

DAV PUBLIC SCHOOLS, ODISHA ZONE

NAME OF THE EXAM. Half Yearly Examination, SUBJECT Geography CLASS : XI

MARKING SCHEME

QSTN NO	VALUE POINTS	MARKS ALLOTTE D	PAGE NO. OF NCERT TEXT BOOK
Qs. No	SECTION-A There are 17 questions in this section.	Mark(s)	Page
1.	c-Eratosthenes	1	FPG-2
2.	b. Systematic Approach	1	FPG-7
3.	c-both are formed in space, probably from same matter.	1	FPG-22
4.	a. Porosity/Permeability	1	FPG-45
5.	c-fjord	1	FPG-65
6.	b. Lakshadweep	1	IPE-5
7.	c. 7	1	IPE-5
8.	c-The earth moves from west to east.	1	IPE-2
9.	b-I & III	1	IPE-5
10.	b.2.4 percent	1	IPE-5
11.	c. Mount Everest	1	IPE-11
12.	c. I and II	1	IPE-19
13.	d. River Godavari and its tributaries in South.	1	IPE-24
14.	d.A is false but R is true	1	IPE-26,27
15.	b. Edwin Hubble	1	FPG-14
16.	b. Singular atom	1	FPG-15
17.	b. 13.7 billion years	1	FPG-15
	SECTION-B Questions 18 & 19 are Source based questions.		
18.	1. Pangaea 2. Around 200 million years ago 3. Laurasia and Gondwanaland forming the northern and southern components respectively	1x3=3	FPG-30
19	a. The relief features which separate the Arabian sea drainage and the Bay of Bengal drainage are the Delhi ridge, the Aravallis and the Sahyadris. (Any two) b. The Himalayan rivers are rainfed as well as snow fed. So they have water flow round the year. c. The slope of the Deccan plateau is from NW to SE, so maximum rivers flow into the Bay of Bengal.	1 1 1	IPE-22,23
	SECTION-C Question numbers 20 to 23 are Short Answer type questions.		
20.	a. Present societies have modified their natural environment by inventing and using technology and thus, have expanded the horizon of their operation by appropriating	3	FPG-3

	<p>and utilising the resources provided by nature.</p> <p>b. With the gradual development of technology, human beings were able to loosen the shackles of their physical environment.</p> <p>c. Technology helped in reducing the harshness of labour, increased labour efficiency and provided leisure to human beings to attend to the higher needs of life.</p> <p>d. It also increased the scale of production and the mobility of labour (Any three)</p>		
21.	<p>An earthquake is shaking of the earth. It's a Natural event. It is caused due to release of energy, which generates waves that travel in all directions.</p> <ul style="list-style-type: none"> • Focus/Hypocentre: The point where the energy is released is called the focus/Hypocentre of an earthquake. • Epicentre: The point on the surface which is nearest to the focus of energy is called epicentre. It is the first one to experience the waves. It is a point directly above the focus <p>Measurement of earthquake:</p> <ul style="list-style-type: none"> • Magnitude: It is measured by Richter Scale • Intensity: It is measured by Mercalli Scale. 	3	FPG-22,24
22.	<p>Physical or mechanical weathering processes depend on some applied forces. The applied forces could be:</p> <ul style="list-style-type: none"> • Gravitational forces such as overburden pressure, load and shearing stress. • Expansion forces due to temperature changes, crystal growth or animal activity. • Water pressures controlled by wetting and drying cycles. <p style="text-align: center;">OR</p> <p>All processes that move, elevate or build up portions of the earth's crust come under diastrophism.</p> <p>They include:</p> <ul style="list-style-type: none"> • Orogenic processes: It involves mountain building through severe folding and affecting long and narrow belts of the earth's crust: • Epeirogenic processes: It involves continental building through uplift or warping of large parts of the earth's crust. • Earthquakes: It involves local relatively minor movements; • Plate tectonics: It involves horizontal movements of crustal plates. <p style="text-align: center;">All these processes-cause pressure, volume and temperature (PVT) changes which in turn induce metamorphism of rocks.</p>	3	FPG-38 FPG-46,48
23.	<p>The salient features of the Indian desert.</p> <p>a. It is a land of undulating topography dotted with longitudinal dunes and barchans.</p> <p>b. This region receives low rainfall below 150 mm per year; hence, it has arid climate with low vegetation cover. It is because of these characteristic features that this is also known as Marusthali.</p> <p>c. It is believed that during the Mesozoic era, this region was under the sea. This can be corroborated by the evidence available at wood fossils park at Aakal and marine deposits around Brahmsar, near Jaisalmer .</p> <p>d. Though the underlying rock structure of the desert is an extension of the Peninsular plateau. (Any three)</p> <p style="text-align: center;">OR</p> <p>The western coastal plain of India.</p> <p>a. The western coastal plains are an example of submerged coastal plain.. Because of this submergence it is a narrow belt and provides natural conditions for the development of ports and harbours. Kandla, Mazagaon, JLN port Navha Sheva, Marmagao, Mangalore, Cochin, etc. are some of the important natural ports located along the west coast.</p> <p>b. Extending from the Gujarat coast in the north to the Kerala coast in the south, the western coast may be divided into following divisions – the Kachchh and Kathiawar</p>	3	IPE-17 IPE-18

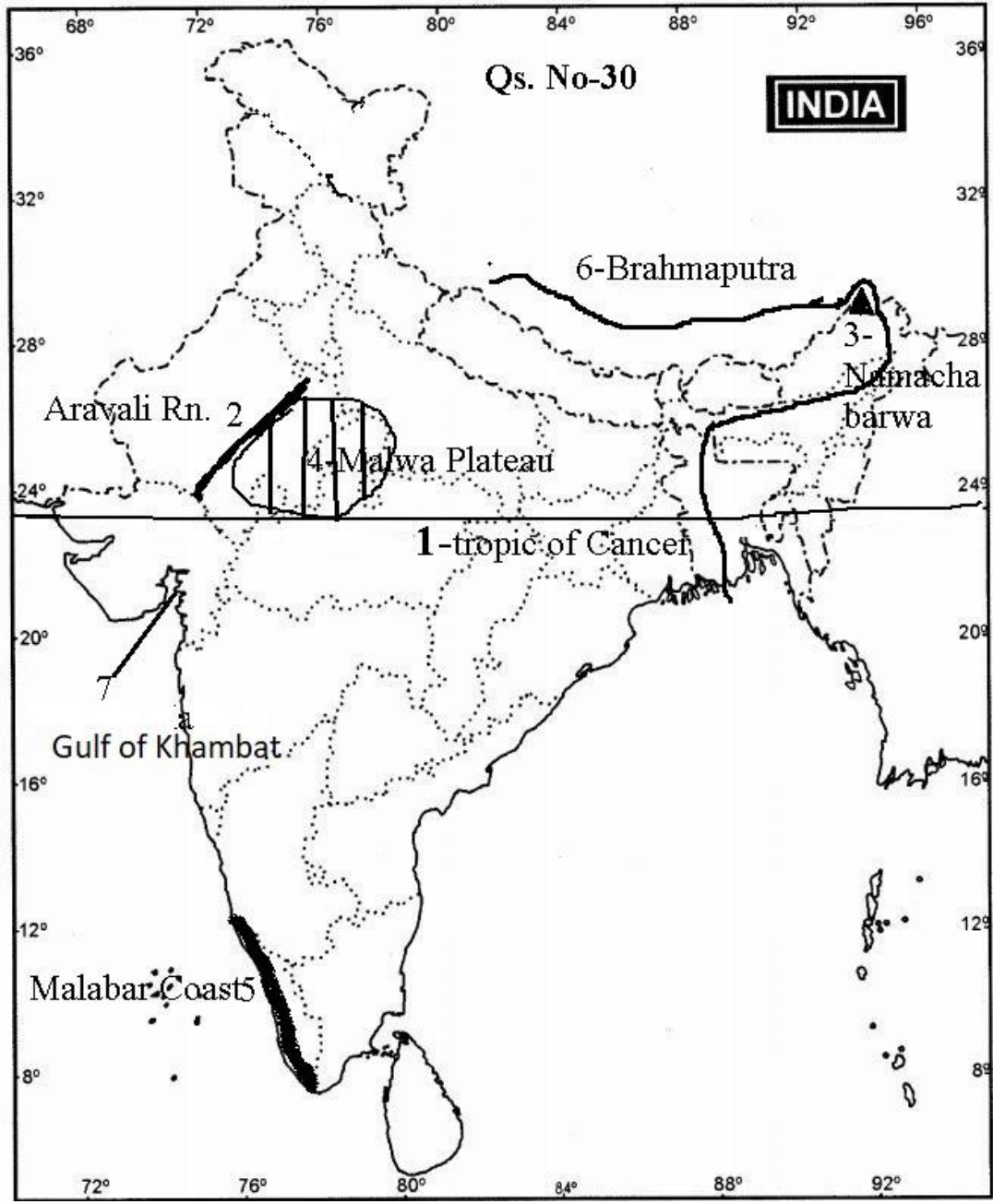
	<p>coast in Gujarat, Konkan coast in Maharashtra, Goan coast and Malabar coast in Karnataka and Kerala respectively.</p> <p>c. The western coastal plains are narrow in the middle and get broader towards north and south. The rivers flowing through this coastal plain do not form any delta.</p>		
	SECTION-D		
	Question numbers 24 to 28 are Long Answer type questions.		
24.	<p>The stages in the development of atmosphere and hydrosphere on earth.</p> <p>a. There are three stages in the evolution of the present atmosphere. The first stage is marked by the loss of primordial atmosphere. In the second stage, the hot interior of the earth contributed to the evolution of the atmosphere. Finally, the composition of the atmosphere was modified by the living world through the process of photosynthesis.</p> <p>b. The early atmosphere, with hydrogen and helium, is supposed to have been stripped off as a result of the solar winds. This happened not only in case of the earth, but also in all the terrestrial planets, which were supposed to have lost their primordial atmosphere through the impact of solar winds.</p> <p>c. During the cooling of the earth, gases and water vapour were released from the interior solid earth. This started the evolution of the present atmosphere. The early atmosphere largely contained water vapour, nitrogen, carbon dioxide, methane, ammonia and very little of free oxygen. The process through which the gases were outpoured from the interior is called degassing.</p> <p>d. Continuous volcanic eruptions contributed water vapour and gases to the atmosphere. As the earth cooled, the water vapour released started getting condensed.</p> <p>e. The carbon dioxide in the atmosphere got dissolved in rainwater and the temperature further decreased causing more condensation and more rains. The rainwater falling onto the surface got collected in the depressions to give rise to oceans.</p>	5	FPG-17
25.	<p>Glacier- Masses of ice moving over the land are called glacier.</p> <p>Depositional features-</p> <p>a. Moraines They are long ridges of deposits of glacial till. Terminal moraines are long ridges of debris. Lateral moraines form along the sides parallel to the glacial valleys. Such deposits varying greatly in thickness and in surface topography are called ground moraines. The moraine in the centre of the glacial valley flanked by lateral moraines is called medial moraine. They are imperfectly formed as compared to lateral moraines. Sometimes medial moraines are indistinguishable from ground moraines</p> <p>b. Eskers-When glaciers melt in summer, the water flows on the surface of the ice or seeps down along the margins or even moves through holes in the ice. These waters accumulate beneath the glacier and flow like streams in a channel beneath the ice. Such streams flow over the ground with ice forming its banks. Very coarse materials like boulders and blocks along with some minor fractions of rock debris carried into this stream settle in the valley of ice beneath the glacier and after the ice melts can be found as a sinuous ridge called esker.</p> <p>c. Outwash Plains- The plains at the foot of the glacial mountains or beyond the limits of continental ice sheets are covered with glacio-fluvial deposits in the form of broad flat alluvial fans which may join to form outwash plains of gravel, silt, sand and clay.</p> <p>d. Drumlins-Drumlins are smooth oval shaped ridge-like features composed mainly of glacial till with some masses of gravel and sand. The drumlins form due to dumping of rock debris beneath heavily loaded ice through fissures in the glacier. Drumlins give an indication of direction of glacier movement</p> <p style="text-align: center;">OR</p> <p>The various types of sand dunes formed in the deserts. The dunes are the temporary hills of sand formed in the desert due to depositional action of the wind. They are of various types on the basis of shapes.</p>	1+4=5	FPG-55

	<p>a. Barchans-Crescent shaped dunes called barchans with the points or wings directed away from wind direction i.e., downwind, form where the wind direction is constant and moderate and where the original surface over which sand is moving is almost uniform.</p> <p>b. Parabolic dunes form when sandy surfaces are partially covered with vegetation. That means parabolic dunes are reversed barchans with wind direction being the same.</p> <p>c. Seif is similar to barchan with a small difference. Seif has only one wing or point. This happens when there is shift in wind conditions. The lone wings of seifs can grow very long and high.</p> <p>d. Longitudinal dunes form when supply of sand is poor and wind direction is constant. They appear as long ridges of considerable length but low in height.</p> <p>e. Transverse dunes are aligned perpendicular to wind direction. These dunes form when the wind direction is constant and the source of sand is an elongated feature at right angles to the wind direction. They may be very long and low in height</p>		FPG-61
26.	<p>Latitudinal extent of India: $6^{\circ} 45'N$- $37^{\circ} 6' N$ Longitudinal extent of India: $68^{\circ} 7'E$- $97^{\circ} 25' E$</p> <p>From the values of latitude, it is understood that the southern part of the country lies within the tropics and the northern part lies in the sub-tropical zone or the warm temperate zone. This location is responsible for large variations in land forms, climate, soil types and natural vegetation in the country.</p> <p>From the values of longitude, it is quite discernible that there is a variation of nearly 30 degrees, which causes a time difference of nearly two hours between the easternmost and the westernmost parts of our country. While the sun rises in the northeastern states about two hours earlier as compared to Jaisalmer, the watches in Dibrugarh, Imphal in the east and Jaisalmer, Bhopal or Chennai in the other parts of India show the same time we follow one standard time.</p> <p style="text-align: center;">OR</p> <p>India has endowed her with great physical diversity. There are lofty mountains in the north; large rivers such as Ganga, Brahmaputra, Mahanadi, Krishna, Godavari and Kaveri; green forested hills in northeast and south India; and the vast sandy expanse of Marusthali. India is bounded by the Himalayas in the north, Hindukush and Sulaiman ranges in the northwest, Purvachal hills in the north-east and by the large expanse of the Indian ocean in the south, it forms a great geographic entity known as the Indian subcontinent. It includes the countries — Pakistan, Nepal, Bhutan, Bangladesh and India. The Himalayas, together with other ranges, have acted as a formidable physical barrier in the past. Except for a few mountain passes such as the Khyber, the Bolan, the Shipkila, the Nathula, the Bomdila, etc. it was difficult to cross it. It has contributed towards the evolving of a unique regional identity of the Indian subcontinent.</p> <p>Peninsular part of India extends towards the Indian Ocean. This has provided the country with a coastline of 6,100 km in the mainland and 7,517 km in the entire geographical coast of the mainland plus the island groups Andaman and Nicobar located in the Bay of Bengal and the Lakshadweep in the Arabian Sea. Thus India, as a country, is a physically diverse land providing occurrence of varied resources</p>	5	IPE-1,4
27.	<p>The salient features of the 'Northern Plains '.</p> <p>a. The northern plains are formed by the alluvial deposits brought by the rivers the Indus, the Ganga and the Brahmaputra. These plains extend approximately 3,200 km 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.</p>	5	IPE-11 , 12

	<p>b. From the north to the south, these can be divided into three major zones: the Bhabar, the Tarai and the alluvial plains. The soils of the alluvial plains further divided into bhangra(old alluvial soil), khadar(new alluvial soil and Kankar (old alluvial soil containing calcareous deposits)</p> <p>c. 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. Most of these areas are subjected to periodic floods and shifting river courses forming braided streams.</p> <p>d. The mouths of these mighty rivers also form some of the largest deltas of the world, for example, the famous Sunderbans delta. Otherwise, this is a featureless plain with a general elevation of 50-150 m above the mean sea level.</p> <p>e. The states of Haryana and Delhi form a water divide between the Indus and the Ganga River systems. As opposed to this, the Brahmaputra River flows from the northeast to the southwest direction before it takes an almost 90° southward turn at Dhubri before it enters into Bangladesh. 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</p>		
28	<p>The Himalayan rivers</p> <ol style="list-style-type: none"> 1. Originated from Himalayan Mountain 2. Perennial-receive water from snow and rainfall. 3. Longer course, in plains meandering and shifting of course. 4. Very large basins 5. Young, youthful, active so have more erosional activity. <p>The Peninsular rivers</p> <ol style="list-style-type: none"> 1. Originated from Peninsular Plateau and Central Highlands. 2. Seasonal- get water from rainfall only. 3. Smaller, fixed course with well-adjusted valleys. 4. Relatively smaller basins. 5. Old rivers with graded profile, hard rock so lesser erosional activity. <p>(Any other relevant points)</p> <p style="text-align: center;">OR</p> <p>The flow of water through well-defined channels is known as ‘drainage</p> <p>Important Drainage Patterns</p> <p>Dendritic-The drainage pattern resembling the branches of a tree is known as “dendritic” the examples of which are the rivers of northern plain.</p> <p>Radial- When the rivers originate from a hill and flow in all directions, the drainage pattern is known as ‘radial’. The rivers originating from the Amarkantak range present a good example of it. Trellis- When the primary tributaries of rivers flow parallel to each other and secondary tributaries join them at right angles, the pattern is known as ‘trellis’.</p> <p>Centripetal- When the rivers discharge their waters from all directions in a lake or depression, the pattern is known as ‘centripetal’.</p>	5	IPE - 29,30
SECTION-E			
29.	<ol style="list-style-type: none"> A. A major tectonic plate – N. American Plate B. A minor tectonic plate.- Nazca Plate C. A major earthquake belt of the world.-Alpine Himalayan belt D. An oceanic ridge -Mid-Atlantic Ridge E. An ocean – Indian Ocean F. A continent- Australia G. A belt of live volcanoes – The Ring of fire 		1x5=5
			(Any 5)

30.

1x5=5



(Any 5)

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