
1. Explain the differences between weather and climate.
2. Identify the type of rainfall shown in the following figure.

![Moist air](image)

**Projects, Assignments and Activity:**
- Worksheets and handouts will be provided.
- Anemometer and Wind vane will be displayed.

**Surf I.T:**
- [http://www.weatherwizkids.com/weather-climate.htm](http://www.weatherwizkids.com/weather-climate.htm)
- [http://www.bbc.co.uk/schools/gcsebitesize/geography/weather_climate/](http://www.bbc.co.uk/schools/gcsebitesize/geography/weather_climate/)

**APRIL-REVISION FOR FINAL ASSESSMENTS 2017**
**MAY-FINAL ASSESSMENTS 2017**