

MAHESH TUTORIALS I.C.S.E.

ICSE X

Marks : 80

SUBJECT : **GEOGRAPHY**

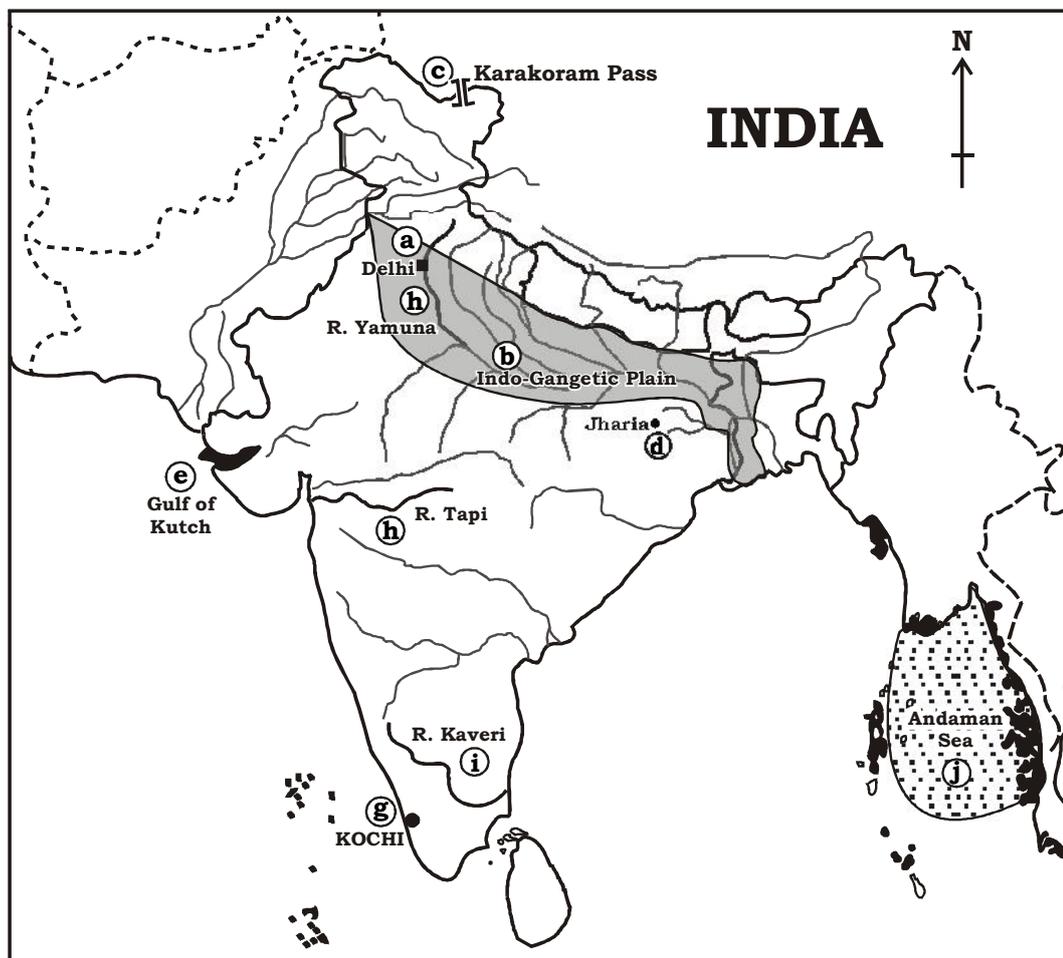
Exam No. : MT/ICSE/PRELIM-I-SET-A-009

Time : 2 hrs.

Model Answer Paper

A.1		
(a)	063215	[1]
(b)	Agriculture animal/Cattle rearing.	[2]
(c)	(i) Stony waste - 0918.	[1]
	(ii) Sheet rock - 0826	[1]
(d)	Broken ground.	[1]
(e)	The area has undergone gully erosion.	[2]
(f)	Dendritic	[1]
(g)	Scattered settlement	[1]
(h)	The direction of Dantrai from Dhana is North West.	[1]
(i)	The contour interval for the map is 20 meters.	[1]
(j)	The road can be used only during the dry season as it gets marshy during the rainy season.	[2]
(k)	The relative height of the dry tank with an embankment is 3 metres above the mean sea level for that given area.	[2]
(l)	Cart track.	[2]
(m)	Government officials.	[2]

A.2



A.3

- (a) (i) Patna receives heavier rain than Delhi because of lies in the lower Ganga Valley, whereas Delhi lies on the Upper Ganga Valley. The Bay of Bengal Branch flows from the Bay of Bengal and reaches Patna earlier than Delhi.
- (ii) Western Rajasthan receives no rain from the Arabian Sea Branch of the south-west Monsoon as these winds blow parallel to the Aravalli Hills.
- (iii) Mangalore is situated along the western coasted plain and is affected by the sea breezes which moderate its temperature. Therefore Mangalore does not get cold in December. [3]
- (b) (i) **Temperate Cyclones or depressions** : This affect the north-west of India which includes the state of Jammu and Kashmir, Punjab, Himachal Pradesh, Haryana, Uttarakhand etc. These are caused in the winter. (December-January).
- (ii) **Tropical Cyclones** : These affect the eastern coast of southern India (Odisha, Andhra Pradesh, Tamil Nadu) and blow in the months of October-November. [2]
- (c) (i) The Westerly Depression in Punjab cause rain in winter which is beneficial for the crops like wheat and barley.

	(ii) The Kalbaisakhi occur in Assam and West Bengal in the hot season. These are thunderstorms accompanied with strong winds and heavy rainfall which is beneficial for the tea, coffee and rice crops.	[2]
(d)	(i) The mean annual temperature is 28°C. (ii) Total rainfall during the monsoon season is 180.5 cm. (iii) Maritime Climate as the range in temperature is only 6.6°C. A continental climate has a much greater difference as the summers are very hot and winters are very cold.	[3]
A.4		
(a)	The two farming techniques which help in soil conservation are crop rotation and contour ploughing. (i) Crop Rotation : It is a system in which farmers grow crops on a farm in a regular cycle so that fertility and productivity of land are maintained. (ii) Contour Ploughing : In this ploughing is done usually in hilly areas along the outline of the field in a curcular manner so that the soil is not washed away by running water.	[2]
(b)	(i) Alluvial soil is extremely fertile soil as it consists of very fine soil called alluvium, which is deposited by the rivers. (ii) Black soil is in - situ in nature because it is formed in the original position of the parent rock. The volcanic ox igneous rock undeego the process of disintegration which leads to the formationof black soil. (iii) Re-afforestation should be practised extensively as the number of trees that are being cut down are more than those that are being planted. Floods and landslides cause soil erosion.	[3]
(c)	(i) Laterite soil is not suitable or cultivation as it is deficient in lime and nitrogen and cannot retain moisture. It is also very acidic which makes it unsuitable for agricultural purposes. (ii) Red soil is red in colour due to the high content of iron oxide. (iii) Khadar soils are preferred to Bhangar soils as they consist of mainly fine silt and clay and are very fertile as they are replenished every year by floods. On the other hand, the Bhangar soils contain pebbles and gravels and are coarse in nature.	[3]
(d)	There is a great need for soil conservation in India for crops to grow. India is an agricultural country and its economy depends on the production of crops. Floods can also be prevented. Soil can be conserved by afforestation which means growing of more trees and by checking overgrazing of pasture land by animals.	[2]
A.5		
(a)	The forest area is reducing in India due to : (i) deforestation for timber and fuel (ii) shifting cultivation practised by tribals	

	(iii) overgrazing (iv) increase in population and demand for food and shelter.	[3]
(b)	(i) Fir (ii) Teak (iii) Sandalwood	[3]
(c)	The two characteristics of Tidal forests are : (i) Tidal forests are found along the coasts and the mouth of the rivers which are affected by tides. (ii) The trees found here (Gujran, Hintal, Sundari) yield hardwood which is strong and durable and is used for making boats and boxes.	[2]
(d)	The trees of the Tropical Deciduous forests shed their leaves in the hot season when there is an acute scarcity of water, so that there is less loss of water by evaporation. The trees shed the leaves at different times and the forest is never bare.	[2]
A.6		
(a)	(i) Agriculture is the most important occupation in Punjab, Rainfall is erratic, unreliable and not sufficient. So irrigation is of great importance. (ii) In Rajasthan, the rainfall is very low as it lies in a rain shadow area. So water is required for crops as well as for domestic use.	[2]
(b)	The two states in which tube wells extensively used are Uttar Pradesh and Punjab. It is an important source of irrigation as it is reliable during the summer when all other means have failed. It can draw out large amounts of water in a short while.	[2]
(c)	There is need to conserve water because : (i) India has seasonal rainfall which is not evenly distributed throughout the country. Certain areas experience scarcity of water, so conservation of water resources of necessary. (ii) The water table is lowered due to overexploitation of underground water. (iii) Industries use large amount of water and also pollute the fresh surface water.	[3]
(d)	(i) Rainwater harvesting is the technique of collecting rain, flood and underground water and then using it according to one's need (ii) (1) To reduce run off loss. (2) To increase the level of groundwater. (3) To reduce erosion and flooding.	[3]
A.7		
(a)	The two main drawbacks of the coal found in India are : (i) A large amount of coal has to be taken out from deep underground mines. Machinery cannot be used effectively.	

	(ii) Most of the coalfields are in Odisha, West Bengal and Jharkhand. The industries in the northern and western parts have to pay higher prices as it has to be transported even greater distances.	[2]
(b)	Conditions necessary for the formation of natural gas are similar to those required for petroleum as they are mostly found together. Oil is found in sedimentary rocks in the sea, in the coastal region. Natural gas can be used for different purposes, e.g. for transport, industries, agriculture, cooking and for lighting purposes. Its transportation is easier as it can be sent to distant places in cylinders or by pipelines.	[3]
(c)	(i) Mineral oil is used as : (a) fuel for vehicles, planes, etc. (b) raw material in industries. (c) lubricating agent. (d) by-products like benzene, kerosene. (ii) Old mineral oil producing area – Digboi, Moran, Naharkatiya. New mineral oil producing area - Mumbai High, Bassein, Aliabet etc.	[2]
(d)	The advantages of hydel power are : (i) It is a neat and clean form of energy and does not cause pollution. (ii) Water is inexhaustible and renewable. (iii) It is the cheapest source of energy. (iv) It has little maintenance.	[3]
A.8		
(a)	The two problems of agriculture in India are as follow : (i) Unreliable, seasonal and unequally distributed rainfall is the main cause of the failure of rain-fed crops. (ii) As the farmers are illiterate, they are not willing to use the modern scientific methods of cultivation.	[2]
(b)	The two geographical requirements for the growth of cotton. (i) Mild, cool, dry climate with temperatures between 21°C and 27°C. (ii) Moderate rainfall of 50 cm to 80 cm, well distributed throughout the year.	[2]
(c)	(i) Tea is cultivated on hill slopes as excess and stagnant water near the roots damages the plants. (ii) The yield per hectere of sugar cane is higher in the southern state owing to the favourable climate, better irrigational facilities and assistance from the government. (iii) Pulses are important as they are a source of protein for the vegetation. Being leguminous, pulses fix atmospheric nitrogen in the soil and are rotated with other crops.	[3]
(d)	(i) Tea is the leading beverage crop of India. (ii) Soil – deep, well drained fertile soil, rich in humus.	

<p>A.9</p> <p>(a)</p>	<p>Rainfall – between 150 cm – 250 cm. Labour – skilled female labour for picking of leaves.</p> <p>(i) The two geographical factors for setting up of Durgapur iron and steel plant are as follows. (a) Iron ore can be easily available from Keonjhar in Odisha and Singbhum in Jharkhand. (b) Coking coal from Raniganj and Jharia.</p> <p>(ii) The Iron and steel industry needs huge capital investment. India is a developing country, so it has not been able to exploit its resources to its fullest extent.</p>	<p>[3]</p>				
	<p>(b) Integrated Steel Plants and Mini Steel Plants.</p>		<p>[2]</p>			
	<table border="1"> <thead> <tr> <th data-bbox="300 633 853 683">Integrated Steel Plants</th> <th data-bbox="853 633 1457 683">Mini Steel Plants</th> </tr> </thead> <tbody> <tr> <td data-bbox="300 683 853 1014"> 1. The integrated steel plants are concentrated near the raw materials. 2. Blast furnaces are used for the processing. 3. There is heavy capital investment. 4. Coal, iron ore, limestone etc are used. </td> <td data-bbox="853 683 1457 1014"> 1. Mini steel plants are spreadout in all directions. 2. Electric furnances are used. 3. Capital investment is less. 4. The raw material used consist of sponge iron, scrap iron etc. </td> </tr> </tbody> </table>	Integrated Steel Plants	Mini Steel Plants	1. The integrated steel plants are concentrated near the raw materials. 2. Blast furnaces are used for the processing. 3. There is heavy capital investment. 4. Coal, iron ore, limestone etc are used.	1. Mini steel plants are spreadout in all directions. 2. Electric furnances are used. 3. Capital investment is less. 4. The raw material used consist of sponge iron, scrap iron etc.	
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	<p>(c) Though Uttar Pradesh has the largest number of sugar mills yet Maharashtra is the largest producer of sugar because of the following reasons :</p> <p>(i) The geographical conditions are more suitable in the south as the soil is well drained. (ii) Capital investment is larger. (iii) The crushing season is longer. (iv) Absence of frost and higher temperature. (v) Modern machinery and fertilizers are used. (vi) Factories are closer to the fields. (vii) Better financial facilities.</p>	<p>[3]</p>				
	<p>(d)</p> <p>(i) The price fluction of raw silk affects the silk industry adversely. Moreover there is great competition from artificial silk and synthetic materials. (ii) Synthetic fibres are more popular as they are cheap, more durable, stronger and of greater variety.</p>	<p>[2]</p>				
<p>A.10</p> <p>(a)</p>	<p>Railways is more important means of transport than airways as it is much cheaper and within the means of the common man. It caters to the needs for large scale movement of both freight and passengar traffic.</p>	<p>[2]</p>				

(b)	(i) National waterway No. 2 – The Brahmaputra river between Sadiya and Dhubri. (ii) North-South corridor connecting Srinagar with Kanniyakumari. (iii) Kolkata.	[2]
(c)	The following are the two advantages of waterways. (i) They are the cheapest form of transport for carrying heavy and bulky goods. (ii) They are fuel efficient and an environment-friendly means of transport. One disadvantage of waterways is that they can only be used in the middle and lower courses of rivers and where the rivers are perennial.	[3]
(d)	The three major factors which influence the railways in India are : (i) Geographical factors like density of population, agriculture, relief of the land. (ii) Economic factors like the level of prosperity of a region. In a well-developed region the need for railways is more. (iii) Political and Administrative factors like policy of Government in promoting transport services.	[3]
A.11		
(a)	The following are the reasons for waste management. (i) Groundwater is contaminated when toxic wastes seep into the ground and causes many diseases like cancer. (ii) Waste, which is accumulated, provides a safe breeding ground for flies, insects, rodents etc. These spread infection. (iii) Liquid wastes discharged into rivers harm aquatic as well as human life.	[2]
(b)	(i) It is very important that gaseous waste is treated as it pollutes the environment and harms humans, wildlife and vegetation. (ii) Asthama and lung cancer are the two common diseases caused by gaseous pollution.	[3]
(c)	65% of the atmosphere is polluted by the exhaust gases – CO ₂ , NO ₂ , lead oxides etc. emitted from the vehicles which have increased recently in the metro cities and densely populated regions. The level of pollution has also increased.	[2]
(d)	The three sources of methane gas are : (i) Fossil fuels like coal and natural gas. (ii) Livestock farming. (iii) Rice/paddy fields.	[3]
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