

GEOGRAPHY
H.C.G. - Paper – 2
(Two hours)

Answers to this Paper must be written on the paper provided separately.

*You will **not** be allowed to write during the first 15 minutes.*

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

Attempt seven questions in all.

Part I is compulsory. All questions from Part I are to be attempted.

A total of five questions are to be attempted from Part II.

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. 45D/10
and 20 cm of twine.*

Note:

- (i) *In all Map Work, by a wise use of arrows to indicate positions of countries, cities and other insertions that you make, you will be able to avoid overcrowding parts of the map.*
- (ii) *The extract of Survey of India Map Sheet No. 45D/10 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 fastened to your answer booklet.*
- (iv) *All sub-sections of each question must be answered in the correct serial order.*
- (v) *All working including rough work should be done on the same answer sheet as the rest of the answer.*

This Paper consists of 7 printed pages and 1 outline map.

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
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Turn over

PART I (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 four figure grid reference for a figure similar to the one given below. Identify the figure:  [2]
- (b) How is the drainage pattern in grid square 1606 different from that in grid square 1608? [2]
- (c) Identify the correct six figure grid reference for each of the following:
- (i) Gautam Maharishi Mandir
200071; 071200; 201070?
- (ii) 443
172059; 052179; 179052? [2]
- (d) Name the most prominent settlement other than ABU. Give two reasons to support your answer. [2]
- (e) (i) What is the general slope of the land in the north-west corner of the map extract?
(ii) What is the compass direction of Chandela(1803) from Hanumanji ka Mandir (2208)? [2]
- (f) What do you understand by the following terms as used on the map extract:
- (i) Causeway (1702)
(ii) Falls 25m (2307). [2]
- (g) (i) If you were to cycle at 10 km an hour, how much time would it take to cover the north-south distance depicted on this map extract?
(ii) Calculate the area enclosed by Eastings 19 to 22 and Northings 04 to 09. [2]
- (h) (i) Identify one natural feature in grid square 1610
(ii) Identify one man made feature in grid square 1903. [2]

- (i) Give two probable reasons, other than dry water features, to indicate that the region depicted on the map extract receives seasonal rainfall. [2]
- (j) Calculate, in metres, the difference in height between the highest point on the map extract and the contour height given in grid square 2402. [2]

Question 2

On the outline map of India provided:

- (a) Mark and name the *Nilgiris*. [1]
- (b) Shade and label the *Malwa Plateau*. [1]
- (c) Shade and label the *Malabar Coastal Plains*. [1]
- (d) Mark and name the river *Gomti*. [1]
- (e) Shade and name the *Andaman Sea*. [1]
- (f) Mark and name *Allahabad*. [1]
- (g) Mark with a single arrow and name the winds that bring winter rain to north-west India. [1]
- (h) Mark and name *Digboi*. [1]
- (i) Mark an area with laterite soil below the *Tropic of Cancer*. [1]
- (j) Mark and name the *Karakoram Pass*. [1]

PART II (50 Marks)

Attempt any five questions from this Part

Question 3

- (a) Explain *two* factors that affect the climate of India giving a suitable example for each. [2]
- (b) State *two* differences between the rainfalls that occur from June to September and that from December to February in North India. [2]
- (c) Give a geographic reason for each of the following:
- (i) Kerala has the longest rainy season.
- (ii) The Konkan coast experiences orographic rainfall.
- (iii) The city of Kanpur in Uttar Pradesh has a higher range of temperature than that of Chennai in Tamil Nadu. [3]

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

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Temp. °C	21.0	21.9	24.3	27.2	28.0	26.4	26.1	25.4	25.0	26.0	23.8	21.2
Rainfall Cm	5.1	2.8	1.2	1.7	3.9	4.6	8.4	11.4	11.9	31.6	34.5	14.8

- (i) Identify the hottest month.
- (ii) Calculate the annual rainfall.
- (iii) Name the winds that bring the maximum rainfall to this city. [3]

Question 4

- (a) State the characteristic of each of the soils named below that makes them most suitable for crop cultivation:
 - (i) Black soil.
 - (ii) Red soil. [2]
- (b) State the geographic term for each of the following processes:
 - (i) The process by which soluble minerals dissolve in rain water and percolate to the bottom, leaving the top soil infertile.
 - (ii) The process by which rain water, flowing in definite paths, removes the top soil, thus causing deep cuts to the surface of the land. [2]
- (c) Define the following:
 - (i) Pedogenesis.
 - (ii) Humus.
 - (iii) Bhangar. [3]
- (d) Give a geographic reason for each of the following:
 - (i) Alluvial soil is extremely fertile.
 - (ii) Need for Soil conservation.
 - (iii) Reafforestation should be practised extensively. [3]

Question 5

- (a) State *two* characteristics of Tropical Deciduous forests. [2]
- (b) State *two* reasons why Tropical Evergreen forests are difficult to exploit. [2]
- (c) Identify the tree as per its characteristics mentioned below:

- (i) It yields wood that is hard and scented and is usually found in high altitudes. [3]
- (ii) It is generally found in deltaic regions and is used to make boats.
- (iii) The furniture made from the wood of this tree is generally the most expensive. [3]
- (d) Differentiate between *afforestation* and *deforestation*. State a disadvantage of deforestation. [3]

Question 6

- (a) State *two* reasons why irrigation is important to a country like India. [2]
- (b) Name *two* modern methods of irrigation. State *one* important reason for their growing popularity. [2]
- (c) (i) Why is well irrigation still a popular means of irrigation? Give *two* reasons to support your answer. [3]
- (ii) State the significance of rainwater harvesting. [3]
- (d) (i) Why is the world in danger of facing a severe water shortage in the coming future? Give *two* reasons to support your answer. [3]
- (ii) State *one* measure the Government should adopt to handle the present water crisis. [3]

Question 7

- (a) State *two* reasons why limestone is a valuable mineral. [2]
- (b) State the most important use of the following: [2]
- (i) Iron ore
- (ii) Bauxite
- (c) Name the: [3]
- (i) Largest oil refinery in the Public sector.
- (ii) State that is the largest producer of coal
- (iii) Best variety of iron ore.
- (d) Give a geographic reason for each of the following: [3]
- (i) Many port cities have their own oil refineries.
- (ii) Petroleum is called a 'fossil fuel'.
- (iii) Coal is called a versatile mineral.

Question 8

- (a) Differentiate between a *Rabi* crop and a *Kharif* crop. [2]
- (b) State an important difference between the climatic requirements for growing cotton and jute. [2]
- (c) Give the geographic term for each of the following:
- (i) Cultivation of sugarcane from the root stock of the cane which has been cut.
 - (ii) The residue left behind after the crushing of oilseeds.
 - (iii) The process by which latex is converted into a thick, spongy mass by adding acetic acid or formic acid [3]
- (d) Give a geographic reason for each of the following:
- (i) Tea is cultivated on hill slopes.
 - (ii) The yield per hectare of sugarcane is higher in the Southern states.
 - (iii) Pulses are important food crops. [3]

Question 9

- (a) (i) Why is the cotton textile industry called an agro-based industry?
(ii) Give an important reason for it being more widespread than the jute industry. [2]
- (b) (i) State one important point of similarity between the woollen industry and the silk industry.
(ii) Name the state that produces the most woollen and silk products respectively. [2]
- (c) (i) State *two* major problems faced by the sugar industry.
(ii) Name *two* by-products of the sugar industry. [3]
- (d) (i) State *one* of the main problems of the silk industry.
(ii) Name *two* products of the jute industry, other than rope and gunny bags.
(iii) Why are synthetic fibres popular? [3]

Question 10

- (a) (i) Why is the iron and steel industry called a basic industry?
(ii) Define a mini steel plant. [2]

- (b) With which large scale industry would you identify the following manufacturing centres?
- (i) Kanpur
 - (ii) Rourkela
 - (iii) Pune
 - (iv) Mangalore. [2]
- (c) (i) State *two* reasons for the growing importance in the status of petrochemical industries. [2]
- (ii) Name *two* products of the petroleum industry. [3]
- (d) (i) State *two* conditions necessary for the setting up of a heavy engineering industry.
- (ii) Name a ship building yard on the east coast and a centre for making electric locomotives. [3]

Question 11

- (a) (i) Why is the Railways an important means of transport as compared to Airways? [2]
- (ii) State *one* economic benefit of the Golden Quadrilateral Project. [2]
- (b) (i) State *one* important difference between an expressway and a highway.
- (ii) Name the first expressway constructed in the country.
- (iii) State a reason why the Northern Rivers are more suitable for navigation than the Deccan Rivers. [3]
- (c) (i) "Waste segregation is important". Give a reason to support your answer.
- (ii) Why is nuclear waste harmful?
- (iii) Explain briefly how as a student, you can help in the reduction of waste generation. [3]
- (d) (i) What is understood by biodegradable waste?
- (ii) State *one* source of gaseous waste. [2]