

Class 10th Social Science

Chapter :3

Geography Of the world

PART-II : GEOGRAPHY

TAXTUAL QUESTIONS and ANSWERS

Exercise

Q 1. Write the brief about the earth's lithosphere and hydrosphere.

Ans: The solid crust of the earth which consists of rocks, minerals and mountain , river, valleys, plains, plateaus, coasts,etc. The total surface area of earth is 510 million sq km out of which the earth's lithosphere consists of 149 million sq km which consists about 29% of the total surface area. The land portion of the earth consists of seven continents, namely Asia, Africa, Europe, North America, South America , Oceania and Antarctica.

The part of the earth's surface which consists of water is known as hydrosphere. it is made up of various sources of water such as oceans, sea, lakes, river, streams, ponds, etc. Over 71%of the earth's surface is covered by water (361 million sq km). The water portion of the earth consists of five oceans, namely pacific, Atlantic, Indian, Arctic and the southern oceans; many sea, lakes, rivers, etc.

Q 2. How was the earth in the early day according to the continental Drift Theory?

Ans: According to the Continental Drift Theory, the earth in its early stage of formation in the permian period of the palaeozoic era about 300 million years ago, the earth's lithosphere was a single landmass surrounded by water or hydrosphere on all sides. This landmass was known as pangaea and the surrounding water body as Panthalassa. During the later period, a narrow and elongated sea was formed in the east -west direction which divide the entire landmass into two separate parts. This known as Tethys sea. The northern part is called Laurasia and the southern part is called Gondwanaland. In the Mesozoic era, about 250 million years ago the present day 7 continental drift, the Laurasia and Gondwanaland got further divided forming the present 7 continents. According to this theory, Laurasia got divided into North America, Greenland, Europe and Asia (north of Indian sub - continents). On the other hand, regions such as south America, Africa, Madagascar, Indian, Arabian regions, Malaysia and other islands including Australia and Antarctica were formed from the division of Gondwanaland.

Q 3. Write briefly about the topography of the ocean floor.

Ans. Over 71 per cent of the earth's surface is covered with water. It mostly consists of the five oceans of the World, namely the Pacific, Atlantic, Indian, Southern and

the Arctic Ocean. Like the land of the world, namely the Pacific, Atlantic, Indian, Southern and the Arctic Ocean. Like the surface, the topography of the ocean floor is also very rugged with ridges and trenches. The following are the most important features of the ocean floor :

(i) Continental shelf: The shallow part of the ocean and seas that is adjoining the landmass is called continental shelf. Its depth is up to 200 meters.

(ii) Continental slope : The considerably deeper part of the ocean floor after the continental shelf is known as continental slope. This area generally slopes towards the middle of the ocean. Its depth is up to 2000 meters.

(iii) Deep oceanic floor: After the continental slope, there is a stretch of land called the deep oceanic floor. Its depth is up to 4000 meters.

(iv) Deep oceanic trench : On the oceanic floor, there, in the middle of the ocean, there exists deep trenches having an average depth of 8000 meters. Among the oceanic trenches, the Mariana Trench or Challenger Trench with a depth of 11,022 meters on the Pacific Ocean floor is the deepest trench in the world.

Q 4. Write briefly about the distribution of oceans and continents.

Ans: Geography, the earth's landmass or lithosphere is divided into four groups:

(i) First group : consists of Asia, Africa and Europe.

(ii) Second group: consists of North America and South America.

(iii). Third group: continents of Australia and other nearby islands.

(iv) Fourth group: consists of Antarctica where there is hardly any permanent human habitation.

There are five oceans on the Earth which are part of the hydrosphere and are all linked to each other.

(i) The Pacific Ocean, the largest Ocean is located between Asia in the west and North America and South America in the east.

(ii) The Atlantic Ocean, the second largest Ocean is located between North America and South America in the west, and Europe and Africa in the east.

(iii) The Indian Ocean is located to the south of Asia, east of Africa and west of Oceania.

(iv) The Southern Ocean is situated to the south of America, Africa and Oceania.

(v) The Northern Ocean or Arctic ocean is situated to the north of North America, Europe and Asia.

Nearly 57% of the hydrosphere is confined to the southern hemisphere while 67% of lithosphere is confined to the northern hemisphere. Out of the five oceans, three oceans, namely the Pacific, Atlantic and the Indian ocean are spatially spread to both northern and southern hemispheres, while the southern ocean lies completely in the Southern hemisphere and the Arctic ocean lies completely within the northern hemisphere.

Q 5. Write in short about the landforms present on the earth's land surface.

Ans: Nearly 29 per cent of the earth's surface consists of lithosphere. The topography of the lithosphere is very rugged and is made up of hills, mountains, plateaus, plains, coastal plains, etc. The topography of the earth's land surface varies from place to place and is not same over the continents. Altitude, presence of rivers, climate and vegetation, etc. greatly influence the topography of a place.

There are many high mountain ranges running across the continents with the Himalaya range of Asia having the highest peak, Mt Everest at 8848m. Many high plateaus are also found, with the Pamir plateau of Asia being the highest. Valleys are also an important feature of the earth's surface, such as the river valleys or the Death valley (86 m below Sea level) Huge plains stretch

across the continents while coastal plains of varying widths border the continents.

Q 6. Briefly discuss the physical characteristics of Asia.

Ans: The continent of Asia extends between 78°N and 1°N latitudes and longitudes 25°E in the west and 170°W in the east. It has a very physical topography with high mountain ranges and plateaus on one hand, and river valleys, lowlands and plains on the other. There are also many islands and deserts.

(i) Mountains: the central part of Asia consists of high mountain ranges, prominent among which are :

(a) the Ural mountain range running north to south and forming the western boundary of the continent.

(b) The Himalaya mountain range running east to west, with its offshoots. The world's highest peak, Mt. Everest is in this range.

(c) The Karakoram mountain range which has Mt. Godwin Austin or K2, the second highest peak in the world.

The other ranges are Kunlun, Altai and Aravalli ranges.

(ii) Plateaus : Asia has the highest Plateau on earth which is the Pamir Plateau. The other important plateaus

are Tibetan, Siberian, Mongolian, Deccan, Arabian and Iranian plateaus.

(iii) Rivers: In Asia many large rivers originate from the highland region of the mountains, hills and plateaus and flow to the oceans and seas towards north, east and South forming large fertile plains and deltas. The main rivers Indus, Ganges and Brahmaputra flow in the south-central part of the continent While Yenisei, Ob and Lena are rivers of the north. Amur, HwangHo, Yangtze, Kiang and Sinkiang rivers flow in the eastern region. Narmada, Tapti, Mahanadi, Krishna, Kaveri, Barak, Irawati and Mekong rivers flow in the south and South-east regions. These rivers with their basins make the region highly fertile, much polluted and promote trade .

(iv) Plain: All the major rivers mentioned above form large fertile plains and deltas.

(v) Lakes : Asia has many lakes, both large and small. The important ones are Balkhas, Baikal, Chilka, Sambhar, Dal, Pulikat, Loktaka, etc .

(vi) Desert: Asia has hot deserts like the Thar and Arabian deserts, and cold deserts like the Gobi desert.

(vii) Islands: Most of the Pacific islands are in Asia. They include Japan, Taiwan, Philippines, Java, Sumatra and Borneo, etc. Islands of the Indian Ocean such as

Andaman and Nicobar, Sri Lanka, Lakshadweep, Maldives and Bahrain, etc. are also in Asia.

Q 7. Give your answer with reasons :

(a) Why do 90% per cent of the world's total population concentrate in the northern hemisphere?

Ans: It is seen that nearly 57% of the hydrosphere is confined to the southern hemisphere while over 67% of the total lithosphere of the world is confined to the northern hemisphere. In the words, there is much more land area in the northern hemisphere than in the southern hemisphere. Therefore, this region has more population than Southern hemisphere which has only 33% land area of which too large part is the uninhabited continent of Antarctica. Secondly, the northern hemisphere is noted for its good climate as well as ideal physical condition for life and work. It is marked by vast plains areas, numerous rivers, rich natural resources, etc. All which boost the growth of population. Therefore, the northern hemisphere has over 90% of the world's population.

(b) What is the reason behind lack of permanent human settlement in Antarctica?

Ans: There is negligible permanent human settlement in Antarctica. This is mainly due to the existence of extreme cold climate there. During most part of the year, the entire region is covered with snow which makes life

difficult. Secondly, the means of livelihood such as agricultural, industry, trade, etc. is not possible in such weather conditions. Therefore, there is hardly any permanent human settlement in this region.

Q 8. Give short answer to the following questions?

(a) Which physical features have created a natural boundary between Asia and Europe?

Ans: Ural mountain and Ural river.

(b) Which is the longest mountain range of the world and where it is located?

Ans: Andes mountain range in the western part of south America.

(c) In terms of land area which are the largest and smallest countries of the world?

Ans: In terms of land area, Largest country: Russia
Smallest country: vatican city

(d) Which country of the world is spread across two continents?

Ans: Russia

(e) In terms of population which are the largest and smallest countries of the world?

Ans: In terms of population, Largest country: china
Smallest country: vatican City

(f) What is the names of major mountain range of North America? In which part of the continent is it located?

Ans: Rocky mountain system situated in the western part of the continent.

(g) Which part of the world's largest desert and Where is located?

Ans: Shara desert situated in the northern part of Africa.

(h) Write the names of two northerly
And two eastly river of Asia.

Ans: Northerly rivers of Asia : Ob and Lena river
Easterly rivers of Asia: Yangtze, kiang and sinkiang rivers.

(i) Write the names of one major mountain range, one river and one desert of Australia.

Ans: major mountain range of Australia: Great Dividing Range ; major river: Darling Major desert: The Great Victoria Desert.

(j) Write the names of three countries of Europe located in the Mediterranean region.

Ans: Italy, France, Greece.

Q 9. Write short notes:

(a) pangea

(b) Arctic Oceans

(c) The continents of Oceania (d) The rivers of Asia

(e) the lake of Africa

(f) The rivers of Europe

(g) The Appalachian Highland region

Ans: (a) pangea: There are several theories regarding the origin of the Earth. One of the theories in this regard is the Continental Drift Theory. The supporters of this theory think that about 300 million years ago during the Permian period, there was on earth a large single landmass which was surrounding water panthalass. pangea broke up into two lands_ northern Laurasia and southern Gondwanaland. These later formed the modern day continents.

(b) Arctic Ocean: Among the five oceans of the world, Arctic ocean is the smallest ocean. It covers about 14 million sq km area. Since it surrounds the north pole, it is circular in shape, and its shelf surrounded by three countries, namely, Asia, Europe and North America. Its average depth is about 3500 meters.

It is frozen with thick ice for most part of the year as it lies around the North Pole.

(c) The continent of Oceania : Oceania is formed by great island of Australia and many other islands such as New Zealand, Tasmania, New Guinea, etc. It lies completely in the southern hemisphere. Roughly extends from 0° equator in the north to 48° south latitude in the south and 180° longitude in the east to 113° longitude in the west. The continent of Oceania is surrounded by the island of Java, Sumatra, Celebes, etc. Of the Pacific Ocean on the east ; and Indian Ocean on the west. The total surface area of the continent is about 8 million sq km Which constitutes about 5.4 per cent of the world's total surface area. Oceania has 14 countries including Australia is biggest country of this continent.

(d) The rivers of Asia: In Asia many large rivers originate from The highland region of the mountains, hills and plateaus and flow to the oceans and seas towards north, east and South forming large fertile plains and deltas. The main rivers Indus, Ganges and Brahmaputra flow in the south- central part of the continent While Yenisei, Ob and Lena are rivers of the north. Amur, Hwan Ho, Yangtze, Kiang and Sinkiang rivers flow in the eastern region. Narmada, Tapti, Mahanadi, Godavari, Krishna, Kaveri, Barak, Irawati and Mekong rivers flow in the south and South-east region. These rivers with their basins make the region highly fertile, much polluted and promote trade.

(e) The lakes of Africa: The continent of Africa has numerous lakes. The most prominent among them are Victoria, Albert, Tanganyika, Chad, Volta, Naysa, Cobar Bassa, Malawi, Turkana, kivu, kochow, Abbe, etc.

(f) The rivers of Europe: The important rivers of Europe are Ebro of Spain ; Rhone and seine of France ; Rhine and Elbe of Germany ; Oder and Vistula of Poland; Danube of Austria, Hungary and Romania; Dnieper of Belarus and Ukraine; Po of Italy; Thames of Great Britain; Don, Volga and Ural of Russia, etc.

(g) The Appalachian Highland Region: The highland that are located on the eastern part of USA running parallel to the Atlantic ocean are known as Appalachian Highland. They extend from New Foundland in the north to Florida in the south. These highlands are very rugged being formed of hills, mountains, narrowed valleys and fragmented plateaus. The Allegheny mountains are located in the east and the Blue Ridge mountains are located in the southern part of this region. The rivers Ohio, Tennessee, Hudson, etc.

(h) The lakes of North America: North America has the largest number of lakes in the world. Among these the largest is the Great Salt Lake of Utah. The Great Salt Lake, the Great Bear lakes, Lakes Superior, Lake Michigan, Ontario, Erie and Huron are other major lakes of North America.

Q 10. Write the difference between:

(a) Continental shelf and continental slope.

Ans: The differences between continental shelf and continental slope are:

Sl. No.	Basis of difference	Continental shelf	Continental slope
(i)	Meaning	The shallow stretch of sea adjoining the shore.	The part of the sea which links the continental shelf with the deep ocean plain.
(ii)	Nature of slope	Gentle slope.	Steep slope.
(iii)	Average depth	Up to 200 meters..	Up to 2000 meters.

(b) Everest peak and Godwin Austin peak.

Ans: The differences between Everest peak and Godwin Austin peak are:

Sl. No.	Basis of difference	Everest Peak	Godwin Austin Peak
(i)	Location	In the Himalayan range of Asia.	In the Karakoram range of Asia.
(ii)	Height	8848 metres.	8611 metres.
(iii)	Height ranking	Highest peak in the world.	Second highest peak in the world.
(iv)	Alternate name	None.	Mount K ₂ .

(c) The continent of Oceania and continent of Antarctica.

Ans: The differences between Oceania and Antarctica continents are:

Sl. No.	Basis of difference	Continent of Oceania	Continent of Antarctica
(i)	Countries	Consists of 14 countries – Australia, New Zealand, etc.	Has no country divisions.
(ii)	Physiography	Has mountains, plateaus, plains and rivers.	Topography covered by a thick layer of ice.
(iii)	Population	Over 38 million.	Has no permanent human settlement.

(d) Gobi desert and Atacama desert.

Ans: The differences between Gobi desert and Atacama desert are:

Sl. No.	Basis of difference	Gobi desert	Atacama desert
(i)	Location	In the continent of Asia.	In the continent of South America.
(ii)	Type of desert	Cold desert.	Hot desert.

Q 11. Choose the correct answer:

(a) Which is the world's second largest Ocean?

(i) Pacific ocean. (ii) Indian ocean.

(iii) Atlantic ocean. (iv) Southern Ocean

Ans: (iii) Atlantic ocean

(b) Which is the smallest continent of the world?

(i) North America. (ii) Europe

(iii) Antarctica. (iv) Oceania

Ans: (iii) Antarctica

(c) In which ocean Falkland Islands is located?

(i) Atlantic ocean. (ii) Arctic ocean

(iii) pacific ocean. (iv) Indian ocean

Ans: (I) Atlantic ocean

(d) Which sea has separate the continents of Asia and Africa?

(i) mediterranean Sea (ii) Red sea

(iii) Caspian sea. (iv) Arabian sea

Ans: (ii) read sea

(e) What has naturally separate Asia from Europe?

(i) Ural mountain range. (ii) Caucasus Mountain

(iii) Caspian sea. (iv) volga river

Ans:(I) Ural mountain range

(f) In which containt is Ecuador located?

(i) North America. (ii) south America

(iii) Africa (iv) Asia

Ans: South America

(g) What is the capital of Brazil?

(i) Rio de Anthrior. (ii) sao

(iii) Brasilia (iv) Lima

Ans: (iii) Brasilia