

BSEH Model Test Paper 2024-25

Haryana School Education Board – Bhiwani Question wise Detailed Marking Scheme (2024 - 25)

Class – 11th

Subject – Geography

Question	Marking scheme (including the importance of each part of the answer)	Aggregate marks	
Section – A Objective Type Questions			
1	(B) Alfred Hartner	1	1
2	(D) Planets without satellite(s)	1	1
3	(B) Volcanism	1	1
4	(C) Troposphere	1	1
5	(D) High rainfall in all the months	1	1
6	(C) January	1	1
7	Brazil	1	1
8	82°30'E	1	1
9	A) Reason is true, and Reason is the correct explanation of Assertion.	1	1
10	A) Reason is true, and Reason is the correct explanation of Assertion.	1	1
Total Marks of Section-A		10	
Section – B Very Short Answer Type Questions			
11	When there is similarity and dissimilarity among the physical and cultural features on the earth surface, it is called aerial differentiation.	2	2
12	Regarding the origin of the earth, the German philosopher Immanuel Kant, considered that the planets were formed out of a cloud of material associated with a youthful sun which was slowly rotating. This theory was supported by Laplace. The name of their theory is known as Nebular Hypothesis.	2	2
13	When 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. These are called neap tides.	2	2
14	Different types of ecosystems exist with varying ranges of environmental conditions where various plants and animals species have got adapted through evolution. This phenomenon is known as ecological adaptation.	2	2
15	Social forestry means the management and protection of forests and afforestation on barren lands with the purpose of helping in the environmental, social and rural development.	2	2
	or		
	Towards the end of summer, there are pre-monsoon showers which are a common phenomenon in Kerala and coastal areas of Karnataka. They are known as mango showers, locally since they help in the early ripening of mangoes.	2	
16	Disaster management is inclusive of all those processes and preparations which are undertaken to mitigate the losses from disasters. It includes steps that should be	2	2

BSEH Model Test Paper 2024-25

	taken before disaster, during disaster and after disaster.		
	or		
	Very high damage risk zone	1	
	High damage risk zone		
	Moderate damage risk zone	1	
	Low damage risk zone		
	Very low damage risk zone.		
Total Marks of Section-B			12
Section – C Short Answer Type Questions			
17	Alfred Wegener, a German meteorologist, put forth a comprehensive argument in the form of “the continental drift theory” in 1912. This was regarding the distribution of the oceans and the continents. According to Wegener, all the continents formed a single continental mass and mega ocean surrounded the same. He called the super continent as PANGAEA, meaning all earth. He named mega ocean as PANTHALASSA, meaning all water. According to him. Around 200 million years ago, the super continent, Pangaea, began to split. Pangaea first broke into two large continental masses as Laurasia and Gondwanaland forming the northern and southern components respectively. Subsequently, Laurasia and Gondwanaland continued to break into various smaller continents that exist today. A variety of evidence was offered in support of the continental drift.	3	3
18	The depositional landform formed by the groundwater are: Stalactites: Stalactites hang as icicles of different diameter. Normally they are broad at their bases and taper towards the free ends showing up in variety of forms.	1	3
	Stalagmites: Stalagmites rise up from the floor of the caves. In fact stalagmites form due to dripping water from the surface or through the thin pipe of stalactite, immediately below it. Stalagmite may take the shape of a column, a disc with either a smooth, rounded bulging end or a miniature crater like depression.	1	
	Pillars: The stalagmite and stalactite eventually fuse to give rise to column and pillars.	1	
19	Longitudinal extent of India is 68°7' to 97°25' E-(2-9°). There is time variation of 2 hours between easternmost and the westernmost parts of our country. The sun rises two hours earlier in Arunachal Pradesh as compared to Gujarat. This is because the earth is tilted and also it rotates in east to west direction. So while rotation, the eastern parts of the world experiences the sun rays earlier as compared to the western parts of the world. 1 degree = 4 minutes 30 degree = 4 x 30 = 120 minutes 120 minutes = 2 hours	3	3
20	These rivers originate in peninsular plateau and central highland. These are seasonal as it is dependent on monsoon rainfall. They reflect super imposed type of drainage pattern and rejuvenated resulting in trellis, radial and rectangular patterns. These rivers are smaller having fixed course with well-adjusted valleys. Their catchment area is relatively smaller basin. These rivers are old rivers with graded profile, and have almost reached their base levels.	3	3
21	The Inter Tropical Convergence Zone (ITCZ) is a low pressure zone located at the equator where trade winds converge, and so, it is a zone where air tends to ascend. In July, the ITCZ is located around 20°N-25°N latitudes (over the Gangetic plain). These are sometimes called the monsoon trough. This monsoon trough encourages	3	3

BSEH Model Test Paper 2024-25

	<p>the development of thermal low over north and northwest India. Due to the shift of ITCZ, the trade winds of the southern hemisphere cross the equator between 40° and 60°E longitudes and start blowing from southwest to northeast due to the Coriolis force. It becomes southwest monsoon. In winter, the ITCZ moves southward, and so the reversal of winds from northeast to south and southwest, takes place. They are called northeast monsoons.</p>		
	or		
	<p>The Himalayan ranges show a succession of vegetation from the tropical to the tundra, which change in with the altitude. Mountain forests can be classified into two types, the northern mountain forests and the southern mountain forests. Deciduous forests are found in the foothills of the Himalayas. It is succeeded by the wet temperate type of forests between altitudes of 1,000–2,000 m. In the higher hill ranges of north-eastern India, hilly areas of West Bengal and Uttaranchal, evergreen broad leaf trees such as oak and chestnut are predominant. Between 1,500–1,750 m, pine forests are also well-developed in this zone, with Chir Pine as a very useful commercial tree. Deodar, a highly valued endemic species grows mainly in the western part of the Himalayan range. Blue pine and spruce appear at altitudes of 2,225–3,048 m. At many places in this zone, temperate grasslands are also found. But in the higher reaches there is a transition to Alpine forests and pastures. Silver firs, junipers, pines, birch and rhododendrons, etc. occur between 3,000–4,000 m.</p>	3	
22	<p>Indian plate is moving at a speed of one centimetre per year towards the north and north-eastern direction and this movement of plates is being constantly obstructed by the Eurasian plate from the north. As a result of this, both the plates are said to be locked with each other resulting in accumulation of energy at different points of time. Excessive accumulation of energy results in building up of stress, which ultimately leads to the breaking up of the lock and the sudden release of energy, causes earthquakes along the Himalayan arch.</p>	3	3
	or		
	<p>Following are the basic requirements for the formation of cyclones: Large and continuous supply of warm and moist air that can release enormous latent heat.</p>	1	
	<p>Strong Coriolis force that can prevent filling of low pressure at the centre because absence of Coriolis force near the equator prohibits the formation of tropical cyclone between 0°-5° latitude.</p>	1	
	<p>Unstable condition through the troposphere that creates local disturbances around which a cyclone develops. Absence of strong vertical wind wedge, which disturbs the vertical transport of latent heat.</p>	1	
Total Marks of Section-C			18
Section – D Long Answer Type Questions			
23	<p>Different types of chemical weathering includes:</p> <p>1. Oxidation and Reduction: Oxidation is the effect of oxygen in air and water on the rocks. The atmospheric oxygen in rainwater unites with minerals in rocks specially with iron compounds. When oxidised minerals are placed in an environment where oxygen is absent, reduction takes place. It exists normally below water table, in area of stagnant water in more hot and humid climates.</p>	2	5
	<p>2. Carbonation: When the carbon dioxide in atmosphere dissolves in water it form carbonic acid that affects the rocks, it is carbonation. It has acidic affect and dissolves calcium carbonates and magnesium carbonates such as gypsum, marble, limestone.</p>	1	

BSEH Model Test Paper 2024-25

	<p>3. Hydration: When the hydrogen of water dissolves in rocks hydration occurs. Certain minerals in rocks increase their volume and become heavy when observe water contains hydrogen. They break due to its increased pressure and the colour also changes.</p>	1	
	<p>4. Solution: Rainwater is able to dissolve certain minerals and leaching of the soil occurs. Normally solids are also removed during leaching. For e.g.: gypsum, rock salt, etc. undergo solution.</p>	1	
	or		
	<p>A river passes through three stages like a human being: youth, mature and old. 1. Youth Stage: Youth streams are less in number. In this stage with poor integration and flow over original slopes showing shallow V-shaped valleys with no floodplains or with very narrow floodplains along trunk streams. Streams divides are broad and flat with marshes, swrnmp and lakes. If meanders are present, they develop over these broad upland surfaces. These meanders may eventually entrench themselves into the uplands. Waterfalls and rapids may exist where local hard rock bodies are exposed.</p>	2	
	<p>2. Mature Stage: During this stage streams are plenty with good integration. The valleys are still V-shaped but deep; trunk streams are broad enough to have wider floodplains within which streams may flow in meanders confined within the valley. The flat and broad inter stream areas and swamps and marshes of youth disappear and the stream divides turn sharp. Waterfalls and rapids disappear.</p>	2	
	<p>3. Old Stage: Smaller tributaries during old age are few with gentle gradients. Streams meander freely over vast floodplains showing natural levees, oxbow lakes, etc. Divides are broad and flat with lakes, swamps and marshes. Most of the landscape is at or slightly above sea level.</p>	1	
24	<p>1. Conduction: The earth after being heated by insolation transmits the heat to the atmospheric layers near to the earth in long wave form. The air in contact with the land gets heated slowly and the upper layers in contact with the lower layers also get heated. It takes place when two bodies of unequal temperature are in contact with one another, there is a flow of energy from the warmer to cooler body. The transfer of heat continues until both the bodies attain the same temperature or the contact is broken. Conduction is important in heating the lower layers of the atmosphere.</p>	2	5
	<p>2. Convection: The air in contact with the earth rises vertically on heating in the form of currents and further transmits the heat of the atmosphere. This vertical heating of atmosphere is known as convection. The convection transfer of energy is confined only to the troposphere.</p>	1	
	<p>3. Advection: The transfer of heat through horizontal movement of air is called advection. Horizontal movement of the air is relatively more important than the vertical movement. In tropical regions particularly in northern India during summer season local winds called 'loo' is the outcome of advection process.</p>	2	
	or		
	<p>Air is set in motion due to the differences in atmospheric pressure. The air in motion is called wind. The wind blows from high pressure to low pressure. The wind at the surface experiences friction. Following factors affect the direction and velocity of winds.</p>	1	
	<p>1. Pressure gradient force: The differences in atmospheric pressure produces a force. The rate of change of pressure with respect to distance is the pressure</p>	1	

BSEH Model Test Paper 2024-25

	gradient.		
	2. Frictional force: It affects the speed of the wind. It is greatest at the surface and its influence generally extends upto an elevation of 1 – 3 km. Over the sea surface the friction is minimal.	1	
	3. Coriolis force: The rotation of the earth about its axis affects the direction of the wind. This force is called the Coriolis force after the French physicist who described it in 1844. In addition, rotation of the earth also affects the wind movement. The force exerted by the rotation of the earth is known as the Coriolis force.	1	
	4. Pressure and wind: The velocity and direction of the wind are the net result of the wind generating forces. The winds in the upper atmosphere, 2-3 km above the surface, are free from frictional effect of the surface and are controlled mainly by the pressure gradient and the Coriolis force. When isobars are straight and when there is no friction, the pressure gradient force is balanced by the Coriolis force and the resultant wind blows parallel to the isobar. This wind is known as the geostrophic wind.	1	
25	The Northern Plains- These plains extend approximately 3,200 from the east to the west. The average width of these plains varies between 150-300 km. The maximum depth of alluvium deposits varies between 1,000-2,000 m.	1	5
	The area covered by northern plains is 7 lakhs square km and is most densely populated region of country. From north to South, these plains can be divided into three sub divisions: Bhabar, Tarai and Alluvial Plains. The alluvial plains can be further divided into the Khadar and the Bhangar.	1	
	Bhabar It is a narrow belt ranging between 8-16 km parallel to the Shiwalik foothills at the breaking of the slopes. The streams and rivers coming from the mountain deposit heavy materials of rocks and boulders and at times, disappear in this zone.	1	
	Tarai Its approximate width is of 20-30 km where most of the streams and river re-emerge without having any properly demarcated channel, thereby, creating marshy and swampy condition known as the Tarai. It has a luxurious growth of natural vegetation and houses a varied wild life.	1	
	Alluvial Plains These plains have characteristic features of mature stage of fluvial erosional and depositional landforms such as sand bars, meanders, ox-bow lakes and braided channels. The Brahmaputra plains are known for their riverine islands and sand bars. The mouths of these mighty rivers also form some of the largest deltas of the world, for example, the famous Sunderbans delta. These river valley plains have a fertile alluvial soil cover which supports a variety of crops like wheat, rice, sugarcane and jute, and hence supports a large population.	1	
	or		
	The Ganga System: 1. The Ganga is the most important river of India both from the point of view of its basin and cultural significance. It rises in the Gangotri glacier near Gaumukh (3,900 m) in the Uttarkashi district of Uttarakhand. Here, it is known as the Bhagirathi. It cuts through the Central and the Lesser Himalayas in narrow gorges.	1	
	2. At Devaprayag, the Bhagirathi meets the Alaknanda; hereafter, it is known as the Ganga. The Alaknanda has its source in the Satopanth glacier above Badrinath. The	1	

BSEH Model Test Paper 2024-25

	Alaknanda consists of the Dhaulī and the Vishnu Ganga which meet at Joshimath or Vishnu Prayag.		
	3. The river has a length of 2,525 km. It is shared by Uttarakhand (110 km) and Uttar Pradesh (1,450 km), Bihar (445 km) and West Bengal (520 km). The Ganga basin covers about 8.6 lakh sq. km area in India alone.	1	
	4. The Ganga river system is the largest in India having a number of perennial and non-perennial rivers originating in the Himalayas in the north and the Peninsula in the south, respectively. The Son is its major right bank tributary.	1	
	5. The important left bank tributaries are the Ramganga, the Gomati, the Ghaghara, the Gandak, the Kosi and the Mahananda. The Yamuna, the westernmost and the longest tributary of the Ganga, has its source in the Yamunotri glacier on the western slopes of Banderpunch range (6,316 km).	1	
	6. The river finally discharges itself into the Bay of Bengal near the Sagar Island.		
Total Marks of Section-D			15
Section – E Map Work			
26	Sikkim, Assam, Meghalaya, Tripura.(Any 2)	1	5
	Palk Strait	1	
	Mahanadi Delta	1	
	Narmada River	1	
	Thar Desert	1	
Aggregate marks			60