PART 1(30 MARKS)

*Attempt **all** questions from this **Part**.*

Question 1

Study the extract of the **Survey of India** Map Sheet No. **45D/10** and answer the following questions:

(a)   Give the *six-figure grid reference* for: [2]

     (i) The highest point in this map extract.

     (ii) Surveyed tree north of Rampura Khera.

(b)   On which bank of Sukli Nadi lies: [2]

     (i) Butri

     (ii) Padrugarh

(c)   Differentiate between the drainage pattern shown in grid square: [2]

     (i) 0704

     (ii) 0705

(d)   The region in this map extract receives seasonal rainfall. Give *two* reasons   for   [2]
     your answer.

(e)   Calculate the distance in km between settlement Bhatana and Makawal along the   [2]
     cart track.

(f)   State the Compass direction of the following: [2]

     (i) Dattani from Marol.

     (ii) Dhavli from Makawal.

(g)   (i) Mention a social activity of people living in Marol.   [2]

     (ii) What is the main occupation of the people living in this region?

(h)   What do you understand by: [2]

     (i) The black broken line in 0807

     (ii) The vertical black line close to Easting 10

(i)   What is the main source of water supply to Bhatana? Give a reason for your   [2]
     answer.

(j)   (i) Name one natural feature in the grid square 0905.   [2]

     (ii) Identify one man made feature in the grid square 1003.

Comments of Examiners

(a) A number of candidates were unable to calculate the six-figure grid reference.

(b) Many candidates were unsure of the left and right bank and incorrectly wrote 'east and west bank'. A few were unable to identify the bank of Sukli Nadi.

(c) Most candidates answered correctly.

(d) This part was answered correctly by most candidates.

(e) Some candidates did not write the unit of measurement.

(f) Most candidates answered correctly.

(g) (i) The term 'social activity' was not understood by some candidates who incorrectly wrote agriculture/worshipping in the temples/ priesthood instead of 'monthly fair at Marol'.

   (ii) While most candidates answered correctly, some wrote animal rearing/irrigation, etc.

(h) (i) Some of the candidates could not identify 'disappearing stream'.

   (ii) Some candidates incorrectly wrote 'latitude' in place of 'longitude'.

(i) Most candidates failed to understand the meaning of 'source of water supply' and as a result the second part of the answer was answered incorrectly. Candidates wrote rivers/tanks instead of 'perennial lined wells'.

(j) (i) Some candidates wrote 'broken land' instead of 'broken ground'.

   (ii) Man made feature was identified correctly by most candidates.

MARKING SCHEME

Question 1

(a)	(i)	Highest point (spot height 365) 078065
	(ii)	Surveyed tree – 072074
(b)	(i)	Butri – Left Bank
	(ii)	Padrugarh – Right
(c)	(i)	0704 – Trellised
	(ii)	0705 – Radial
(d)		Cart Track motorable in the dry season/ dry tanks / dry river beds / seasonal streams. *(Any two)*
(e)		4.9 km – 5 km.
(f)	(i)	South west
	(ii)	North east
(g)	(i)	Monthly fair at Marol
	(ii)	Cultivation / farming / agriculture
(h)	(i)	Undefined drainage pattern / disappearing drainage pattern.
	(ii)	Longitude line – 72° 35' east
(i)		Perennial lined wells – are marked all over the settlement and the seasonal tank is dry in the dry season.
(j)	(i)	0905 – broken ground / isolated hillocks / seasonal streams. *(Any one)*
	(ii)	1003 – PO / Temple / permanent settlement / cart track / seasonal tank / seasonal tank with embankment / perennial lined well. *(Any one)*

Question 2

On the outline map of India provided:

(a)   Draw and name the *Tropic of Cancer.*   [1]

(b)   Label the river *Godavari.*   [1]

(c)   Mark and name the *Garo Hills.*   [1]

(d)   Mark C on the coal fields in *Jharia.*   [1]

(e)   Mark with an arrow and name *the NE monsoon* over *the Bay of Bengal*.   [1]

(f)   Shade and name the *Gulf of Kutch*.   [1]

(g)   Shade and name the *coastal plain* that receives rainfall in *October-November*.   [1]

(h)   Mark with a dot and name *Delhi*.   [1]

(i)   Shade a region with *Black Cotton Soil.*   [1]

(j)   Use an arrow to point at a *densely populated state in South India.*   [1]

Comments of Examiners

(a) Most of the candidates drew the 'Tropic of Cancer' as a straight line cutting through Gulf of Kutch instead of an arc (curved line).
(b) Most candidates marked *Godavari* correctly.
(c) *Garo hill* was not marked correctly by many candidates. Some candidates confused it with 'Khasi' and 'Jaintia'.
(d) *Jharia* was not marked correctly by a few candidates.
(e) Most candidates marked the *NE Monsoon* over the Bay of Bengal correctly, However, in several cases, the arrow head was incorrectly pointed towards Myanmar and Bangladesh.
(f) Most candidates marked *Gulf of Kutch* correctly.
(g) A few candidates shaded the entire east coast area while some candidates shaded over the water area.
(h) Some candidates marked *Delhi* anywhere along the Yamuna.
(i) The region with black cotton soil was correctly marked by most candidates.
(j) Some candidates did not demarcate the area correctly - the arrow was marked haphazardly. Some candidates shaded the entire area of Kerala and Tamil Nadu.
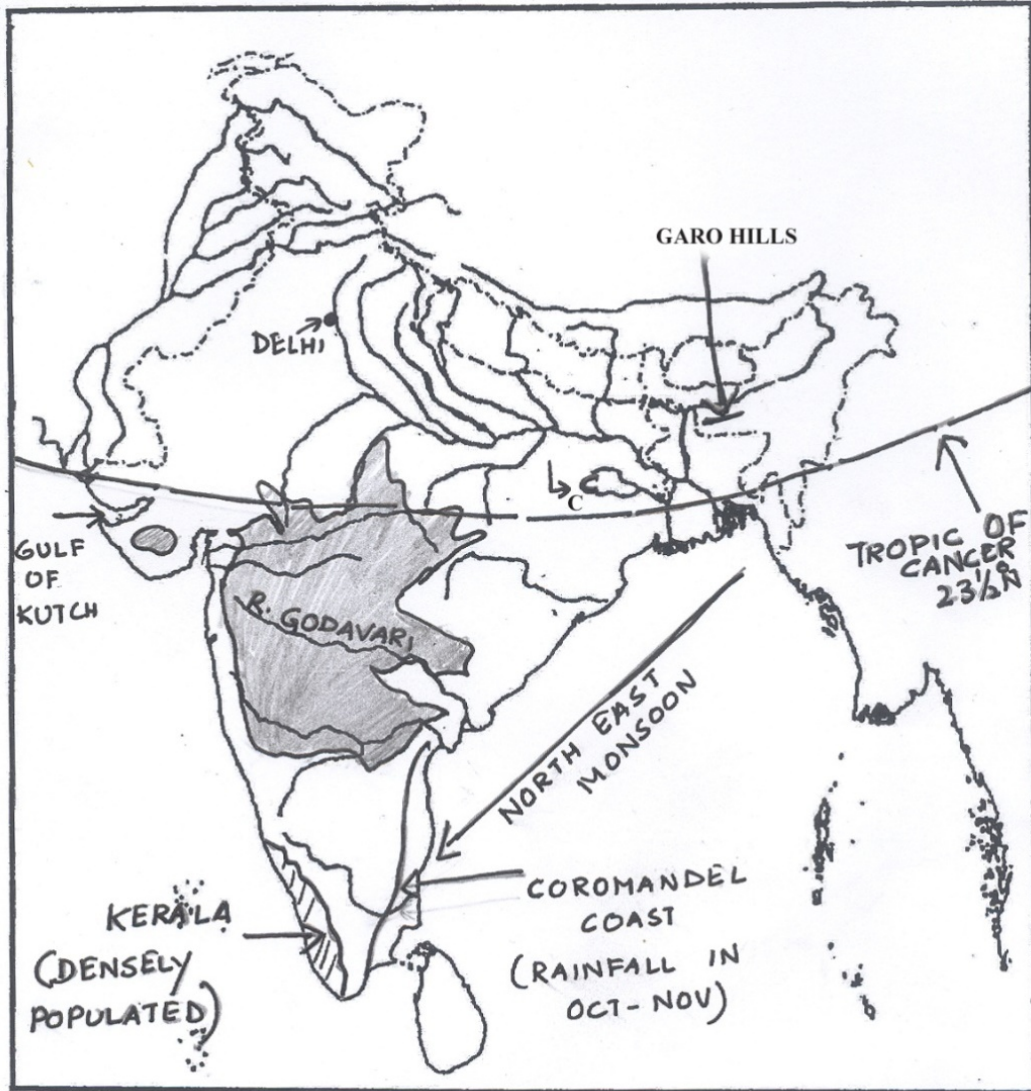
Question 2

Map

Hand-drawn outline map of India with the following labels: GARO HILLS, DELHI, C, TROPIC OF CANCER 23½°N, GULF OF KUTCH, R. GODAVARI, NORTH EAST MONSOON, KERALA (DENSELY POPULATED), COROMANDEL COAST (RAINFALL IN OCT-NOV)

Question 3

(a)   Mention the four seasons that prevail in India stating the months for each.   [2]

(b)   State the *agricultural benefits* derived from: [2]

        (i)   The Westerly Depressions in Punjab.

        (ii)   The Kalbaisakhi in Assam.

(c)   Give a *reason* for each of the following: [3]

    (i)   Kolkata receives heavier rain than Lucknow.

    (ii) The Summer Monsoon winds blows over the Arabian Sea from the South-west.

    (iii) Thar is a desert.

(d)   Study the climatic data given below and answer the questions that follow: [3]

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Temp. °C	12.0	25.5	26.3	27.1	30.0	36.2	36.0	35.9	30.3	28.4	21.0	16.6
Rainfall cm	1.5	0.1	0.0	1.4	1.1	21.0	25.3	27.2	24.0	9.4	1.5	0.4

    (i)   What is the annual range temperature of the station?

    (ii)   What is the total annual rainfall experienced by the station?

    (iii) Why would it be correct to presume that the station lies in the interior and not on the coast?

Comments of Examiners

(a) Most candidates answered correctly. Many could not write the months for each season prevailing in India.

(b) (i)-(ii)Agricultural benefits derived from Westerly depression in Punjab and Kalbaisakhi in Assam was not understood by most candidates who explained the terms and the process instead of naming the crop as benefit.

(c) (i)Many candidates were not sure about the location of Kolkata and Lucknow hence, incorrectly answered about the location and direction of wind.

(ii)Coriolis force was not clear. Summer, monsoon winds over the Arabian sea from SW was explained by candidates however, the bifurcation and deflection at the equator was not clear.

(iii)This part was answered correctly by most candidates.

(d) (i)Most of the candidates wrote annual range temperature of the station correctly.

(ii)Many candidates calculated total annual rainfall experienced by the station correctly but did not express the unit of measure.

(iii)Many candidates were unable to answer this part correctly. They were unable to realize the implication of high annual range of temperature.

MARKING SCHEME
Question 3

(a)	Cold/winter – December to February Hot /summer – March to May Monsoon – June to September Retreating monsoon – October, November
(b)	(i) Westerly Depression – wheat and barley in Punjab (ii) Kalbaisakhi – tea in Assam

(c)	(i) Kolkata is situated in the Ganga delta region whereas Lucknow is located inland in the middle course of the Ganga. The Bay of Bengal branch of the SW monsoon is exhausted as it blows up the Ganga Plain. Therefore, Kolkata receives more rainfall than Lucknow. (ii) As the SE trade winds cross the Equator they are deflected to their right (according to Ferrel's law) and blow towards the West coast from the South West when they cross the Arabian Sea. (iii) - The Arabian Sea branch of SW monsoon blows parallel to the Aravalli that do not intercept the winds. Therefore, no rain. - Less than 25 cm rainfall occurs in winter due to the westerly depressions. - The Bay of Bengal branch of SW monsoon is exhausted by the time it reaches the windward slopes of the Aravallis. These winds shed no rain on the leeward side where the Thar Desert lies. - Humidity is very low in summer. The moisture evaporates before it could rain. - The moisture laden winds blowing over Rajasthan do not saturate as the heat of the Thar region increases the capacity to hold moisture, so there is no rainfall.
(d)	(i) 24.2ºC (ii) 112.9 cm (iii) It is in the interior because the annual range temperature is high as 24.2°C/ the rain is only 112.9 cm, while a place on the coast would have a much heavier rainfall. *(Any one)*

Question 4

(a)   Mention two differences between Alluvial Soil and Black Cotton Soil.   [2]

(b)   Name an area in India in which each of the following processes take place: [2]

    (i)   Sheet erosion

    (ii)   Gully erosion

(c)   What is soil conservation? State a method of soil conservation in the: [3]

    (i)   Arid and Semi-Arid region.

    (ii)   river valleys prone to flood.

(d)   Name the soil which: [3]

    (i)   is good for cultivation of sugarcane.

    (ii)   is acidic in nature.

    (iii)   occurs *exsitu*.

Comments of Examiners

(a) Most candidates wrote the differences between Alluvial Soil and Black Cotton Soil correctly.

(b) Naming an area of 'sheet erosion' and 'gully erosion' was misinterpreted by some candidates who instead of an area, named States.

(c) (i)-(ii)Most candidates answered the first part correctly. However, methods of soil conservation were not answered correctly by most of the candidates.

(d) (i)Most candidates could name the soil good for cultivation of sugarcane.

(ii)The soil which is acidic in nature was named correctly by most candidates.

(iii)A few candidates were unable to understand the meaning of *ex-situ* and wrote incorrect answers.

MARKING SCHEME

Question 4

(a)	**Alluvial Soil**	**Black Soil**
	Transported Soil	Residual soil
	Exsitu	*Insitu*
	Less moisture retention	More moisture retention
	Lighter in colour	Dark in colour
	Sandy / coarse in texture	Clayey / fine grain
	Rich in humus	Deficient in humus *(Any two)*
(b)	(i) Sheet erosion – flood plains of Brahmaputra, Ganga, Kosi, Damodar, Nilgiris. (ii) Gully erosion – Chambal valley	
(c)	Soil conservation is an effort made by man to prevent soil erosion and to retain its fertility.	

	A method of soil conservation:
	(i) Planting of shelter belts / afforestation / re-afforestation
	(ii) Construction of dams and barrages
(d)	(i) Good for sugarcane – alluvial / black cotton soil.
	(ii) Acidic soil – laterite soil
	(iii) Alluvial soil

Question 5

(a)   How do trees in the Tropical desert forests adapt themselves to the dry climate?   [2]

(b)   Name the tree as per its characteristics given below: [2]

      (i)   The wood is hard and suitable for ship building.

      (ii)   The stilt roots are underwater during high tide.

(c)   Explain why the forest cover in India is shrinking?   [3]

(d)   Name the natural vegetation found in the following regions: [3]

      (i)   The western slopes of the Western Ghats.

      (ii)   The Nilgiris.

      (iii) Western Rajasthan.

Comments of Examiners

(a) Most candidates answered the question correctly.

(b) (i)Most candidates answered this part question correctly.

   (ii)Many candidates failed to understand that Mangrove is a type of vegetation and not the name of a tree.

(c) Most candidates answered correctly the reason for shrinkage of forest cover in India.

(d) Many candidates named the natural vegetation found in in the regions asked for in the subparts of this question correctly.

|		
MARKING SCHEME
Question 5
(a)		Trees in the tropical desert forests adapt themselves as they have long roots, small leaves, hard thorns or sharp spines / xerophytic in nature. *(Any two)*
(b)	(i)	Teak
	(ii)	Sundari / Hintal / Gorjan
(c)		– Increased demand for forest products – Deforestation – Urban sprawl/industrialization – Overgrazing by the cattle – Faulty agricultural practices eg. Jhuming *(Any three)*
(d)	(i)	Western slopes of Western Ghats – tropical evergreen forests / rain forests.
	(ii)	Nilgiris – mountain forests.
	(iii)	W Rajasthan – desert and semi desert / thorn and scrub.

Question 6

(a)   Give a reason for the significance of irrigation in: [2]

    (i)   Punjab.

    (ii)   Rajasthan.

(b)   Name a state where: [2]

    (i)   Tube wells are common.

    (ii)   Tank irrigation is popular.

(c)   Give one Geographical reason for each of the following: [3]

    (i)   Sprinkler irrigation is practised in arid and semi-arid regions.

    (ii)   A tube well should be installed in a fertile and productive region.

    (iii) Canal irrigation is more suitable in the Northern Plains.

(d)   Study the diagram below and answer the questions that follow: [3]

Rain water
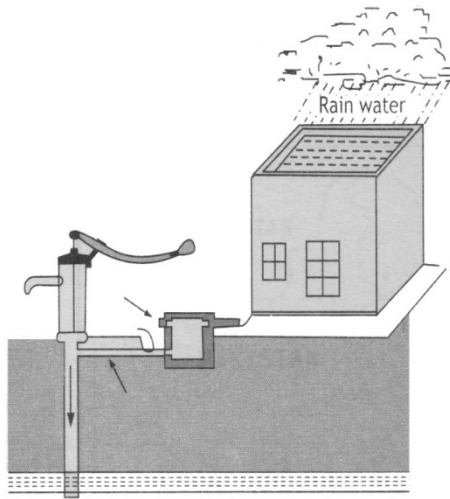
(i)   Name the activity shown in the diagram.

(ii) Give two objectives of the activity named in (d) (i).

Comments of Examiners

(a) The significance of irrigation in Punjab and Rajasthan was not understood by many candidates. They explained the process instead of giving the correct reason.

(b) Many candidates answered both sub-parts of this question correctly. However, a few mentioned that tank irrigation is popular in North India.

(c) Most candidates wrote geographical reasons for the sub-parts of this question correctly. However, tube wells being installed in fertile and productive region was not written correctly by some candidates.

(d) Most candidates wrote 'water harvesting' instead of 'rainwater harvesting' in sub-part (i).

Suggestions for teachers

–   Emphasis must be given to application based reasoning questions.

–   Class tests on reasoning questions should be given regularly to improve the overall performance of students.

–   Comparative study of different methods of irrigation, their advantages and disadvantages must be done.

–   Modern methods of rainwater harvesting, mostly in Urban areas should be explained properly.

–   Explain the importance of traditional and modern means of irrigation. Drip and Sprinkler method should be explained using images. Recharge of groundwater table should be given importance.

MARKING SCHEME

Question 6

(a)	(i)	Punjab – Rainfall is uncertain and varies from year to year and place to place / seasonal / water needed for Rabi crops (winter). The region is rich in agriculture.
	(ii)	Rajasthan – West Rajasthan receives less than 25 cm rainfall.
(b)	(i)	Uttar Pradesh / Bihar / Punjab / Haryana / Rajasthan / West Bengal *(Any one)*
	(iii)	Tamil Nadu / Andhra Pradesh / Karnataka *(Any one)*
(c)	(i)	Sprinkler irrigation – water is supplied through pipes – there is no loss of water by evaporation. Therefore, minimum wastage.
	(ii)	A tube well must be installed in a productive region so that the cost of construction and operation of the tube well may be recovered from increased farm production / it is less expensive / can be installed in the farming area / occupies less space / free from pollution.
	(iii)	Perennial rivers in the Northern plains supply water / plain surface for easy drainage / soft earth-easy to construct canals
(d)	(i)	Rainwater harvesting / ground water recharge
	(ii)	Objectives of rainwater harvesting: – To meet the increasing demand for water – To reduce surface runoff – To avoid flooding of roads – To raise the groundwater level – To improve the quality of ground water/reduce ground water pollution – To reduce soil erosion – To supplement household requirements of water during the hot summers *(Any two)*

Question 7

(a)   Give the names of four important types of iron ore found in India.   [2]

(b)   Name the following: [2]

    (i)   An offshore oil field in the Gulf of Cambay.

    (ii)   An oil refinery in Bihar.

(c)   (i)   Name the state that produces the largest amount of limestone.   [3]

    (ii)   State two uses of limestone.

(d)   State an important industrial use of: [3]

    (i)   Manganese

    (ii)   Coal

    (iii)   Aluminium

Comments of Examiners

(a) Most candidates named correctly the four important types of iron ore found in India.

(b) The offshore oil field in the Gulf of Cambay and the oil refinery in Bihar were named correctly by most of the candidates.

(c) Majority of the candidates wrote the name of the state that produces the largest amount of limestone and its two uses correctly.

(d) Most candidate wrote an important industrial use of each (i) Manganese (ii) Coal and (iii) Aluminium correctly.

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	MARKING SCHEME	
	Question 7	
(a)	Four types of Iron ore mined in India:	
	(i) Magnetite	
	(ii) Hematite	
	(iii) Limonite	
	(iv) Siderite	
(b)	(i) Aliabet island close to Bhavnagar in the Gulf of Cambay.	
	(ii) Barauni	
(c)	(i) Madhya Pradesh / Rajasthan / Gujarat / Andhra Pradesh / Tamil Nadu	
	(ii) Limestone is used as raw material in fertilizer plants / chemicals / iron and steel / cement / glass industry.	
(d)	Industrial use of	
	(i) Manganese – raw material for making steel / paints / glass. *(Any one)*	
	(ii) Coal – main source of power generation / generate thermal electricity / fuel / used in iron and steel industries, chemical industries, cement industry, railway industry. *(Any one)*	
	(iii) Aluminum – raw material for manufacture of aircrafts / automobile / electronic goods / utensils. *(Any one)*	

Question 8

(a)   What is Mixed farming? Mention *any one* benefit of Mixed farming.   [2]

(b)   Give the Geographical requirements for the cultivation of Sugarcane.   [2]

(c)   Explain the following terms and name the crop with which each is associated: [3]
        (i)   Retting
        (ii)   Ratooning
        (iii)   Ginning

(d)   Give geographical reasons for the following:

        (i)   Regular pruning is essential for tea bushes.

        (ii)   Coffee beans are roasted.

        (iii)   Millets are known as dry crops.   [3]

Comments of Examiners

(a) Many candidates did not explain mixed farming properly which reflected a lack of understanding of the topic.

(b) Most of the candidates gave geographical requirements for the cultivation of Sugarcane correctly.

(c) Most candidates were unable to explain the terms correctly and failed to mention the crop associated with each of the terms.

(d) (i) Most candidates answered correctly.

(ii) Most candidates mentioned about the moisture content instead of the aroma, flavour, taste, etc.

(iii) Only a few candidates answered correctly.

MARKING SCHEME

Question 8

(a)	Mixed farming – cultivation of crops and livestock rearing on the same farm. One benefit – cattle and poultry do not need extra expenditure; they thrive on farm waste / Livestock provides substitute income when crops are not ready. *(Any one)*
(b)	Geographical requirement for Sugarcane cultivation: – 20 degrees to 30 degrees Celsius temperature – 100 to 200 cm rainfall – Alluvial or Black soil (well drained)
(c)	(i) Retting – It is a microbiological process in which the jute bundles are submerged in soft, clean water for 2 – 3 weeks, this helps to loosen the outer bark and helps in removal of the fibre from the stalk. (ii) Ratooning – It is a shoot from the root-stock of sugarcane which has been cut leaving the root intact in the soil. (iii) Ginning – It is the process in which cotton fibre is separated from the seed / raw material.
(d)	(i) It helps in growing new shoots bearing soft leaves in plenty / facilitates plucking. (ii) Roasting gives coffee its taste, colour and flavor. (iii) Millets can withstand high temperatures and drought / it is a hardy crop / can grow in areas of scanty rainfall / in adverse climatic conditions.

Question 9

(a)   Differentiate between Mineral-based Industry and Agro-based industry giving one example for each.   [2]

(b)   *'Though Uttar Pradesh has the largest number of sugar mills yet Maharashtra is the largest producer of sugar.'* Give any two reasons to justify the statement.   [2]

(c)   Give the *geographic term* for each of the following: [3]

    (i)   Non-mulberry silk produced in Madhya Pradesh.

    (ii) Rejected cane after crushing.

    (iii) The rearing of silk worms to obtain silk.

(d)   With reference to the cotton textile industry answer the following questions: [3]

    (i)   Give two reasons why Mumbai is an important cotton textile   industry.

    (ii) Mention two more important centres of cotton textile industry in India.

Comments of Examiners

(a) Most candidates differentiated between mineral-based industry and agro-based industry correctly citing appropriate examples for each.

(b) Majority of candidates misinterpreted the question and emphasized on UP having the largest number of sugar mills, and explained about UP and not about Maharashtra.

(c) Most candidates answered the sub-parts(i), (ii) and (iii) correctly.

(d) (i)Most candidates answered the question correctly.

   (ii)Most candidates wrote incorrect answers, as they wrote on states instead of important centres.

	MARKING SCHEME
Question 9
(a)	Mineral based industries use raw materials obtained from mines / e.g. iron and steel / cement **/** shipbuilding. Agro based industries use raw materials obtained from agriculture / e.g. sugar / cotton / jute.
(b)	Maharashtra is the largest producer of sugar – the geographical conditions in the south are more suitable (temperature 20-30 degree Celsius, rain 100-200 cm, no frost, black lava soil). – Large holdings are well planned. – Longer crushing season. – Mills are near the plantation (no loss of sucrose and cost of production is low). – Mills better managed in the cooperative sector. – The sugar lobby is responsible for large capital investment; hence farmers are interested in growing sugarcane. *(Any two)*
(c)	(i) Tussar (ii) Bagasse (iii) Sericulture
(d)	With reference to cotton textile industry: (i) – Easy availability of raw material from the Black Soil region of Maharashtra. – Humid climate. – Cheap hydroelectric power. – Mumbai has international port – import / export facility. – Existence of ready market. – Skilled and unskilled labour from surrounding areas. – Well connected with hinterland by roads and railways. – Abundant supply of soft water for dyeing and bleaching. – Banking facilities available. *(Any two)* (ii) Ahmedabad / Surat / Bhavnagar / Kanpur / Coimbatore / Madurai / Salem / Modinagar / Etawah / Moradabad / Saharanpur. *(Any two)*

Question 10

(a)　'The Iron and Steel industry constitutes the backbone of modern industrial economy.'　[2]

　　　Give two reasons to justify the statement.

(b)　(i)　Name an Iron and Steel Industry set up in Orissa with the help of a famous German　[2]
　　　　　firm.

　　　(ii)　From where does the industry named in b (i) get its iron ore and manganese?

(c)　Name a manufacturing centre for each of the following industries:　[3]

　　　(i)　Aircraft

　　　(ii)　HMT

　　　(iii)　Railway coaches

(d)　Name two products each of the following industries:　[3]

　　　(i)　petrochemical industry.

　　　(ii)　heavy engineering industry.

　　　(iii)　electronic industry.

Comments of Examiners

(a) Some candidates were unable to comprehend the term 'backbone' and hence, wrote reasons that were vague in nature.

(b) (i)A few candidates were unable to identify the Rourkela Steel Plant.

　　(ii)Most candidates answered incorrectly.

　　(i) & (ii) Most candidates answered these sub-parts　of the question correctly.

　　(iii)Some candidates committed errors in identifying the manufacturers of railway coaches, engines and locomotives and hence, wrote incorrect answers.

(c) (i)A few candidates made mistakes in naming products based on the petrochemical industry.

　　(ii)Some candidates attempted the question correctly.

　　(iii)Most candidates answered correctly.

MARKING SCHEME
Question 10
(a)		Iron and steel industry:
		– Supplies necessary machinery for production of other goods
		– Railway tracks, engines, ships and motors are made of iron and steel
		– Used in constructing bridges
		– Making armaments
		– Water pipes and sewage covers
		– Infrastructural necessities in airports and seaports
		– Other capital goods
		– Supports agriculture, fertilizer and cement industry *(Any two)*
(b)	(i)	Rourkela Steel Plant
	(ii)	Iron ore – Bonaigarh, Mayurbhanj, Keonjhar, Noamundi, Sundergarh Manganese – Noamundi / Keonjhar.
(c)	(i)	Aircraft – Bengaluru / Nasik / Korapat / Hyderabad / Lucknow / Kanpur.
	(ii)	H.M.T. – Bengaluru / Hyderabad / Srinagar / Ajmer / Ranchi / Secunderabad.
	(iii)	Railway coaches – Chennai / Kapurthala in Punjab.
(d)	(i)	Plastics / insecticides / Synthetic fibre / Synthetic rubber / PVC / Polythene
	(ii)	Ships / Aircrafts / Automobiles.
	(iii)	Computers / Television Sets / Audio systems

Question 11

(a)   Mention two reasons why more people use railways rather than airways.   [2]

(b)   Why is inland waterways declining in its importance? Give two reasons for your   [2]
answer.

(c)   What do you mean by the following: [3]

      (i)   Sewage.

      (ii)   Eutrophication.

      (iii)   Recycling.

(d)   'Methane is an air pollutant that causes Green House effect.' Name three sources of this   [3]
gas.

Comments of Examiners

(a) Most candidates could give reasons for why railways are used by more people than the airways.

(b) Most candidates were unable to comprehend the question and wrote incorrect and vague answers.

(c) (i) Many candidates wrote generalised meaning of sewage.

(ii) Most candidates explained 'Eutrophication' correctly.

(iii) Most candidates answered correctly except for a few who appeared to be unaware of the term 'Recycling'.

(d) Most candidates did not write three sources of methane correctly.

	MARKING SCHEME
	Question 11
(a)	More people travel by railways than by airways because: – Airways are expensive. – Airways do not allow passengers to carry much luggage. – Not all places are connected by airways. *(Any two)*
(b)	Indian waterways is declining its importance because: – It provides access to limited areas. – It is much slower than roadways and railways.
(c)	(i) Sewage: the waste water discharge from domestic premises like residences, institutions, and commercial establishments is known as sewage. (ii) Eutrophication: Type of water pollution / it is process of depletion of oxygen from the water bodies either through natural or due to human activities / This process takes place due to introduction of nutrients and chemicals through discharge of domestic sewage, waste from industries and from agricultural fields. (iii) Recycling or reuse involves the collection of used and discarded materials and processing these materials and making them into new products.

(d)	Methane comes from – Cattle shed – Swamps – Coal mines – Decomposition of vegetable matter *(Any three)*

GENERAL COMMENTS

Topics found difficult / confusing by candidates

- Topographical map: Bank of Sukli Nadi, Social activity of people living in Marol, Vertical black line close to Easting 10, Main source of water supply to Bhatana.
- Winds deflecting due to Coriolis effect.
- Name an area in India in which each of the following processes take place: Sheet erosion, gully erosion.
- Mixed farming and its benefits.
- Sources of Methane, terminology associated with waste management.
- Marking on the outline map of India: Coal field Jharia, Tropic of cancer, Coastal plain.
- Agricultural benefits derived from: The westerly depressions in Punjab, the Kalbaisakhi in Assam.
- Significance of irrigation in Punjab and Rajasthan.
- Off shore oil fields.

Suggestions for candidates

- Study the chapter thoroughly.
- Practice miscellaneous exercise on map work.
- Avoid selective study.
- Optimize the reading time to select the questions to be answered.
- Neat work and legible handwriting is a must.
- Differences should be written in a tabular form.
- Maps should be fastened and attached properly inside the answer booklet.
- Solve the previous years' board papers and discuss all doubts with your teacher.
- Prepare tables and charts on topics such as soil, minerals and crops.