



**MBS INTERNATIONAL SCHOOL,
SECTOR 11, DWARKA
ANNUAL EXAM (2019-20)
GEOGRAPHY
PRACTICE PAPER
CLASS XI**


Time: 1.5 hour

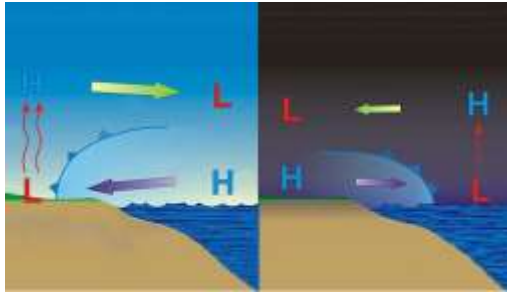
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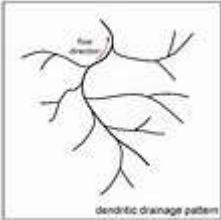
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| 1 | Give any two reasons for the decline of wildlife in India. | 1 |
| 2 | What is relative humidity ? | 1 |
| 3 | What is the significance of ozone in the atmosphere? | 1 |
| 4 | Mention any two differences between forest cover & forest area. | 1 |
| 5 | Describe Tropical deciduous Forest with reference to rainfall, temperature, trees, wildlife and area. | 3 |
| 6 | Early civilizations believed the ocean floor to be a smooth bowl, devoid of features or life. However, the ocean floor is not flat; it has a wide variety of geological features. In this reference name the divisions of ocean floor and discuss any one major division of ocean floor in detail. | 3 |
| 7 | With the help of diagram explain how land & sea breeze takes place. | 3 |
| 8 | [i] Distinguish between eastern & western coastal plains of India. [3 points] [ii] What do you mean by river basin? [iii] With the help of a diagram explain dendritic pattern of drainage. | 5 |
| 9 | What are Laterite soils? Describe their formation and characteristics. | 5 |
| 10 | Explain orographic rain and convectional rainfall with diagram. | 5 |
| 11 | On the political map of India mark and label 1. Highest peak on Western ghats 2. Aravalli hills 3. Shade a state receiving mango showers 4. A state struck by tropical cyclone 5. an area with thorn vegetation | 5 |

ANSWER KEY

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| 1 | Bhagirathi and Alaknanda | 1 |
| 2 | Human Animal Conflict// Poaching and Hunting:// Loss of Habitat and Habitat Alteration | 1 |
| 3 | Ration of actual amount of moisture in atmosphere and capacity to hold moisture at a particular temperature | 1 |
| 4 | The stratospheric ozone layer absorbs ultraviolet light (UV) emitted by the sun. If the solar UV light were able to penetrate the stratosphere and troposphere and reach the earth's surface, it would seriously damage our ecosystem. | 1 |
| 5 | helps the navigators and fishermen plan their activities. Tidal flows are of great importance in navigation/ also generates electricity | 1 |
| 6 | The forest area is the area notified and recorded as the forest land while forest cover is the area occupied by forest with canopy | 1 |
| 7 | Natural disaster is a natural occurrence which is often unpleasant. It causes damage of property, loss of human life and a general destruction of nature of the place it occurs. Natural disaster is generally not preventable. The effects of natural disaster could, however, be avoided | 1 |
| 8 | Spring tides : The position of both the sun and the moon in relation to the earth has direct bearing on tide height. When the sun, the moon and the earth are in a straight line, the height of the tide will be higher. These are called spring tides and they occur twice a month, one on full moon period and another during new moon period. Neap tides : Normally, there is a seven day interval between the spring tides and neap tides. At this time the sun and moon are at right angles to each other and the forces of the sun and moon tend to counteract one another. The Moon's attraction, though more than twice as strong as the sun's, is diminished by the counteracting force of the sun's gravitational pull. | 3 |

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| 9 | <p>Biodiversity: Biodiversity is a system in constant evolution, from a view point of species, as well as from view point of an individual organism.</p> <p>Genetic Diversity: Genetic biodiversity refers to the variation of genes within species. Groups of individual organisms having certain similarities in their physical characteristics are called species. Human beings genetically belong to the homo sapiens group and also differ in their characteristics such as height, colour, physical appearance, etc., considerably. This is due to genetic diversity. This genetic diversity is essential for a healthy breeding of population of species.</p> <p>Or Ecosystem diversity: The broad differences between ecosystem types and the diversity of habitats and ecological processes occurring within each ecosystem type constitute the ecosystem diversity. The ‘boundaries’ of communities (associations of species) and ecosystems are not very rigidly defined. Thus, the demarcation of ecosystem boundaries is difficult and complex.</p> | 3 |
| 10 | <p>a) Restriction on the construction and other developmental activities such as roads and dams, limiting agriculture to valleys and areas with moderate slopes, and control on the development of large settlements in the high vulnerability zones, should be enforced. This should be supplemented by some positive actions like promoting large-scale afforestation programmes and construction of bunds to reduce the flow of water</p> <p>b) Crop failure leading to scarcity of food grains (akal), fodder (trinkal), inadequate rainfall, resulting in shortage of water (jalkal), and often shortage in all the three (trikal) is most devastating// . Large-scale death of cattle and other animals, migration of humans and livestock are the most common sight to be seen in the droughtaffected areas.// Scarcity of water compels people to consume contaminated water resulting in spread of many waterborne diseases like gastro-enteritis, cholera, hepatitis,</p> | 3 |
| 11 | <p>a) They spread over regions which receive rainfall between 70-200 cm.</p> <p>b) On the basis of the availability of water, these forests are further divided into moist and dry deciduous</p> <p>c) The Moist deciduous forests are more pronounced in the regions which record rainfall between 100-200 cm. These forests are found in the northeastern states along the foothills of Himalayas, eastern slopes of the Western Ghats and Orissa. Teak, sal, shisham, hurra, mahua, amla, semul, kusum, and sandalwood etc. are the main species of these forests.</p> <p>d) Dry deciduous forest covers vast areas of the country, where rainfall ranges between 70 -100 cm. On the wetter margins, it has a transition to the moist deciduous, while on the drier margins to thorn forests. These forests are found in rainier areas of the Peninsula and the plains of Uttar Pradesh and Bihar. The trees shed their leaves completely and the forest appears like a vast grassland with naked trees all around. Tendu, palas, amaltas, bel, khair,</p> | 3 |

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| | axlewood, etc | |
| 12 | <p>Continental Shelf The continental shelf is the extended margin of each continent occupied by relatively shallow seas and gulfs. It is the shallowest part of the ocean showing an average gradient of 1° or even less. The shelf typically ends at a very steep slope, called the shelf break. The width of the continental shelves vary from one ocean to another. The average width of continental shelves is about 80 km. The shelves are almost absent or very narrow along some of the margins like the coasts of Chile, the west coast of Sumatra, etc.</p> <p>The continental shelves are covered with variable thicknesses of sediments brought down by rivers, glaciers, wind, from the land and distributed by waves and currents. Massive sedimentary deposits received over a long time by the continental shelves, become the source of fossil fuels.</p> | 3 |
| 13 | <p>With the help diagrams explain how land & sea breeze takes place.</p> <p>During the day, the sun heats up both the ocean surface and the land. Water is a good absorber of the energy from the sun. The land absorbs much of the sun's energy as well. However, water heats up much more slowly than land and so the air above the land will be warmer compared to the air over the ocean. The warm air over the land will rise throughout the day, causing low pressure at the surface. Over the water, high surface pressure will form because of the colder air. To compensate, the air will sink over the ocean. The wind will blow from the higher pressure over the water to lower pressure over the land causing the sea breeze. The sea breeze strength will vary depending on the temperature difference between the land and the ocean.</p> <p>At night, the roles reverse. The air over the ocean is now warmer than the air over the land. The land loses heat quickly after the sun goes down and the air above it cools too. This can be compared to a blacktop road. During the day, the blacktop road heats up and becomes very hot to walk on. At night, however, the blacktop has given up the added heat and is cool to the touch. The ocean, however, is able to hold onto this heat after the sun sets and not lose it as easily. This causes the low surface pressure to shift to over the ocean during the night and the high surface pressure to move over the land. This causes a small temperature gradient between the ocean surface and the nearby land at night and the wind will blow from the land to the ocean</p>  <p>creating the land breeze.</p> | 3 |
| 14 | <p>[i]Distinguish between eastern & western coasts.[4 points]</p> <p>1. The Eastern Coastal plain lies along the east coast of India and is washed by the Bay of Bengal. But the Western Coastal Plain lies along the west coast of India and is washed by The Arabian Sea.</p> <p>2. The East Coast plain runs smoothly from the north to the south with</p> | 5 |

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| | <p>a broad plain and level surface. But the West Coast plain also runs from the north to the south and it is in some places intersected by the mountain ridges.</p> <p>3. Eastern Coastal Plain is broader than the West Coast plain. The width varies from 80 to 100 km. But the Eastern Coastal Plain is narrow with a width of 50 to 65 km. In some places it is so narrow that the Western Ghats touch the Sea water.</p> <p>4. The large rivers make wide deltas on the Eastern Coastal Plains. But the short swift rivers do not make any deltas on the West Coast.</p> <p>5. The Eastern Coast is sandy with alluvium and slopes gently towards the sea. Sand dunes and marshy lands are also found. In some Coastal strips lagoons (Chilka, Pulicat) are formed. But the Western Coast is relatively rocky with sand and sand dunes. It slopes abruptly down to the sea. There is no lagoon on the northern part. It has many estuaries on the Konkon Coast. But the southern part especially the Malabar Coast has the beautiful scene of back-water country with a series of lagoons.</p> <p>[ii] What do you mean by river basin? The catchments of large rivers are called river basins</p> <p>[iii] With the help of a diagram explain dendritic pattern of drainage. The drainage pattern resembling the branches of a tree is known as “dendritic” the examples of which are the rivers of northern plain</p>  | |
| 15 | <p>[i] Why Rajasthan receives very low rainfall? [ii] Discuss the Hot Weather season under the following headings: 1) months 2) temperature conditions 3) pressure conditions 4) precipitation 1) June –July 2) high temperature with sunshine 3) Low pressure 4) no rain</p> | 5 |
| 16 | <p>Write the features of Tropical Evergreen Forest They are found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 22°C.// Tropical evergreen forests are well stratified, with layers closer to the ground and are covered with shrubs and creepers, with short structured trees followed by tall variety of trees.// trees reach great heights up to 60 m or above. There is no definite time for trees to shed their leaves, flowering and fruition// they appear green all the year round// Species found in these forests include rosewood, mahogany, aini, ebony, etc.</p> | 5 |
| 17 | <p>Highlight the features of Laterite soil Laterite has been derived from the Latin word ‘Later’ which means brick. The laterite soils develop in areas with high temperature and high rainfall.// These are the result of intense leaching due to tropical rains// With rain, lime and silica are leached away, and soils rich in iron oxide and aluminium compound are left behind.// Humus content of the soil is removed fast by bacteria that thrives well in high temperature.// These soils are poor in organic matter, nitrogen, phosphate and calcium, while iron oxide and potash are in excess.// Hence, laterites are not suitable for cultivation; however, application of manures and fertilisers are required for making the soils fertile for cultivation.</p> | 5 |
| 18 | <p>What is mass movement .Explain the two types of Movements These movements transfer the mass of rock debris down the slopes under the</p> | 5 |

direct influence of gravity. That means, air, water or ice do not carry debris with them from place to place but on the other hand the debris may carry with it air, water or ice. The movements of mass may range from slow to rapid, affecting shallow to deep columns of materials and include creep, flow, slide and fall

Slow Movements Creep is one type under this category which can occur on moderately steep, soil covered slopes. Movement of materials is extremely slow and imperceptible except through extended observation. Materials involved can be soil or rock debris. This process is quite common in moist temperate areas where surface melting of deeply frozen ground and long continued rain respectively, occur frequently

Rapid Movements These movements are mostly prevalent in humid climatic regions and occur over gentle to steep slopes. Movement of water-saturated clayey or silty earth materials down low-angle terraces or hillsides is known as earthflow

19 What is terrestrial radiation? Explain Heat Budget of earth 5

The insolation received by the earth is in short waves forms and heats up its surface. The earth after being heated itself becomes a radiating body and it radiates energy to the atmosphere in long wave form. This energy heats up the atmosphere from below. This process is known as terrestrial radiation

Consider that the insolation received at the top of the atmosphere is 100 per cent. While passing through the atmosphere some amount of energy is reflected, scattered and absorbed. Only the remaining part reaches the earth surface. Roughly 35 units are reflected back to space even before reaching the earth's surface. Of these, 27 units are reflected back from the top of the clouds and 2 units from the snow and ice-covered areas of the earth. The reflected amount of radiation is called the albedo of the earth. The remaining 65 units are absorbed, 14 units within the atmosphere and 51 units by the earth's surface. The earth radiates back 51 units in the form of terrestrial radiation. Of these, 17 units are radiated to space directly and the remaining 34 units are absorbed by the atmosphere (6 units absorbed directly by the atmosphere, 9 units through convection and turbulence and 19 units through latent heat of condensation). 48 units absorbed by the atmosphere (14 units from insolation +34 units from terrestrial radiation) are also radiated back into space. Thus, the total radiation returning from the earth and the atmosphere respectively is 17+48=65 units which balance the total of 65 units received from the sun. This is termed the heat budget or heat balance of the earth

The diagram illustrates the Earth's heat budget with the following energy flows (in units):

- Incoming Solar Radiation:** 100 units from Space.
- Reflected Radiation (Albedo):** 35 units are reflected back to Space. This includes 27 units reflected by clouds, 2 units from snow/ice, and 6 units from the surface.
- Absorption:** 65 units are absorbed. 14 units are absorbed by the atmosphere, and 51 units are absorbed by the Ocean/Land surface.
- Outgoing Radiation:** 65 units are radiated back to Space. This includes 17 units of Net Longwave Radiation from the surface, 9 units of Net Longwave Radiation from the atmosphere, and 39 units of radiation from clouds (27 units from clouds and 12 units from the atmosphere).
- Atmospheric Processes:** 19 units of energy are transferred from the surface to the atmosphere through latent heat flux (evaporation) and sensible heat flux. 6 units are absorbed directly by the atmosphere, and 13 units are absorbed through convection and turbulence.

20 Explain orographic rain and convectional rainfall 1+4=5

Conventional Rain

The, air on being heated, becomes light and rises up in convection currents. As it rises, it expands and loses heat and consequently, condensation takes place and cumulous clouds are formed. With thunder and lightening, heavy rainfall takes place but this does not last A combination of these four basic

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| | <p>types can give rise to the following types of clouds: high clouds – cirrus, cirrostratus, cirrocumulus; middle clouds – altostratus and altocumulus; . Such rain is common in the summer or in the hotter part of the day. It is very common in the equatorial regions and interior parts of the continents, particularly in the northern hemisphere.</p> <p>Orographic Rain When the saturated air mass comes across a mountain, it is forced to ascend and as it rises, it expands; the temperature falls, and the moisture is condensed. The chief characteristic of this sort of rain is that the windward slopes receive greater rainfall. After giving rain on the windward side, when these winds reach the other slope, they descend, and their temperature rises. Then their capacity to take in moisture increases and hence, these leeward slopes remain rainless and dry. The area situated on the leeward side, which gets less rainfall is known as the rain-shadow area. It is also known as the relief rain.</p> | |
| 21 | Map work | 10 |