Dawood Public School

Course Outline for 2014-2015 Subject: Geography Class: VII

Book:

Crawford, D (2013) Geography Today Pupil Book1 and 2 Revised Edition, Peak Publishing Ltd, UK

<u>Month</u>	<u>Contents</u>	<u>Book</u>
August	Basic Skills Earth's Movements and their Causes	Geography Today Book 1 by Doreen Crawford. Handout
September	Natural Vegetation	Geography Today Book 1 by Doreen Crawford.
October	Landforms Fresh Water	Geography Today Book 1 & 2by Doreen Crawford.
November	Revision for Mid-Term Exam	
December	Mid-Year Examination	
January	Agriculture	Geography Today Book 1 by Doreen Crawford.
February	Weather and Climate	Geography Today Book 2 by Doreen Crawford.
March	Trade and Transport.	Geography Today Book 2 by Doreen Crawford.
April	Revision for Final Exam	
May	Final Examination 2015	

Syllabus Content

August:

Chapter: Basic Skills

Book: Crawford, D (2013) Geography Today Pupil Book 1 Revised Edition, Peak Publishing Ltd, UK Page# 66-109

Reference Book:

Jay, Sian E; Lim, Solomon and Nathan, Edward (n.d.) Our World: a Closer Look, Secondary 3, Federal Publications, Singapore.

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 amonth 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.

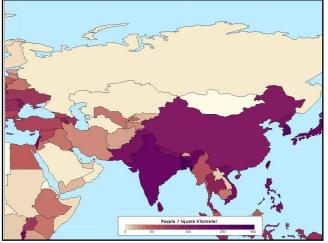
<u>Key Words:</u>Political map, Dot map. Thematic map, Choropleth, Cross section, Statistical data, Mean, average, Grid, Latitudes, Longitudes.

(Refer to glossary given on Pageno#220-223) Model Questions:

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



3. Study the following map which shows the population density.a. Insert any three elements of map on the given population density map1.





b. Describe the distribution of population density shown in map.1.

Projects, Assignments and Activity:

- Work Sheet and handouts will be provided.
- To develop students' understanding skills, multimedia presentation related with basic skills will be screened.

Surf I.T:

- <u>http://geographyfieldwork.com/DataPresentationMappingTechniques.htm</u>
- http://www.slideshare.net/adeshipp/photographs-geography

August:

Chapter: Earth's Movements and their causes.

> Book: Handout will be provided to the Students

Reference Books:

- > (2001) New Secondary Geography, FEP International (Private) LTD, Rawalpindi.
- > Leong, Goh Cheng, (2001) *Excel in Geography 1*, Federal Publication, Singapore.
- Moss, peter, (1999) *Geography Alive Book 1*, Oxford University Press, Oxford.

Topics:

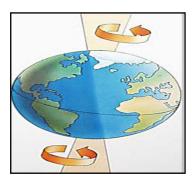
- **Earth's Axis:**The earth's axis is inclined at an angle of 661/2⁰ to the plane of its orbit.
- **Rotation:** The movement of earth on its own axis which causes day and night. It takes 24 hours to complete its one turn.
- **Revolution:** The movement of earth around the Sun in its orbit. Revolution of earth around the sun with its inclined axis causes the change in season and variation in day length.
- **Summer Solstice:** Condition of earth in its orbit when the northern hemisphere experiences summer. The overhead sun position is on the tropic of cancer.
- Winter Solstice: Condition of earth in its orbit when the northern hemisphere experiences winter and the overhead sun position is on Tropic of Capricorn.
- Autumnal Equinox: Condition of earth in its orbit when the northern hemisphere experiences autumn. Overhead sun position is on the Equator.

- **Spring Equinox:** Condition of earth in its orbit when the northern hemisphere experiences spring. Overhead Sun position is on Equator.
- **Different Length of Day and Night:**Revolution of earth around the sun with its inclined axis causes the variation in day length. Different places on earth experience different day lengths in different seasons except the Equator.
- Apparent Movement of Sun: Sun does not move but appears to move.

<u>Key words:</u> Solstice, Equinox, Overhead Sun, Tropic of Cancer, Tropic of Capricorn, Equator. (Meanings are given in the Handout)

Model Questions:

- 1. What are the results of rotation and revolution of Earth?
- 2. Why is the duration of day and night different at different places?
- 3. Explain the condition of Earth shown in the following figure.



Projects, Assignments and Activity:

- Work Sheet and handouts will be provided.
- Multimedia presentation to develop students' understanding about the rotation and revolution of the Earth and their causes will be screened.
- Different angles of incidence with the help of torch and globe will be demonstrated in class.
- Students will be given an assignment to collect the data of sunset and sunrise for different cities of the world and calculate their day length.

Surf I.T

- <u>http://www.slideshare.net/Mariadebiologia/the-movements-of-the-earth</u>
- http://www.windows2universe.org/kids_space/qearth_motion.html

September:

Chapter: Natural Vegetation

Book: Crawford, D (2013) Geography Today Pupil Book 1 Revised Edition, Peak Publishing Ltd, UK

Page# 70-90

Reference Books:

- Liew, Jeanne, (2011) International Lower Secondary Geography 1, Marshall Gavendish Education, Singapore.
- > (2001) New Secondary Geography, FEP International (Private) LTD, Rawalpindi.

Topics:

• 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 ofscrub 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.

<u>Key Words:</u> 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 to show any of the vegetation and its features for the presentation.

Surf I.T

- http://eschooltoday.com/forests/types-of-forests.html
- http://www.sciencekids.co.nz/sciencefacts/earth/rainforests.html

October:

Chapter: Landforms

Book: Crawford, D (2013) Geography Today Pupil Book 1 Revised Edition, Peak Publishing Ltd, UK

Page# 13-31

Reference Book:

(2001) New Secondary Geography, FEP International (Private) LTD, Rawalpindi.

Topics:

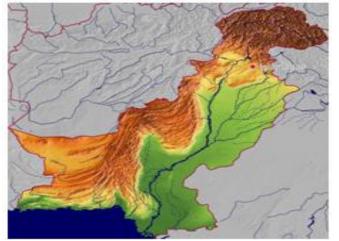
- Topography(Relief) •
 - The earth's surface varies from place to place; it may be high above sea level or low-lying. It may also be flat, uneven or rugged. The description of shape of the earth's surface in an area is called topography or relief. Different types of landforms make up the topography of different areas and create different landscapes.
- The Formation of the Topography. Different features of the landscapes such as mountain, plateau are the result of Plates movements which cause to form fold, block and volcanic mountain. Earth quakes are also the result of sudden movement of plates.

Weathering and erosion are also responsible for making different landforms such as waterfall.

Key Words: plain, plateau, valleys and mountains, rift valley, magma, lava flow, fault, weathering sedimentary rocks.

(Refer to glossary given on Page no # 111-112) Model Questions:

- 1. Explain the formation of different land forms.
- 2. Identify the land feature shaded with green shown in the following map and describe its formation.



3. How can you differentiate between plain and plateau?

Projects, Assignments and Activity:

- Worksheets and handouts will be provided.
- Multimedia presentation related to the movement of plates will be screened.
- Student will do research work on Vanishing seas for e.g. Dead Sea.

Surf I.T

- http://www.edu.pe.ca/southernkings/landforms.htm
- http://mocomi.com/landforms/

October:

Chapter: Fresh Water

- Book: Crawford, D(2013) *Geography Today Pupil Book 2* Revised Edition, Peak Publishing Ltd, UK
- Page# 29-39

Reference Book:

Liew, Jeanne, (2011) International Lower Secondary Geography 1, Marshall Gavendish Education, Singapore.

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 – AWorld 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.

<u>Key Words:</u> Nun <u>Model Questions:</u>

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 in order to write about each a, b and c
 - 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
- Students will make an assignment on major dams of Pakistan.

Surf I.T

- <u>http://video.nationalgeographic.com/video/env-freshwater-whycarech6.1</u>
- http://www.planetseed.com/laboratory/drinking-water-sea
- http://www.treehugger.com/clean-water/how-desalination-works.html

NOVEMBER-REVISION FOR MID TERM EXAMINATION 2014-2015 DECEMBER-MID TERM EXAMINATION 2014-2015

January:

Chapter: Agriculture

- Book: Crawford, D(2013) *Geography Today Pupil Book 1* Revised Edition, Peak Publishing Ltd, UK
- Page# 39-69

Reference Book:

Sethi, Huma Naz(2007) The Environment of Pakistan, Pakistan Studies, Peak Publications, Pakistan.

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.

<u>Key Words</u>: Agriculture, export, tributaries, arable land, plantation, hydroponic and aeroponic. (Refer to glossary given on Page no # 111-112) <u>Model Questions</u>:

- Discuss the importance of agriculture for the economy of Pakistan.
- Identify the type of following crops and state in which season they grow.



Projects, Assignments and Activity:

- Worksheets and handouts will be provided
- Students will be given an assignment on Agriculture advancement in China.

Surf I.T

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

February:

Chapter: Weather and Climate

- Book: Crawford, D(2013) *Geography Today Pupil Book 2* Revised Edition, Peak Publishing Ltd, UK
- ➢ Page#4-28.

Reference Book:

> Chun, Tham Yoke, (1998) Understanding Geography 3, Longman, Singapore.

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,

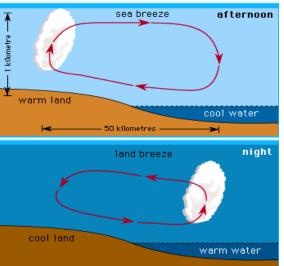
• Climate:

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. 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.

<u>Key Words</u>: Troposphere, water vapour, barometer, wind vane, Beaufort scale, evaporation, condensation (Refer to glossary given on Page no # 111-112) <u>Model Questions</u>:

- 1. Explain the differences between weather and climate.
- 2. Describe the phenomenon shown in the following figure.



Projects, Assignments and Activity:

• Worksheets and handouts will be provided.

Surf I.T:

- <u>http://www.weatherwizkids.com/weather-climate.htm</u>
- http://www.bbc.co.uk/schools/gcsebitesize/geography/weather_climate/

March:

Chapter: Trade and Transport

- Book: Crawford, D(2013) *Geography Today Pupil Book 2* Revised Edition, Peak Publishing Ltd, UK
- Page# 66-109

Reference Book:

Sethi, Huma Naz(2007) The Environment of Pakistan, Pakistan Studies, Peak Publications, Pakistan.

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, 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.

<u>Key Words:</u> 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, hinter land, 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

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.

Surf I.T:

- <u>http://www.economywatch.com/international-trade/benefit.html</u>
- <u>http://www.epza.gov.pk/</u>

APRIL-REVISION FOR FINAL EXAMINATION 2014-2015 MAY- FINAL EXAMINATION 2014-2015