

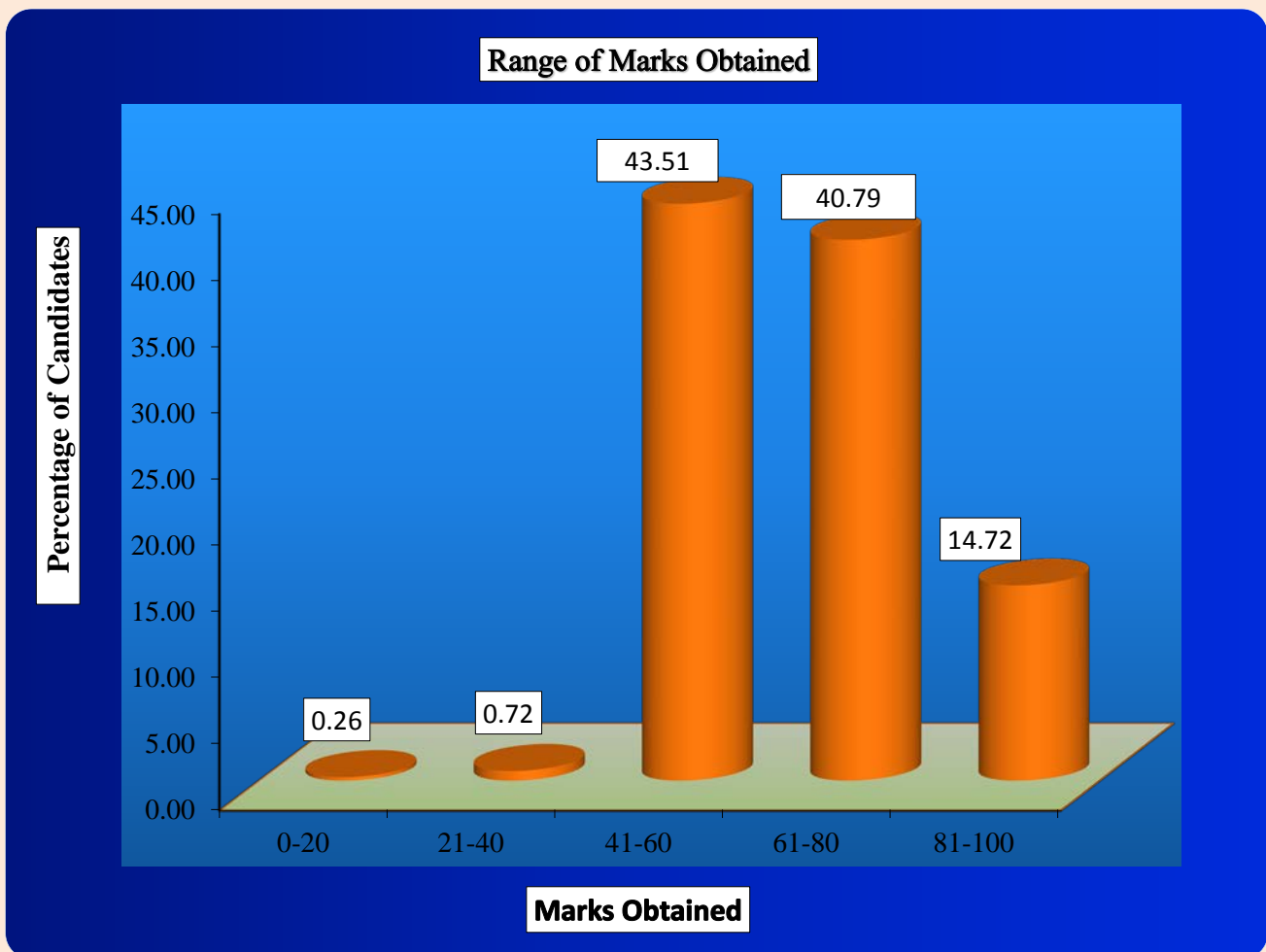
GEOGRAPHY

STATISTICS AT A GLANCE

Total Number of students who took the examination	3,452
Highest Marks Obtained	100
Lowest Marks Obtained	3
Mean Marks Obtained	64.58

Percentage of Candidates according to marks obtained

Details	Mark Range				
	0-20	21-40	41-60	61-80	81-100
Number of Candidates	9	25	1502	1408	508
Percentage of Candidates	0.26	0.72	43.51	40.79	14.72
Cumulative Number	9	34	1536	2944	3452
Cumulative Percentage	0.26	0.98	44.50	85.28	100.00



GEOGRAPHY

PART I (30 Marks)

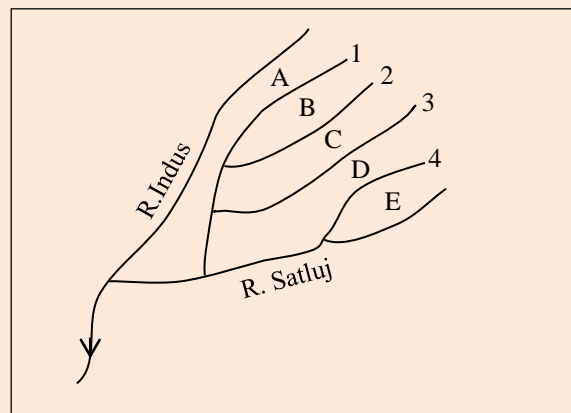
Answer all questions.

Section A

Question 1

[10 × 2]

- (i) State the latitudinal and longitudinal extent of India.
- (ii) Mention *any two* characteristic features of the Peninsular Plateau of India.
- (iii) The diagram given below represents the Punjab Plain. Study the diagram and answer the questions that follow:



- (a) Name *any two* of the rivers numbered 1, 2, 3 and 4.
- (b) Name *any two* of the five doabs marked A, B, C, D and E.
- (iv) Differentiate between *inter-state migration* and *intra-state migration*.
- (v) Explain the following:
 - (a) Inshore fishing
 - (b) Deep sea fishing
- (vi) Mention the *two* environmental concerns with regard to the use of conventional energy resources.
- (vii) What is *Geographic Information System* (GIS)? How is it useful?
- (viii) Name *any two* minor industrial regions of India.
- (ix) (a) Define *industrial clusters*.
(b) State *any two* indices used to identify industrial clusters.
- (x) State *the* latitudinal and longitudinal extent of Chhattisgarh.

Comments of Examiners

- (i) Some of the errors made by candidates in this question included omission of the unit/degree ($^{\circ}$) sign and the name of the hemisphere (N). Many candidates had not learnt the extent of minute: Candidates wrote $8^{\circ}4'-37^{\circ}6'$, $68^{\circ}7'-97^{\circ}25'$. Others were confused and wrote $8^{\circ}4'$ E - $37^{\circ}6'$ E and $68^{\circ}7'$ N - $97^{\circ}25'$ N.
- (ii) The question was on the characteristic features of the peninsular plateau of India and not on its geological formation – several candidates explained how it was formed.
Some candidates did not mention the unit – i.e. 'kilometres' when they wrote the plateau's N-S or E-W length.
- (iii) Several candidates did not seem to know the order of the Indus river system, or the names of the 'doabs' in between. The number/letter assigned to the river /doab – did not match in many cases; candidates did not follow the correct order.
- (iv) Many candidates did not seem to know the difference between the two terms – 'inter' and 'intra' and the interchanged terms – some candidates preferred to answer with the help of examples instead of the definition.
- (v) (a) Inshore fishing was confused with 'fresh water' fishing in lakes and rivers. In several cases, candidates merely repeated the term 'inshore' or 'near the shore'. They did not mention the distance from the shore, depth or the methods used.
(b) Deep sea fishing – in some cases, candidates simply wrote – when "fishing is done in the sea" instead of emphasising that this type of fishing is practised far away from the shore in the deep sea/ocean or that large ships & trawlers are used.
- (vi) Several candidates did not understand the term "environmental concerns". Instead they wrote about the benefits of non-conventional energy resources.
- (vii) Many candidates were unaware of the definition of G.I.S. Some confused the definition with uses.
- (viii) Many candidates wrote names of major industrial regions instead of minor industrial regions as required. Many seemed to be confused between region & centre – e.g. instead of writing "Ambala – Amritsar" region they merely wrote Amritsar

Suggestions for teachers

- Stress upon the importance of units and that it is imperative to mention units of all figures.
- Instruct students to read and understand what has been asked in the question before they answer it.
- Stress upon the importance of correct numbering of questions and their sub-parts.
- The study of relief and drainage should be done with the help of sketch maps – it leaves a deeper and more lasting impression on the mind.
- Definitions along with examples must be marked out by the teacher before students learn them. Keywords concepts /definitions should be focussed on.
- Explain to students the importance of key words, technical terms and their meanings.
- Definitions and applications of these modern techniques must be made very clear to students.
- Explain the difference between minor & major industrial region. The concept of clustering i.e. a large number of industries found in a small area or the high concentration of industries should be emphasized.
- Explain that indices are parameters for identifying industrial clusters - these are very different from the factors of location.

region or instead of writing “North Malabar” or “Middle Malabar” region they wrote “Malabar” region.

- (ix) (a) A number of candidates were unable to explain that an industrial cluster is a region of a large group of industries within a small area. The concept of many or an agglomeration of industries was not clear to a large number of candidates.
- (b) Instead of writing the indices used to identify industrial clusters, some candidates wrote about the factors of industrial location such as, the availability of raw material power, transport facilities, etc.
- (x) Geographical location is always in terms of latitudinal & longitudinal extent. However, many candidates mentioned the latitudinal & longitudinal extent of Chhattisgarh incorrectly – i.e. The hemispheres (N or E) were missing, or latitudinal & longitudinal extents were mixed up (e.g. – instead of 80°E to 84°E many wrote 80°N – 84°N) Some even gave one latitude & one longitude.

MARKING SCHEME

Question 1

(i)	latitudinal extent of India: 8°4' N – 37°6' N longitudinal extent of India: 68° 7'E – 97°25'E					
(ii)	Characteristic features of the Peninsular Plateau of India: <ul style="list-style-type: none">• It forms an irregular triangle• Oldest landmass• General elevation is 600 – 900 metres• It is surrounded by mountains/ hills on all sides• 1600 Kms N – S length and• 1400 km E – W width• It is divided into three parts by the Narmada – Tapi Trough• Dissected plateau <div>(Any two)</div>					
(iii)	(a)	1. Jhelum 2. Chenab 3. Ravi 4. Beas <div>(Any two)</div>				
	(b)	A = Sind Sagar Doab B = Chaj Doab C = Rechna Doab D = Bari Doab E = Bist – Jalandhar Doab				
(iv)	Difference between <i>Inter-state migration</i> and <i>intra-state migration</i> : <table><tr><td><i>Inter-state migration</i></td><td><i>Intra-state migration</i></td></tr><tr><td>Movement of people from one State to another State in a country.</td><td>Movement of people within a state from one city to another.</td></tr></table>		<i>Inter-state migration</i>	<i>Intra-state migration</i>	Movement of people from one State to another State in a country.	Movement of people within a state from one city to another.
<i>Inter-state migration</i>	<i>Intra-state migration</i>					
Movement of people from one State to another State in a country.	Movement of people within a state from one city to another.					

	E.g. from Uttar Pradesh to Bihar.	e.g. from Kolkata to Durgapur.	
(v)	(a)	Inshore fishing: When fishermen operate only within 8 km from shore, when small boats are used. Fishes are caught by net or lines.	
	(b)	Deep sea fishing: When fishing takes place far from the shore in the deep sea. The vessels of the fishermen are large in size. They mainly use trawlers.	
(vi)	Environmental concerns with regard to the use of conventional energy source: <ul style="list-style-type: none">• Global warming• Fly ash• Thermal pollution in waters• Atmospheric pollution• Land / soil pollution• Ozone depletion• Ecological imbalance with large area being used.		
(vii)	Geographic Information System (GIS): (Uses) <ul style="list-style-type: none">• It is a branch of information technology.• A computer assisted mapping• A cartographic application• A set of spatial analysis tools• A type of data based system• A field of academic study <div>(Any one)</div> Definition <ul style="list-style-type: none">• A hardware / software / procedure designed to support / manage / manipulate / analyse / model / display of spatially influenced data for solving complex planning and management problems.• Technology used for making better decisions.• It has potential to organise complex problems. <div>(Any one)</div>		
(viii)	Minor industrial regions of India: <ol style="list-style-type: none">1. Ambala – Amritsar region2. Saharanpur – Muzaffarnagar – Bijnaur3. N. Malabar.4. Middle Malabar5. Adilabad – Nizamabad6. Allahabad – Varanasi – Mirzapur7. Bhojpur – Munger8. Durg – Raipur		

	9. Bilaspur – Korba 10. Brahmaputra valley (Any two)	
(ix)	(a)	Industrial clusters: The pockets or areas having high concentration of industries.
	(b)	1. Number of industrial workers 2. Number of industrial units 3. Quantum of power used for industrial purposes 4. Total industrial output 5. Value added by manufacturing (Any two)
(x)	Latitudinal extent: 18°N – 24°N Longitudinal extent: 80°E – 84°E	

Section B

Question 2

[10]

On the outline map of India provided:

- (a) Mark and name the major river which flows through Assam.
- (b) Mark and label the Thalghat gap in Western Ghats.
- (c) Shade and label the 68°7'E longitude.
- (d) Mark the Khasi hills.
- (e) Shade and name the main area of Arid forests.
- (f) Mark the capital city of Bihar.
- (g) Shade and name the main state for the cultivation of jute.
- (h) Mark the Kalpakkam Nuclear Power station.
- (i) Mark and name the first oil refinery of India.
- (j) Trace the North-South Corridor and name *any one* terminal city.

Note: All the map work, including legend (Index) should be done on the map sheet only.

Comments of Examiners

- (a) Most candidates could not draw the river Brahmaputra in India – they did not seem to know the entry point or the exit of the river in India. Some named the Tsang po portions as the Brahmaputra; In several cases, exit points were marked through Bihar or Myanmar.
- (b) Thalghat Gap was marked incorrectly – by marking it too far north or south or in most cases, too close to the coast. Many lost marks because the symbols they used were too large resulting in the location became incorrect.
- (c) Although 68°E is marked in the margin many candidates did not connect the two points and other lines were drawn instead. The line should be drawn as a slanting line touching 68° on the top and bottom borders and the western most point in India in Gujarat. Instead, it was drawn as a vertical line, or even a part of a line.
- (d) Though marked correctly by some, many candidates did not have any idea where the Khasi Hills were located - some marked it in the Naga Hills, some located them in the Siwaliks, some marked the entire Purvanchal ranges – Garo, Khasi, Jaintia together as a long straight line. Some also marked it over the Bangladesh border.
- (e) The shaded area was either too small or too large and went well – over the Aravali boundary. Many candidates did not name the area.
- (f) Though many candidates named and identified Patna correctly, the location of the city was way-off the mark – as far as or even in Uttar Pradesh.
- (g) The State-West Bengal was named correctly – but shading the area was not always correct- either only the Sundarban area or a thick line near the Bangladesh border. Many shaded too large an area covering Bihar, West Bengal and Odisha. Several candidates did not name the state.
- (h) In several cases, marking of Kalpakkam was way-off mark in the middle of the peninsula, or too far from Chennai. Many marked it on the coast.
- (i) Digboi was named correctly by many candidates, but was marked either touching the Indian border or too far north in Arunachal Pradesh.

Suggestions for teachers

- Students must be taught to draw the entire course of the river – if a part of the entire river is asked for, the entry and the exit should be accurate. The name Brahmaputra should be in India. The course of the Brahmaputra river should be highlighted with blue pencil.
- Adequate practice in a map work is essential. Teachers must give relevant locational tips to students to help them plot. The western Ghats do not touch the coast - the gap should also be away from the coast. The symbols used should not be too large as it gives an incorrect impression of the location.
- The Khasi Hills lie between the Garo and Jaintia hills. It is in India – should not touch the Bangladesh border in the South or the Brahmaputra valley in the North.
- Students need to be instructed to shade at least $\frac{3}{4}$ of the area to be shown to be awarded a mark.
- Both parameters need to be correct – the name of the city as well as the correct location. The students need to be taught to mark cities with reference to the outline of India.
- The boundary of the state – must be marked with reasonable accuracy – the name “West Bengal” needs to be clearly written in the proper place.
- Teachers should follow the map list and mark features on the map, explaining how to locate features – Teaching using a power point presentation if possible, helps.

- (j) In several cases, the N-S corridor was marked incorrectly - It was marked as (i) a ruler straight line joining Srinagar and Kanyakumari (ii) too far east or (iii) too far west. In some cases, Srinagar was marked in the wrong place.

- Broad patterns of roads must be followed all small bends used not be shown but the important bends & terminal town need to be correctly shown. Srinagar & Kanyakumari should not be joined with the straight line.

MARKING SCHEME

Question 2

Candidates were required to give a correctly labelled map showing the exact location of the regions/places asked for.

PART II (40 Marks)

Answer any **four** questions.

Question 3

- (a) Give *any three* differences between *Eastern Coastal lowland* and *Western Coastal lowland*. [3]
- (b) Study the climatic data provided in the table below for a city A in India and answer the questions that follow: [3]

City	T/R	J	F	M	A	M	J	J	A	S	O	N	D
A	T	25	26	28	31	33	33	31	31	30	28	26	25
	R	4	13	13	18	38	45	87	113	119	306	350	135

T = Mean monthly temperature in degree Celsius (°C).

R = Average monthly rainfall in millimetres (mm).

- (i) Account for the maximum rainfall in the months of October-November.
- (ii) Account for the low rainfall in city A during the months of June to September.
- (c) *In the Brahmaputra river basin, floods are almost an annual feature.* Give two reasons to explain why. [2]
- (d) With reference to Forest Conservation Movement, explain the *Chipko Movement*. Give the reason for its success. [2]

Comments of Examiners

- (a) Many candidates were unable to differentiate between the two coastal plains. In many cases the answers did not match the headings written down by the candidates. In many cases, the points of difference did not match. At times, a single point was split into two key words or correct distances were not mentioned. While writing the length and width of the plains, many candidates did not mention the units. Some candidates were confused between the concept of port and harbour.
- (b) (i) Several candidates failed to mention the correct name of the wind i.e. - Retreating Monsoons/ N.E Monsoons/Tropical Cyclones. They wrote the total amount of rainfall, but not the source of rain – i.e. Retreating Monsoons/NE Monsoons/ Tropical Cyclones. In a few cases, the NE Monsoon winds were incorrectly named as the NW Monsoons.
- (ii) A number of candidates were unable to correlate the location of the city A and the rain bearing wind affecting it. Name of particular wind not given in a few cases / the explanation given was missing or incomplete. One reason for the low rainfall of city A was that it was located on the leeward side of the Western Ghats – some candidates just wrote “located on the leeward side/rain shadows” without mentioning the Western Ghats.
- (c) A full explanation of each point was required. However, many candidates gave incomplete answers such as, “Earthquake”, Landslides”, without any explanation. In many cases, only one reason was given correctly.
- (d) Most candidates were able to explain the word “Chipko” but were unable to explain the reason for its success.

Suggestions for teachers

- Instruct students to write differences in a tabular form and to give matching points of differences.
- More practice must be given in analysis of climatic data – it is a must for the study of climate.
- In questions pertaining to climate, winds characteristics of each season and how it causes rainfall should be learnt.
- The cause for more or less rainfall in a particular city should be explained systematically, with respect to the wind. The leeward/windward or rain shadow area must be mentioned with reference to the mountain range.
- Explain to students that one word answers are not accepted - complete explanations should be given.

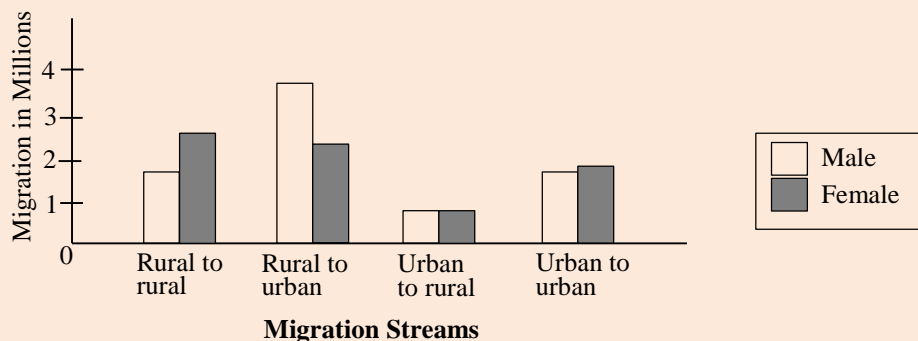
MARKING SCHEME

Question 3

(a)	<p>West Coastal Plain</p> <ul style="list-style-type: none"> • This plain is located between Western Ghats and the Arabian Sea coast. • It is a narrow plain with average width of 64 km. • This plain is drained by several short and swift streams which are unable to form deltas. • There are several lagoons especially in the southern part of this plain. • It has indented coast which supports many ports. 	<p>Eastern Coastal Plain</p> <ul style="list-style-type: none"> • This plain is located between Eastern Ghats and the Bay of Bengal. • It is a broader plain with an average width of 80 – 100 km. • Big rivers like the Mahanadi, the Godavari have formed large deltas. • Lagoons are comparatively less in this plain • The eastern plain has a straight coast where good ports are lacking. <p style="text-align: right;"><i>(Any three)</i></p>
(b)	(i) <ul style="list-style-type: none"> • City A lies on the East coast. • The movement of retreating monsoon winds bring rainfall as they pick up moisture from the Bay of Bengal 	
	(ii) <ul style="list-style-type: none"> • Tropical cyclones/ north east monsoons • The Bay of Bengal branch of South West monsoon winds blow parallel to the East coastal plain giving no rainfall to city A. • The city A lies on the leeward slope of Western Ghats for the Arabian Sea branch of South West monsoon winds. <p style="text-align: right;"><i>(Any one)</i></p>	
(c)	<p>Reasons:</p> <ul style="list-style-type: none"> • Heavy rainfall during the rainy season. • Large amount of silt which makes the river channel shallow and its capacity to carry large amount of water is reduced. • Earthquakes which occur at frequent intervals bring change in the level of the river courses and flow of water is obstructed. • Landslides which are very common here and acts as a temporary dam across the river and submergence of vast area. <p style="text-align: right;"><i>(Any two)</i></p>	
(d)	(i) <p>Chipko Movement: means sticking to the tree by the people with their arms spread around the tree trunk / hugging of trees to avoid cutting of trees in Garhwal region of Uttarakhand.</p> <p style="text-align: right;"><i>(Any one)</i></p>	
	(ii) <ul style="list-style-type: none"> • It has been a success as felling of all trees is banned in areas having an altitude of 1000 metres and above sea level. • Creating awareness for similar movements in different parts of the country. <p style="text-align: right;"><i>(Any one)</i></p>	

Question 4

- (a) Explain the meaning of the following terms: [2]
- (i) Birth rate
 - (ii) Migratory growth of population
- (b) Discuss *one* positive and *one* negative social consequence of migration. [2]
- (c) Study the streams of migration from the given diagram and answer the questions that follow: [3]



- (i) In which stream of migration is the number of female migrants the highest? What is the reason for the high rate of migration amongst females, in the stream mentioned by you?
 - (ii) Give a reason for the high rate of migration amongst males, from rural to urban areas.
- (d) (i) What is *Star shaped pattern* of settlement? Name a state in India where this pattern of settlement is generally found. [3]
- (ii) What are *slums*? What is the reason for their growth?

Comments of Examiners

- (a) (i) Important and meaningful words/terms are left out in the definitions, changing the meaning entirely. 'Birth Rate' is the number of live births in a year per thousand population – in the definition given by candidates, words like – 'live', 'year', 'thousand' were missing. Many candidates wrote 'per hundred' instead of 'per thousand'.
- (ii) This part was correctly answered by most candidates. However, some did not mention that "migratory growth" is a change/ increase or difference between in migration and out migration – This change is a necessary part of the definition.
- (b) Candidates were asked to write about the social consequences of migration – instead many wrote about positive and negative consequences of migration in general or about economic consequences/ sex ratio, etc. Others were able to write a positive impact but were unable to mention a negative consequence. Many candidates seemed to have overlooked or ignored the word social.
- (c) (i) Most candidates were able to answer this question. Some however wrote 'rural to urban'.
- (ii) This question was answered correctly by most - a few candidates lost marks as this was a linked question. Some candidates wrote about the type of migration instead of the reason.
- (d) (i) Most candidates wrote about the settlement or houses radiating from a common centre. Candidates confused the star-shaped pattern with the checkerboard pattern, where streets are parallel or perpendicular to each other. Many candidates gave incorrect examples.
- (ii) Most candidates either left out this answer or wrote it incorrectly. They gave answers such as, "slums are places where poor people live" without writing about the sub standard structure of housing / surroundings/ poor sanitation facilities. The reasons for slum development was given as "lack of money to buy houses/ poverty" instead of unplanned/ unchecked growth of urban areas.

Suggestions for teachers

- Tell students to learn definitions verbatim - important /Key ideas and words are often lost when they express concepts in their own words. Also, definitions given must be complete.
- Explain to students that migratory growth suggests of difference or change - this should be highlighted – it is not to be confused with migration.
- Students must be told to read the question carefully.
- Ensure that students pay attention to graphs/tables/ diagrams. Give practice in analyse them. Learning by heart does not help in answering application based questions. Many such questions must be prepared for class tests.
- Teachers can set linked questions for school exams. To familiarise students with question which will not fetch them marks if the first part is wrong.
- The text should be studied thoroughly and teachers should point out the key words to the pupil.
- Characteristics of slums should be listed out and keywords must be stressed upon and underlined so that students can easily memorize them.

MARKING SCHEME		
Question 4		
(a)	(i)	Birth rate: It is the number of live births in a year per thousand of the population.
	(ii)	Migratory growth : it is the growth of population caused by migration of people.
(b)	Positive impact: <ol style="list-style-type: none"> 1. They bring new ideas related to technology / family planning / girl education, etc. 2. Migrants are very good agents of social change as they bring new ideas. 3. Intermixing of diverse cultures and evolution of composite culture. 4. Breaking mental narrowness / broadening of mental horizon. (Any one) Negative impact: <ol style="list-style-type: none"> 1. Anonymity that creates social vacuum and dejection in individuals. 2. Increase in anti-social activities. (Any one) 	
(c)	Rural to rural. Reason: Females leave their homes due to marriage. Rural to urban: Reason: Men migrate to urban areas in search of jobs / better quality of life.	
(d)	(i)	Star shaped pattern of settlement: It is a rural settlement pattern when in a village, streets radiate from a common centre. Tamil Nadu / U.P. (Any one)
	(ii)	Slums – they are sub-standard structures of housing, overcrowding, lack of ventilation, zero or nearly zero sanitary facilities (Any two features) Reason: Unchecked, unplanned and haphazard growth of urban areas.

Question 5

- (a) (i) Define *sustainable development*. [3]
- (ii) Mention *any two* reasons for low percentage of *area sown more than once* in India.
- (b) State *any two* advantages of using sprinkler irrigation. [2]
- (c) State *two* geographical conditions essential for the construction of canal irrigation. [2]
- (d) Explain *any three* reasons why irrigation is necessary for profitable farming in India. [3]

Comments of Examiners

- (a)(i) The question was answered correctly by most of the candidates.
- (ii) Instead of mentioning 'lack of soil moisture' or 'deficiencies in soil moisture', many candidates gave reasons such as, lack of rainfall or lack of irrigation facilities.
- (b) Many candidates wrote that sprinkler irrigation 'was an efficient method of irrigation' (which is an incomplete and vague answer) or a 'convenient' method, without mentioning the areas. Key words like "seepage", "evaporation" and "efficient in dry and semiarid areas" were missing in many answers. Some candidates wrote that sprinklers "cause no loss of water" (incomplete answer) – should have written "cause no loss of water by seepage" or "evaporation"
- (c) This part was correctly answered by most candidates. However, many candidates did not seem to know that geographical conditions are the pre requisites of canal irrigation. Some candidates confused advantages of canal irrigation with the geographical conditions responsible for canal irrigation.
- (d) This question was understood and not only answered, but explained very well by many candidates. However, a few repeated phrases in different words e.g. "high rainfall variability" and "unreliable" mean the same, and are not considered as two separate points.

Suggestions for teachers

- Stress upon learning of correct definitions with the key words.
- Explain that lack of soil moisture is connected with the amount of rain received by the region, but the reason for infertile soil cannot be lack of rain. It is deficiency of soil moisture that lowers the percentage of area sown more than once – not the lack of irrigation.
- Complete explanations should be given in the answer – part answers are not accepted. This must be stressed upon by the teacher.

MARKING SCHEME

Question 5

(a)	(i)	Sustainable development: The development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
	(ii)	Reasons: <ul style="list-style-type: none"> • Infertile soils • Deficiency of moisture • Insufficient use of manures and fertilizers <p style="text-align: right;">(Any two)</p>
(b)	Advantages of using sprinkler irrigation: <ul style="list-style-type: none"> • No loss of water by seepage • No loss of water by evaporation • Efficient method of irrigation in dry and semi-dry areas/ uneven, hilly topography. <p style="text-align: right;">(Any two)</p>	
(c)	Geographical conditions which are essential for the introduction of canal irrigation: <ul style="list-style-type: none"> • Low level relief 	

	<ul style="list-style-type: none"> • Deep fertile soils • Perennial source of water • Extensive command area. • Soft soil for easy cultivation <p style="text-align: right;">(Any two)</p>
(d)	<p>Reasons why irrigation is necessary for profitable farming in India:</p> <ul style="list-style-type: none"> • High/Improve agricultural yield. • For crops which require large quantity of water for successful growth. • In areas where high rainfall variability is experienced / extension of area under cultivation. • In low rainfall areas • Agricultural period is long and therefore multiple cropping is possible if irrigation is provided. • Rainfall is seasonal in India. So, irrigation helps in year round cultivation of crops. • Irrigation reduces instability in yields. <p style="text-align: right;">(Any three)</p>

Question 6

- (a) Explain the following types of farming: [2]
- (i) Crop rotation
- (ii) Crop combination
- (b) (i) What are the climatic conditions required for wheat cultivation in India? [3]
- (ii) Name the *two* main wheat growing areas of China.
- (c) Explain *any two* reasons for the underdevelopment of fishing industry in India. [2]
- (d) (i) Differentiate between *metallic minerals* and *non-metallic minerals*. Give an example of each. [3]
- (ii) Which is the leading State for iron ore production in India?

Comments of Examiners

- (a) (i) This question was not attempted correctly by many candidates. They merely stated that crops are cultivated alternately without giving the reason why. Others were unable to explain that crops were cultivated in alternate seasons and not at the same time.
- (ii) Candidates were unable to define crop combination correctly – there seemed to be a confusion with rotation of crops. In some cases, geographical conditions were stated instead of socio-economic and infrastructural causes. Many candidates were unable to give the reason for cultivation of two or more crops at the same time.

Suggestions for teachers

- Stress upon the importance of learning complete definitions with key words.
- Differences must be answered in tabular form. Points must match and the entire point must be stated.
- Tables can be prepared with names of the leading states for minerals mentioned in the syllabus. The first three producers for each mineral can be learnt

- (b) (i) Incorrect range was given in several cases/ units for temperature and rainfall were not mentioned. Some candidates gave an average of temperature and rainfall instead of the range.
- (ii) Candidates seemed to have resorted to selective study – obvious from the fact that very few candidates answered this part correctly. Some confused wheat growing areas with rice growing areas while others named areas in Japan e.g. “Hokkaido”
- (c) Only a part of the answer was mentioned. Candidates wrote incomplete answers such as “tropical climate” “tropical cyclones” or “lack of facilities”. Key words were missing in many answers.
- (d) (i) A number of candidates were confused between metallic and non-metallic minerals and ferrous & non-ferrous metals. In several cases, the points did not match. Key words were not mentioned/ incorrect examples mentioned. For non- metallic minerals some candidates mentioned “Diamonds” which is not a mineral. Many others wrote “iron” and Aluminium” which are metals and not metallic minerals.
- (ii) The leading state for iron ore production is Odisha but many candidates wrote Jharkhand or Andhra Pradesh.

MARKING SCHEME						
Question 6						
(a)	(i)	Crop rotation: When crops are grown in rotation one after the other, e.g. leguminous crop is grown after the cereal crop/ explanation of examples with maintenance of fertility mentioned				
	(ii)	Crop combination: When due to varying socio-economic and infrastructural conditions/ or geographical or temperature and rainfall conditions, farmers are encouraged to grow crops in different combinations.				
(b)	(i)	Climatic conditions required for wheat cultivation: Temperature 10°C - 20°C/ 10°C for sowing, 15°C - 20°C for ripening Rainfall 50 – 100 cm.				
	(ii)	Main wheat growing areas of China: 1. Wei – Ho Valley 2. Shantung Peninsula 3. Loess plateau 4. Manchurian plain 5. Parts of Red Basin. <div>(Any two)</div>				
(c)	Reasons for backwardness of the fishing industry: <ul style="list-style-type: none">• In tropical climate – fish preservation is not possible for a long time• Indian coast lacks good fishing ground / indented coast• Marine fishing is a seasonal phenomenon due to tropical cyclones• Majority of Indians are vegetarians and do not eat fish.• About 60% of the fishermen still use small non-mechanised boats.• Lack of landing, freezing, canning, transport and organised markets are a problem for fishing industry in India. <div>(Any two)</div>					
(d)	(i)	<table><tr><td colspan="2">Metallic minerals and non-metallic minerals.</td></tr><tr><td><i>metallic minerals</i></td><td><i>non-metallic minerals</i></td></tr></table>	Metallic minerals and non-metallic minerals.		<i>metallic minerals</i>	<i>non-metallic minerals</i>
Metallic minerals and non-metallic minerals.						
<i>metallic minerals</i>	<i>non-metallic minerals</i>					

		<ul style="list-style-type: none"> • They are those minerals which provide metals on melting. • They are usually hard and have shine. • They are generally found in igneous rocks. • They are hard and do not break easily. • They are ductile and malleable 	<ul style="list-style-type: none"> • They are minerals which do not contain metals. • They have lustre of their own. • They are mostly found in sedimentary rocks • They are easily broken into pieces. • They are not ductile and malleable.
		Example: Iron ore, copper, manganese, nickel, cobalt, tungsten, tin, magnesium, lead, gold, silver, etc.	Example: Coal, petroleum, mica, limestone, gypsum, graphite, etc.
	(ii)	Leading state for iron ore in India: Odisha	

Question 7

- (a) Mention *any three* factors that affect inland water transport in India. [3]
- (b) Explain why: [3]
- (i) Large area of Western Rajasthan lacks rail transport.
- (ii) Northern Plains have a dense network of road and rail transport.
- (iii) Pipelines are more suitable for the transportation of petroleum.
- (c) (i) Where is the New Mangalore Port located? [2]
- (ii) What is the chief importance of this port?
- (d) State *two* ways in which cellular phones are an important means of communication. [2]

Comments of Examiners

- (a) Many candidates gave incomplete answers, e.g. silting of rivers, waterfalls, demand, etc. without giving the explanations. Many candidates wrote about the disadvantages of water transport instead of factors that hinder water transport.
- (b) (i) Many candidates mentioned ‘desert area’ instead of sandy soil – They wrote “because Rajasthan is a desert, without explaining why developing rail transport in a desert or shifting sandy soil is difficult.
- (ii) Majority of the candidates were able to focus on the presence of flat level land hence – easy development of rail and road transport. However, there were a few candidates who was unable to relate conditions and factors; some cited examples without relevant reasons.
- (iii) Incomplete answers were given by many candidates – “Pipelines are efficient”/ “Pipelines are convenient” – but why they are so was not written.
- (c)(i) The precise location of the port in Karnataka was not known to many candidates who simply wrote – “in Karnataka”.
- (ii) This question was vaguely answered by most candidates those who did mention “iron ore”. Others made careless mistakes like mentioning “iron” instead of “iron ore”
- (d) In most cases candidates were able to relate from their own experiences and cite examples on the use of cellular phones for communication with others – personally or at different levels.

Suggestions for teachers

- Focus on regions where a certain transport type has developed or is absent. Geographical reasons as well as other non-geographic/economic reasons can be discussed.
- Transport network for different regions can be discussed along with geographic/ cultural economic reasons.
- Specific location of ports and not merely a vague location should be stated. The location, its advantages, problems, important items of export and import for each port need to be learnt.

MARKING SCHEME

Question 7

(a)	<p>Factors that hinders inland water transport:</p> <ul style="list-style-type: none"> • Rivers and canals should have regular flow of water. • The presence of water falls, cataracts, sharp bends in the river course • Silting of the river bed which reduces the depth of water • There should be sufficient demand for waterways to make it economically viable. • Diversion of water for irrigation purposes reduces the quantity of water. <p style="text-align: right;"><i>(Any three)</i></p>
(b)	<p>(i) Large area of Western Rajasthan lacks in railway transport because:</p> <ul style="list-style-type: none"> • Loose sandy soil makes it difficult for laying of rail tracks. • Less population leads to lack of demand in Western Rajasthan. <p style="text-align: right;"><i>(Any one)</i></p>
	<p>(ii) Northern Plains has a dense network of land transport because:</p> <ul style="list-style-type: none"> • Flat level land easy for development of transport means. • Rich agricultural land and need of transport means.

		<ul style="list-style-type: none"> Dense population allows large demand for different means of road and rail transport. Urbanisation and industrialisation. <p style="text-align: right;"><i>(Any one)</i></p>
	(iii)	Pipelines are most suited for the transportation of petroleum because: <ul style="list-style-type: none"> It is economical mode of transport for liquids. It is convenient and efficient to transport over long distances. <p style="text-align: right;"><i>(Any one)</i></p>
(c)	(i)	New Mangalore Port is located at the Southern tip of the Karnataka Coast.
	(ii)	The chief importance of this port is export of iron ore from the Kundremukh mines.
(d)		Cellular phone: <ul style="list-style-type: none"> Modern device for communication at individual level. It can communicate messages in times of emergency It is a means of bridging distances. <p style="text-align: right;"><i>(Any two)</i></p>

Question 8

- (a) Discuss *the two* factors which influence the location of Sugar industry in Maharashtra. [2]
- (b) Enumerate *three* factors favouring the location and growth of Hindustan Steel Plant at Durgapur. [3]
- (c) (i) Which is the first fertilizer plant that was set up in India after independence? [2]
(ii) Why are the fertilizer industries located near the oil refineries?
- (d) (i) Define *tourism*. [3]
(ii) Give *two* reasons as to why domestic tourism is an important segment of the tourism industry.

Comments of Examiners

- (a) Reasons cited by many candidates were incomplete or vague. Many confused sugar industry with sugar cultivation and wrote geographical factors like temperature, rainfall and soil. Many candidates confused sugar industry with the textile industry and wrote about the humid climate. Some others did mention that raw material is available but no specific case of Maharashtra was given. Availability of sugarcane (raw material) from the Decan Trap region, the presence of Mumbai Port and its modern facilities, etc. was required in the answer. The points had to be specific.
- (b) Many candidates gave generalised answers – they mentioned the required raw materials such as “iron ore available”, “the availability of coal” etc. without stating from where these raw materials were obtained.
- (c) (i) Most candidates were unable to answer this part.
- (ii) Several candidates wrote that raw material is available from oil refineries but did not mention which particular raw material They failed to name “naphtha” as the raw material.
- (d) (i) The definition of tourism was only partly given. Many candidates mentioned – the objectives of tourism without mentioning the key phrase – Tourism involves travelling.
- (ii) Most candidates were able to score in this question.

Suggestions for teachers

- As Maharashtra is the leading state, factors helping it to lead in production should be listed and focussed upon. Complete factors need to be stated – not just the heading of the factors.
- Candidates must be told to guard against incomplete answers – Help students prepare a chart/ table for the location of the steel plants with the name of the particular source or supply of raw material. The teachers can also help students to learn using maps or sketch maps.
- Point out minor details which can be included in answers. They need to stress on the important of naphtha & that it is a product of oil refineries.
- The entire definition is required to be written. Help students identify key word and phrases.
- Explain the difference between the factors for national and domestic tourism and their importance.

MARKING SCHEME

Question 8

(a)	Factors which influence the location of sugar industry in Maharashtra: <ul style="list-style-type: none">• Availability of raw sugarcane from nearby areas• Cheap transport facility• Port facility which facilitates import of modern machines for efficient processing• Availability of cheap Hydro Electricity from nearby areas• Good network of road and rail transport• Integrated cooperative system of sugar mills• Longer crushing period
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		<ul style="list-style-type: none"> • Higher yield of cane • Higher recovery rate <p style="text-align: right;"><i>(Any two)</i></p>
(b)		<p>Factors favouring the location and growth of Hindustan Steel Ltd.</p> <ul style="list-style-type: none"> • Availability of Iron ore from Bolani mines and Mayurbhanj • Availability of coal from Jharia and Raniganj • Availability of Limestone from Birmitrapur in Sundergarh • Manganese from Jamda mines in Keonjhar district of Odisha • Dolomite from Birmitrapur • Hydro electricity from Damodar Valley Corporation • Water from Durgapur Barrage • Kolkata – Asansol railway line links it with other parts • Cheap labour from the surrounding areas • Large market <p style="text-align: right;"><i>(Any three)</i></p>
(c)	(i)	Fertilizer plant that was set up in India after independence: Sindri
	(ii)	Fertilizer plants located near the oil refineries because: Availability of raw material
(d)	(i)	<p>Tourism:</p> <p>Tourism involves travelling to relatively undisturbed or uncontaminated natural areas with the specific object of studying / admiring and enjoying the scenery and its wild plants and animals / as well as any existing cultural aspects found in these areas.</p>
	(ii)	<p>Domestic tourism is an important segment of tourism industry because:</p> <ul style="list-style-type: none"> • It fosters a sense of unity in the otherwise diverse environment of the country and contributes to national integration. • It adds to the maximum revenue earned by the government from tourism. • Contributes to domestic economy • Generates employment

Question 9

(a)	Explain the following terms briefly:	[3]
	(i) Regional development	
	(ii) Multi-level planning	
	(iii) A Planning region	
(b)	Give a reason for the following:	[3]
	(i) Bengaluru is known as the <i>Electronic Capital</i> of India.	
	(ii) Chhattisgarh is the 'Rice Bowl' of India.	
	(iii) Haldia Port was developed to support Kolkata Port.	
(c)	(i) Name the <i>two</i> main districts for silk production in Chhattisgarh.	[4]
	(ii) State <i>two</i> characteristic features of the silk industry in Chhattisgarh.	

Comments of Examiners

- (a) (i) Most answers were vague without the required key words. Some candidates wrote that regional development is the overall development of a society/region, which is an incomplete answer.
- (ii) Many candidates gave a correct definition.
- (iii) While many defined Planning Region correctly, some candidates gave incomplete answers.
- (b) (i) Many candidates incorrectly wrote that "Bengaluru is a big/large centre of electrical goods production" This was a very common error. They were unable to explain that Bengaluru is the largest centre for the production of electronic goods.
- (ii) Most candidates incorrectly stated that "Chhattisgarh is the leading rice producing state or that Chhattisgarh has the highest yield of rice in India They were unable to emphasize that rice occupies the largest area in the basin of the Mahanadi River & tributaries.
- (iii) The problems of the Kolkata port led to the development of Haldia port – but the problems needed to be spelt out. Many candidates wrote "Haldia port supports Kolkata Port", which was a vague answer. They either needed to specify that it was developed to "ease the congestion of Kolkata Port" or they had to write that "Haldia port allows larger vessels to enter as they cannot enter Kolkata Port"

Suggestions for teachers

- Stress upon learning the definitions with the key words.
- Textual answer. Students have to learn the text thoroughly. The first listed factors could have been stated.
- Students have to be urged to learn the text thoroughly. Teachers need to help students identify key words & phrases.
- Explain clearly the reasons for the establishment of Haldia Port. Teaching with a map the location of Kolkata & Haldia would explain the topic lucidly.
- Help students prepare tables of resources and leading districts.
- The students should be able to distinguish between the characteristic features of the silk industry and the methodology of sericulture.

- (c) (i) Many candidates lost marks as they confused names of the silk producing districts and the mineral producing ones.
- (ii) There seemed, to be some confusion with the term – ‘silk industry’ and many candidates were unable to list complete characteristic features. One-word answers like “cheap labour” or “Tassar” were given by several candidates. Some defined sericulture which was not asked for. Others wrote on how silk is obtained from cocoons – instead of writing about the characteristics.

MARKING SCHEME		
Question 9		
(a)	(i)	<p>Regional development:</p> <p>It implies overall improvement in economic, social, political and environmental conditions of a society.</p>
	(ii)	<p>Multi-level planning:</p> <p>It is the planning for a variety of regions which together form a system and subordinate systems.</p>
	(iii)	<p>Planning region:</p> <p>It is a self-created living organism having a life time which not only supports the life in the region, but also radiates unifying forces that enable the region to be a unified regional space so as to facilitate the practice of regional planning. OR</p> <p>It is a living organism in which the whole is related to parts in the same way as the parts are related to the whole.</p> <p>It is a unit of area which is distinguished from another area by the display of some unifying characteristics of its own.</p>
(b)	(i)	<p>Bengaluru is known as the Electronic Capital of India, because:</p> <ul style="list-style-type: none"> - It is the largest centre of electronic goods production. - Incentive by the state and central government - A close network of roads and railways - A large number of Indian, foreign, MNCs have invested huge sums of money to nourish industries in the city. - The city enjoys unique advantages which other cities of the state cannot avail
	(ii)	<p>Chhattisgarh is the ‘Rice Bowl’ of India because:</p> <ul style="list-style-type: none"> • It has rice covering the major part of the agricultural land. • Drained by river Mahanadi and tributaries
	(iii)	<p>Haldia Port is developed to help Kolkata Port because:</p> <ul style="list-style-type: none"> • To reduce congestion at Kolkata port • To allow large vessels which cannot enter Kolkata port to easily come up to Haldia port. <p style="text-align: right;"><i>(Any one)</i></p>
(c)	(i)	<p>Main districts for silk production:</p>

		Bastar, Bilaspur, Surguja (Any two)
	(ii)	<p>Characteristic features of the silk industry in Chhattisgarh:</p> <ul style="list-style-type: none"> • Labour intensive • It provides employment to a large number of people • Silk is produced by small units usually individual farm families • Availability of cheap skilled labour • It mainly produces tasar silk which amounts to 97% of the total production. <p style="text-align: right;">(Any two)</p>

GENERAL COMMENTS:

(a) Topics found difficult by candidates:

- Identification of rivers and their respective doabs
- Definitions – e.g. – Inshore Fishing, deep sea fishing “G.I.S, Industrial clusters, Birth Rate. Migratory growth of Population, Interstate & Intra State migration, star shaped settlement pattern, crop combination, sustainable developments tourism, regional development, multi- level planning& planning region
- Reasons for the absence or presence of a transport network in a certain region & factors for the location
- Importance and Location of New Mangalore Port.
- Map work: Candidates did not seem to have any idea where some features were located – or where to place them on the map. Other common mistakes were – locations shifted, less than 50% of the area shaded, incorrect names figured out.

(b) Concepts in which candidates got confused:

- Candidates got confused with the basic concept of latitude/longitudes. They wrote that the location of Chhattisgarh is 80° N to 84° N” instead of 80° E to 84° E – totally forgetting that 80° N was somewhere close to the poles – Whereas Chhattisgarh lies within the tropics.
- Inshore Fishing and Deep Sea Fishing.
- Candidates did not understand “environmental concerns” in Q 1(vi).
- The reasons for the success of the Chipko Movement.
- Concept of Crop Combination & Crop Rotation.
- Advantages of transporting petroleum & advantages of pipe lines in general.
- Birth Rate & Migratory growth of population & the social consequences of migration.

(c) Suggestions for candidates:

- Study the syllabus thoroughly & avoid selective study
- Physical Geography must be studied with the map, diagrams & sections.
- Population study should be done with reference to the current data.
- Focus must be on factors/ reasons/requirements. Working out answer in a cause & effective manner help
- Learn definitions precisely.
- Identify advantages, disadvantages. Technical terms should be used to answer questions.
- Map work needs regular & thorough practice.
- Learn definitions by heart.
- Practice Map work regularly. Places should be located on the map with reference to latitudes & longitudes on the outline map of India provided. The map must have a key or legend.
- Write full explanations - do not give one word answers.
- Write differences in tabular form and remember to write points which match.
- Answer and explain in points, highlighting key words.