

GEOGRAPHY

(H.C.G. PAPER – 2)

Maximum Marks: 80

Time allowed: Two hours

1. *Answers to this paper must be written on the answer sheet provided separately.*
 2. *You will not be allowed to write during the first 15 minutes.*
 3. *This time is to be spent in reading the question paper.*
 4. *The time given at the head of this Paper is the time allowed for writing the answers.*
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5. *Part I is compulsory. All questions from Part I are to be attempted.*
 6. *A total of five questions are to be attempted from Part II.*
 7. *The intended marks for questions or parts of questions are given in brackets [].*

To be supplied with this paper: Survey of India Map Sheet No. G43S10 and 20 cm of twine.

Note:

- (i) *In all map work, make wise use of arrows to avoid overcrowding of the map.*
- (ii) *The extract of Survey of India Map Sheet No. G43S10 must not be taken out of the examination hall. It must be handed over to the Supervising Examiner on completion of the paper.*
- (iii) *The map given at the end of this question paper must be detached, and after marking, must be fastened to your answer booklet.*
- (iv) *All sub-sections of the questions attempted must be answered in the correct serial order.*
- (v) *All working including rough work should be done on the same answer sheet which is used to answer the rest of the paper.*

Instruction for the Supervising Examiner

Kindly read aloud the Instructions given above to all the candidates present in the Examination Hall.

This paper consists of 12 printed pages and 1 outline map of India.

PART I (30 Marks)

(Attempt all questions from this Part.)

Question 1

Study the extract of the **Survey of India** Map Sheet No. **G43S10** and answer the following questions:

- (i) (a) Give the *six-figure* grid reference for spot height **.437** in the *southeastern* part of the map extract.
- (b) Aman, a local craftsman, wants to sell his product to a large gathering to earn money instantly.
1. Which settlement should he go to?
 2. Name the month in which he should visit the settlement named by you above.
- (ii) (a) On which bank of the **Sukli nadi** is the settlement of **Pamera** situated?
- (b) Identify the **settlement pattern** seen in the grid square **6732**.
- (iii) Roshan, while travelling from **Sirori** to **Tokra**, observed that the surface water sources are dry except for the reservoir near **Tokra**.
- (a) What according to you may be the reason for the presence of water in the reservoir in **6832** near Tokra settlement?
- (b) State whether this reservoir is *artificial* or *natural* source of water.
- (iv) (a) What is the *direct distance* between **Gulabganj** to **Pithapur**? Give your answer in **kilometre**.
- (b) Mention the *compass direction* of **Pithapur** from **Gulabganj**.
- (v) (a) Name **two man-made features** seen in the grid square **6534**.
- (b) Define *contour interval*.

Question 2

On the outline map of India provided:

- (i) ✓ Mark and label the *Nathu-La pass*. [1]
- (ii) ✓ Shade and name the *coastal plain* that occupies a large part of *Kerala*. [1]
- (iii) ✓ Mark and label *Digboi*. [1]
- (iv) ✓ Mark and label *Chilka lake*. [1]
- (v) ✓ Mark with arrows and *name the wind* that brings rainfall to Tamil Nadu coast during winter. [1]
- (vi) ✓ Mark and label the river *Sutlej*. [1]
- (vii) ✓ Mark and label the *Standard Meridian of India*. [1]
- (viii) ✓ Mark and label *Satpura range*. [1]
- (ix) ✓ Shade and label the *Chota Nagpur plateau*. [1]
- (x) ✓ Mark and label *Visakhapatnam*. [1]

Question 3

Choose the correct answers to the questions from the given options.

[10]

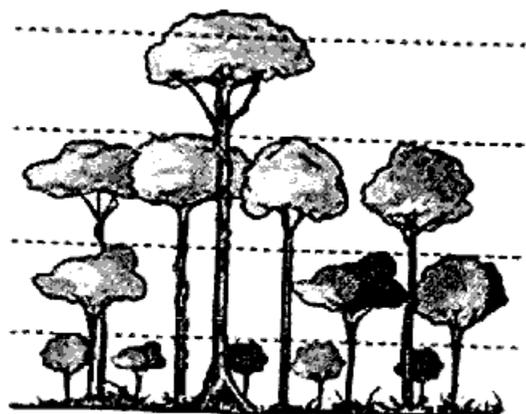
(Do not copy the questions, write the correct answers only.)

- (i) **Assertion(A):** Mumbai receives more rainfall than Pune.
Reason(R): Mumbai gets rain from Arabian Sea branch of southwest monsoon.
- (a) Both (A) and (R) are true and (R) is the correct explanation for (A).
(b) ✓ Both (A) and (R) are true and (R) is not the correct explanation for (A).
(c) (A) is true and (R) is false.
(d) (A) is false and (R) is true.

(ii) Which of the following *pairs of soils* displays **similar characteristics** in terms of their **colour and texture**?

- (a) Alluvial soil and laterite soil
- (b) Black soil and red soil
- (c) Red soil and laterite soil
- (d) Alluvial soil and black soil

(iii) The *type of natural vegetation* shown in the picture given below is found in:



- (a) Tropical desert
- (b) Tropical deciduous
- (c) Tropical evergreen
- (d) Littoral forest

(iv) Which of the following *prevents wastage of water*?

- (a) Canal
- (b) Well
- (c) Sprinkler
- (d) Tube well

- (v) Balaghat : Manganese : : Mumbai High : _____
- (a) Copper
 - (b) Coal
 - (c) Iron Ore
 - (d) Petroleum
- (vi) A *microbiological process* that loosens the bark of a crop and facilitates *removal of fibre* from the stalk:
- (a) Rolling
 - (b) Ratooning
 - (c) Retting
 - (d) Fermentation
- (vii) Which industry amongst the following has revolutionised the lifestyle of the Indian masses in recent years?
- (a) Cotton Textile
 - (b) Electronic
 - (c) Iron and Steel
 - (d) Sugar
- (viii) Which of the following household products is associated with the petrochemical industry?
- (a) Glass bottle
 - (b) Wooden chopping board
 - (c) Kitchen knife
 - (d) Plastic mug

- (ix) Raman, a dairy farmer in Ludhiana, supplies milk within the city on a daily basis. Which mode of transport is he most likely to use?
- (a) Railway
 - (b) Roadway
 - (c) Airway
 - (d) Waterway
- (x) The collection of discarded materials and converting them into useful products is:
- (a) Recycling
 - (b) Processing
 - (c) Reducing
 - (d) Composting

PART II (50 Marks)

(Attempt any five questions from this Part.)

Question 4

- (i) 'Severe cyclonic storms are often formed over the Bay of Bengal during the retreating monsoon season.' [2]
- (a) Name *two* states that are affected by tropical cyclones on the *eastern coast* of India.
 - (b) The temperate cyclones cause less damage than the tropical cyclones. Give *any two points* to support this statement.
- (ii) (a) Name the *local wind* that causes rainfall in the states of **Assam** and **West Bengal** in the month of *April*. [2]
- (b) How is this rainfall *beneficial* for the states mentioned above?

- (iii) With reference to **Figure A** and **Figure B** given below, answer the questions that follow: [3]

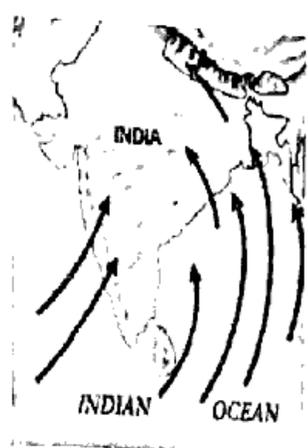


Figure A



Figure B

- (a) Name the winds shown by arrows in Figure A and Figure B.
 (b) How is the wind shown in Figure A different from the one shown in Figure B? (2)

- (iv) Study the climate data of station X and answer the following questions: [3]

Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Temp (°C)	24.0	25.4	26.7	28.3	30.0	28.9	27.6	27.4	27.3	27.1	27.0	25.0
Rainfall(cm)	0.25	0.25	-	-	1.75	50.2	61.0	37.0	27.0	4.75	1.50	-

- (a) What is the **annual range of temperature** for station X?
 (b) Which is the **wettest month**?
 (c) Name the **wind** which brings rainfall for station X during the **rainy season**.

Question 5

- (i) The Ganga Plain is known for its fertile soil. It is often referred to as the food bowl of India. This region supports a variety of crops such as rice, wheat, pulses, jute and sugarcane. [2]
- (a) Name the soil that is found in large parts of Ganga plain.
 (b) Give *two* properties of this soil which helps it to produce a variety of crops.

- (ii) (a) What is meant by *soil erosion*? [2]
(b) Name *any two* agents of *soil erosion*.
- (iii) Give a geographical reason to explain each of the following: [3]
(a) **Soil conservation** is the need of the hour.
(b) **Red soil** has a poor water retention capacity.
(c) **Laterite soils** are infertile.
- (iv) With reference to **black soil** of India, answer the following questions. [3]
(a) How is this soil formed?
(b) How is this soil able to retain moisture for a long period?
(c) Mention *any two* minerals present in this soil.

Question 6

- (i) *India has lost 2.33 million hectares of tree cover since the year 2000. This is equivalent to a six percent decrease in tree cover during this period.* [2]
Source: The Indian Express, Date: 12.04.2024
(a) Mention *any two* causes of the decrease in the forest cover of India.
(b) Name a *conservation method* that may be used to help in increasing the forest cover.
- (ii) Mention the *climatic condition* suitable for the development of tropical evergreen forest. [2]
- (iii) State *any three* differences between tropical deciduous and tropical desert vegetation. [3]
- (iv) (a) Give *any two* reasons for the great diversity of natural vegetation in India. [3]
(b) How do the forests help in maintenance of air quality?

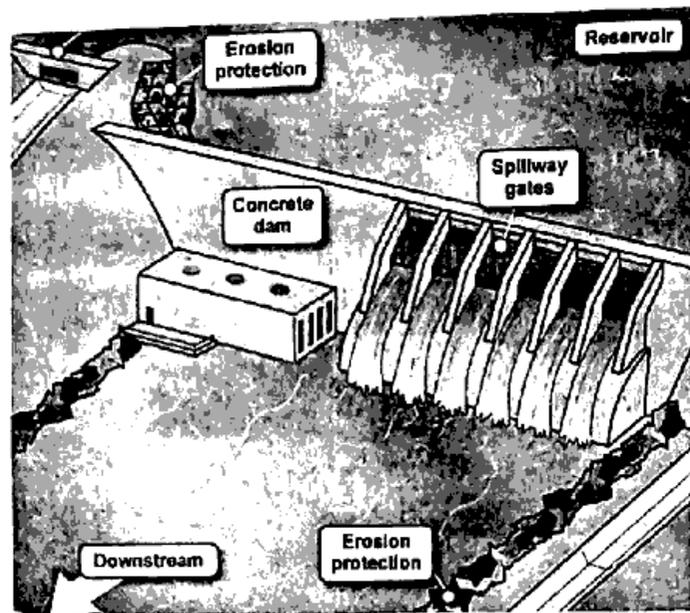
Question 7

- (i) Mention *any one* advantage and *any one* disadvantage of **well irrigation**. [2]
- (ii) Suggest *any two* measures to overcome *scarcity of water* in the metropolitan cities of India. [2]
- (iii) Give *one* reason to explain each of the following: [3]
- (a) *Tank* irrigation is **NOT** common in Northern India.
- (b) Canal irrigation is important in Punjab.
- (c) All farmers *do not* use tube well irrigation even if the geographical condition is favourable.
- (iv) State *any three* objectives of rainwater harvesting. [3]

Question 8

- (i) *With the rising price of fossil fuel every passing day, it is very important to develop non-conventional energy resource.* [2]
— *Bulletin – Department of non-conventional sources of energy*
- (a) Name a non-conventional energy source that can be harnessed by taking advantage of India's vast coastline.
- (b) State *one* advantage of using *geothermal energy*.
- (ii) (a) How is *Biogas* formed? [2]
- (b) Mention *any one* advantage of *Biogas* over other non-conventional energy resources.
- (iii) Give a reason for each of the following. [3]
- (a) *Iron ore* is called a versatile mineral.
- (b) *Windmills* set up on agricultural lands are beneficial to farmers.
- (c) *Coal* is the most preferred source of energy in Indian industries.

(iv)



- (a) Identify the type of energy being generated in the picture given above.
- (b) State why this type of energy is cheaper in the long run.
- (c) Name a power project associated with the generation of this energy in the northern part of India.

Question 9

- (i) Mention *two* climatic conditions that favour the cultivation of *groundnut*. [2]
- (ii) Give *any two* reasons why *Maharashtra* has emerged as an important *sugarcane* producing state. [2]
- (iii) Give *one* reason to explain each of the following: [3]
- (a) *Trees* are planted in between the rows of *coffee* plants.
- (b) *Cotton* cultivation requires plenty of *cheap labour*.
- (c) *Hill slopes* are best suited for *tea* cultivation.
- (iv) Explain the following: [3]
- (a) Mixed farming
- (b) Zayad
- (c) Transplantation

Question 10

- (i) State *any two* factors that are responsible for the growth of the cotton textile industry in Kolkata. [2]
- (ii) 'Karnataka is the leading state for silk production in India.' [2]
Give *any two* reasons to justify the above statement.
- (iii) (a) Name the Iron and Steel industry located at Chhattisgarh. [3]
(b) From where does the industry named by you above get its supply of the following?
1. Iron ore
2. Coal
- (iv) Raghav has been given a project by his teacher in which he has to write about the by-products of an industry that is used for preparing shoe polish, carbon paper and cardboard. <https://www.icseonline.com> [3]
(a) Which industry will he be writing about?
(b) Name *any two* by-products of the industry mentioned by you.

Question 11

- (i) Why is a well-developed transport network important for India? [2]
- (ii) Mention *any two* advantages of road transport. [2]
- (iii) Name the following: [3]
(a) The mode of transport that ensures comfortable journey, especially for elders and children. *airways*
(b) The highway connecting *Silchar in Assam to Porbandar in Gujarat*
(c) The *cheapest* means of transport for *bulky goods*.

- (iv) Give a reason for each of the following.
- (a) *Airways* are the most efficient mode of transport to connect *Northeast India* with the rest of the country.
 - (b) *Railways* are easily developed in the *Northern Plains of India*.
 - (c) *Rivers of peninsular India* are **NOT** ideal for *inland water transport*.

Question 12

- (i) (a) Give a reason for a substantial rise of E-waste in India.
- (b) What is *dumping*?
- (ii) 'You cannot protect environment unless you empower people, you inform them and help them to understand that these resources are their own, that they must protect them.'

— Wangari Maathai (recipient of Nobel Prize 2004 for Sustainable Development)

As a responsible student how would you contribute to reduce and manage the waste generated in your surroundings. Explain by giving suitable examples.

- (iii) With reference to the **3Rs**, give a term that best describes each of the following:
- (a) An empty soft drink can is used as a pen stand.
 - (b) Old scrap papers are used to manufacture handmade paper.
 - (c) No food is wasted in the household.
- (iv) Give a reason for the following statements:
- (a) Organic manure should replace chemical fertilisers.
 - (b) There should be a ban on the use of polythene and plastic products.
 - (c) Manual handling of waste must be avoided.