** GREENWOOD PUBLIC SCHOOL, ADITYAPURAM**

**OUR MOTTO-DEVELOPMENT WITH DELIGHT**

**CLASS-IX SUBJECT- Geography**

**TERM-1 SYLLABUS**

 CHAPTER 2-PHYSICAL FEATURES OF INDIA

\*QUESTION /ANSWERS

Q1.Explain the plate boundaries with their movement?

Ans-The plate boundaries are broadly classified in three types on the movement they exhibit.

DIVERGENT BOUNDARIES:- Plates move apart leaving a gap between them which get filled up with molten rocks and water or magma which come out from the crust in the form of lava. The sea floor is spreading due to diverging plate movement . Ex-Pacific ocean is spreading as it lies on diverging plate boundaries, this movement is also called constructive movement.

CONVERGENT BOUNDARIES:- Plates move towards each other causing one to go under the other or causing plate to collide forming mountain. Ex- the formation of Himalayas is due to the collision of Indo-Australian plate and Eurasian plate, this movement is also called destructive movement.

TRANSFORM FAULT BOUNDARIES:- When two plates moves horizontally and slide pass each other they may form conservative boundaries . They may neither create nor destroy the Earth’s crust. Ex- the Earthquakes originates by transform plate mountains.

Q2. Describe how the Himalayas were formed?

Ans – The process of the formation of the Himalayas is as follows:-

1. About 220 million years ago India was a part of ancient continent called Gondwana land.
2. It was located in southern Hemisphere.
3. The convection currents of the mantle fractured it into number of pieces.
4. The Indo-Australian plate after getting separated from Gondwana land drifted slowly towards north.
5. It collided with much larger Eurasian plate.
6. The northern edge of the Indo-Australian plate was pushed beneath the Eurasian plate.
7. Under the impact of this collision, the sedimentary rocks enclosed the sea Tethys were folded to form the mountain system of central Asia including Himalayas.

Q3.DIFFERENCE BETWEEN:-

(One )

Khaddar :- 1. It is a new alluvium soil deposit that is formed after the recent deposition made by rivers.

2. Being new it is more fertile. 3. It is very fine in nature and dark in color. 4. It is found near river channels in delta and in flood plains.

Bhangar:- 1. It is an old alluvium soil deposit that is formed after the change in the course of the rivers.

2. Being old it is comparatively less fertile as it is not renewed frequently.

3. The texture of soil is porous because of the deposition of khadar (calcium carbonate). Its color is light brown.

4. It is found away from the river at a higher ground level.

(Two)

Bhabar:- 1. It lies to the south of Shiwalik range. 2. The thickness of Bhabar is between 8-16 km. 3. The area is highly coarse in nature due to many pebbles in local language they are called kanbar.

4. Bhabar is less fertile than Terai due to pebbles deposition. 5. All streams of rivers disappear in Bhabar.

Terai:- 1. This belt exist to the south of Bhabar area. 2. It is almost parallel to Bhabar. 3. The area has got highly fine sediments due to the deposition made by several steams.

4. Terai is very fertile region due to the deposition of sediments. 5. Several streams are found in Terai region.

 (Three)

Western Ghats:- 1. Western Ghats formed the edge of the Deccan plateau. 2. These Ghats are regular and comparatively higher in elevations. 3. Their average elevation is 900-1600m. 4. The highest peak is Anaimudi followed by Doda Betta. 5. They are continuous and can be crossed by passes. Eastern Ghats :- 1. Eastern Ghats from the eastern cage of the Deccan plateau.

2. These Ghats are irregular and comparatively lower in elevation. 3. Their average elevation is 600m. 4. The highest peak is Mahenaragiri followed by shevroy and javadi hills.

5. They are discontinuous and dislocated by river draining in to Bay of Bengal.

Q4. Write short note on Purvanchal Himalayas.

Ans :- Brahmaputra makes the eastern most boundary of the Himalayas. Beyond the Dihang gorge, the Himalayas bend sharply to the south and spread along the eastern boundary of India. They are known as the Purvanchal or the eastern hills and mountains these hills running through the north – eastern states are mostly composed of strong sandstones which are sedimentary rocks. Covered with dense forest, the mostly run as parallel range and valleys. The purvancal comprises the Patkal hills, the Naga hills , Manipur hills and the Mizo hills.

Q5. Write short note on the following:-

1. The Indian Desert: Ans – 1. The Indian desert lies towards the western margins of the Aravalli hills. 2. It is an undulating sandy plain covered with sand dunes. 3. This region receives very low rainfall below 150 mm per year. 4.It has arid climate with low vegetation cover. 5. Luni is the only large river in this region.

(2.)The Central Highlands: Ans-1. The part of peninsular plateau lying to the north of the Narmada river covering a major area of the Malwa plateau is known as the Central Highlands.

2. The river draining in this region are the Chambal, the Sindh, the Betwa and Ken.

3. These are wider in the west but narrower in the east. 4. The eastward extensions of this plateau are called as Bundelkhand and Baghelkhand.

5. The eastward extension which is narrower is known as Chhota Nagpur plateau, which is drained by Damodar river.

(3.)The Islands Group Of India: Ans- 1. The Lakshadweep and Andaman & Nicobar Islands are the main group of island of India.

2. The Lakshadweep group lying close to the Malabar Coast of Kerala. This group of islands is composed of small coral islands. It covers small area of 32 sq km.

3. Kavaratti Island is the administrative headquarters of Lakshadweep. 4. Andaman & Nicobar island are the elongated chain of islands located in the Bay of Bengal.

5. The entire group of islands is divided into two broad categories – The Andaman in the north and the Nicobar in the south. 6. These islands lie close to equator and experience equatorial climate and has thick forest cover. Port Blair is the administrative headquarters of Andaman & Nicobar Islands.

 Chapter -3 DRAINAGE

VERY SHORT ANSWER TYPE QUESTIONS

Q1.What is a drainage? Ans-A system of flowing water from higher level to the lower level. Q2.What is a drainage river basin ? Ans-The area drained by a single river system is called a river basin or a drainage basin.

Q3.What is the area drained by a single river system called ?

Ans- Drainage basin. Q4.What is a gorge? Ans- A deep narrow opening formed by the river in the upper course , ex- the gorge formed by the river Indus. Q5.Which is the largest river basin in India ? Ans-The Ganga basin. Q6. Name two large rivers of India which flow in to Arabian sea? Ans-The Narmada and the Tapti. Q7.What is a lake ? Ans- A body of water lying on a hollow on the earth’s surface , and being entirely surrounded by land is known as a lake.

Q8.Name two salt water lakes on the eastern coast of India? Ans-The chillika lake and the Pulicat lake. Q9.What is the major reason for non –perennial nature of the peninsular rivers?

Ans-Rainfall is the only source of water for these rivers.

Question /Answers

Q1.Explain the drainage pattern formed by rivers?

Ans-The streams within a drainage basin form certain patterns ,

depending on the slope of the land, underlying rock structure as well as the climate conditions of the area.

1.Dendritic drainage patterns: The dendritic pattern develops where the river channel follows the slope of the terrain.The stream with its tributaries resembles the branches of a tree , thus the name dendritic. Ex-Ganga and its tributaries , Amazon and its tributaries. 2.Trellis pattern : A river joined by its tributaries , at approximately right angles, develops a trellis pattern . A trellis drainage pattern develops were hard and soft rocks exists parallel to each other. Ex- Narmada and Tapi along with its tributaries. 3.Rectangular pattern : A rectangular drainage pattern develops on a strongly jointed terrain . Tributaries joined the main river at 90 degree angle.

Ex- Mahanadi and its tributaries.

4.Radial pattern : The radial pattern develops when streams flow in different directions from a central peak or dome like structure. It looked like a slope of a wheel .The streams flow slopes of the land .

Ex- All glacier rivers and Narmada at Amarkantak



Q2.Differentiate between Himalayan and peninsular river

Ans- HIMALAYAN RIVERS

* Himalayan rivers originate from Himalayas.
* Most of the Himalayan rivers are perennial in nature.
* Himalayan rivers have longer course and carry more sediments in them.
* These rivers have got comparatively larger drainage basin.
* These rivers are involved more in doing erosional and depositional activities and therefore forms many land features like Gorges , meanders , oxbow lakes, delta.

Indus , Ganga , Brahmaputra are examples of Himalayan rivers.

PENINSULAR RIVERS

* Peninsula rivers have their source in the peninsula of the country.
* Most of the peninsular rivers are seasonal in nature.
* Peninsular rivers have shorter course and carry less sediments in them.
* These rivers have got comparatively smaller drainage basin.
* These rivers are less involved in doing erosional and depositional activities and therefore they form waterfall, delta
* Narmada , Tapi , Mahanadi, Godavari , Krishna , Kaveri etc are the example of peninsular rivers.

Q3.Differentiate between distributary and tributary

DISTRIBUTARY

* Distributaries are small channel of rivers that separate them from the main river before entering into the sea or ocean.
* Distributaries are formed in lower course.
* Distributaries decreases the volume of the water and sediments from the main river.
* Hooghly is the distributary of Ganga.

TRIBUTARY

* Tributaries are rivers or streams that join the main river .
* Tributaries join the main river in upper and middle course.
* Tributaries increases the volume of water and sediments deposition of the main river.
* Yamuna is the tributary of Ganga.

Q4.Differentiate between delta and estuary

DELTA

* Delta is formed by the river when it is about to enter the sea or ocean by forming various distributaries .
* It is roughly triangular in shape.
* Delta region is highly fertile because of sediments deposition.
* Agriculture can be practiced here.
* All Himalayan rivers and east flowing rivers like Mahanadi, Kaveri, Krishna , Godavari.

ESTUARY

* When the river directly enter the sea or ocean it forms an estuary.
* It is funnel shaped land feature.
* The region near estuary is not fertile.
* Estuary region is good for fishing activity.
* Narmada and Tapi forms estuary.

Q5.Differentiate between east flowing river and west flowing river.

EAST FLOWING RIVER

* These rivers originate from or near to western ghats and flows towards east.
* These peninsular rivers have longer course and involved in less sediments deposition.
* These rivers forms estuary while entering into Arabian sea.
* Narmada and Tapi.

WEST FLOWING RIVER

* These rivers originate from east or central highlands and flows towards western India.
* These peninsular rivers have shorter course and involved in less sediments deposition.
* These rivers forms while entering into Arabian sea.
* Narmada and Tapi.

Q6.Why does Brahmaputra become a big river on entering India?

* Ans-In Tibet , the Brahmaputra river carries a smaller volume of water and less silt as it is a cold and dry area.
* It enters India from Arunachal Pradesh and is joined by many tributaries such as Dibang , the Lohit etc.
* It passes through a region of high rainfall. Here , the river carries a large volume of water and considerable amount of silt.
* Every year during the rainy season , the river overflows its banks.
* Brahmaputra is marked by huge deposits of silt on its bed causing the river bed to rise.

Q7.Differentiate between fresh water lakes and salt water lakes?

Ans-FRESHWATER LAKES

* Freshwater lakes are mostly found in the Himalayan region.
* They are of glacial origin which means that they were formed when glaciers dug out a basin which was later filled with snow melt.
* The Wular lake in Jammu and Kashmir is the result of tectonic activity.
* The Dal lake ,Bhimtal , Nainital , Loktak, and Barapani are some other important freshwater lakes.

SALT WATER LAKES

* Spits and bars form lagoons in the coastal areas , e.g :the Chillika lake , the Pulicat lake, the Kolleru lake are the salt water lakes.
* Lakes in the regions of inland drainage are the saltwater lakes , e.g: the Sambhar lake in Rajasthan. Its water is used for producing salt.

HIGH ORDER THINKING SKILLS

Q1.What is the role of river in building up of an economy?

Ans-Rivers play an important role in building up of an economy:

1.Base of civilization : Water from the rivers is a basic natural resource , essential for various human activities. Therefore , the river banks have attracted settlers from ancient times . These settlements have now become big cities.

2.Deposition of sediments :Deposition of sediments done by the rivers makes the river banks highly good for cultivation. Thus promoting agriculture overtime there. Ex- the Ganga –Brahmaputra basin. 3.Fishing activity: All the rivers are good source of fisheries and aquatic animals thus provide livelihood to the large number of people. Ex- Brahmaputra river. 4.Navigation: Inland , drainage system of rivers gives chances to navigate in any part of the country which gives boots to trade within the country.

Ex-All Himalayan rivers. 5.Other uses: Using rivers for irrigation , industries and hydro-power generation is of special significance – particularly to a country like India , where agriculture is the major source of livelihood of the majority of its population.

Q2.Why lakes are important for human beings ?

Ans-Lakes are important for human beings for the following reasons-

1.Regulate the flow of river :Lakes helps to regulate the flow of river ,during heavy rainfall it prevent flooding , and during the dry season it helps to maintain even flow of water.

Ex- Tighra dam.

2.Generation of hydel –power : Daming of river is done in order to store the water for the generation of hydroelectricity. Ex-Hirakud dam on Mahanadi river. 3.Promote tourism : Lakes are always attraction for tourist for recreation . Lakes enhance the natural beauty of the adjoining areas and hence promote tourism.

Ex-Wular lake , Dal lake. 4.Moderate climate: Lakes also helps in moderating climate of adjoining areas that supports eco-system within a lake and outside the lake.

5.Sources of rivers :Many lakes also provide major source for many rivers.