

NCERT SOLUTIONS

CLASS - 11th



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Class : 11th

Subject : Geography

Chapter : 5

Chapter Name : Topographical Maps

Q1 Answer the following questions in about 30 words:

- (i) What are topographical maps?
- (ii) Name the organisation which prepares the topographical maps of India.
- (iii) Which are the commonly used scales for mapping our country used by the Survey of India?
- (iv) What are contours?
- (v) What does the spacing of contours indicate?
- (vi) What are conventional signs?

Answer.

(i) Topographical maps are the detailed and accurate representations of the physical and cultural features of the Earth as they appear on the Earth's surface.

(ii) The Survey of India prepares the topographical maps of India.

(iii) The commonly used scales for mapping our country by the Survey of India are:

1 : 10,00,000

1 : 250,000

1 : 1,25,000

1 : 50,000

1: 25,000

These scales provide a latitudinal and longitudinal coverage of $4^{\circ} \times 4^{\circ}$, $1^{\circ} \times 1^{\circ}$, $30' \times 30'$, $15' \times 15'$ and $5' \times 7' 30''$, respectively.

(iv) Contours are imaginary lines joining points of equal elevation from the mean sea level on a topographical map. These lines are also known as level lines.

(v) The spacing of the contours indicates the slope of the ground. If the spacing is large, it indicates a gentle slope and a steep slope is indicated by close contour lines.

(vi) The signs which are used to represent various features on the map, but are not drawn to scale are called conventional signs.

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Q2 Write short notes on—

(i) Contours

(ii) 'Marginal Information' in Topographical sheets

(iii) The Survey of India

Answer.

(i) Contours are imaginary lines which are used to join the points having the same elevation on the Earth's surface from the mean sea level. These lines are used to determine the slope of the land and are also known as level lines. Two contour lines of different elevations do not cross each other. The contour lines, when placed wide apart represent a gentle slope whereas closely spaced contour lines represent a steep slope.

(ii) The 'Marginal Information' in Topographical sheets provides some useful information to the user about the map. It includes the information such as contour interval, representative fraction, scale of the map, producer of the map, symbols used in the map and also the dates of preparation of the maps.

(iii) The Survey of India is the apex body for the standardisation of the maps in India. It is one of the oldest engineering departments of India which is responsible for the publishing of the maps and the topographical sheets according to the International Map Series.

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Q3 Explain what is meant by 'map interpretation' and what procedure is followed for its interpretation.

Answer. Map Interpretation involves the study of those factors which explain the causal relationship between various features on the map, both cultural and physical. For

example, the distribution of natural vegetation can be best understood by a background of land drainage. The procedure that is followed for Map Interpretation is :

1. Find out from the index number of the topographical sheet, the location of the area.
2. Trace out the major landforms, drainage and water features land use and settlement and transport pattern.
3. Describe the distributional pattern of each of the features separately drawing attention to the most important aspect.
4. Superimpose pairs of these maps and note down the relationship, if any, between the two patterns.

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Q4 If you are interpreting the cultural features from a topographical sheet, what information would you like to seek and how would you derive this information? Discuss with the help of suitable examples.

Answer. While interpreting the cultural features from a topographical sheet, information such as settlement and transport would be sought. The contour map will give an idea of the reason behind the particular settlement pattern in that area whereas food and water supply will give an idea of the density of the settlement. The conventional signs and symbols will give an idea of the transport system of the area.
For example, the density of population of hilly areas is less and the settlement pattern is also scattered. Due to this reason, there is a low density of transport system as well.

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Q5 Draw the conventional signs and symbols for the following features—

- (i) International Boundary
- (ii) Bench Mark
- (iii) Villages
- (iv) Metalled Road
- (v) Footpath with bridges
- (vi) Places of Worship
- (vii) Railway line

Answer. The features are represented in the table below:

International Boundary	- . - . - . - . - . - .
Bench Mark	BM 63.3
Villages	
Metalled Road	
Footpath with bridges	
Places of Worship	
Railwayline	

Study the contour pattern and answer the following questions.



Q1 Name the geographical feature formed by contours.

Answer. Plateau

Page : 65 , Block Name : Exercise A

Q2 Find out the contour interval in the map.

Answer. 100 metres

Page : 65 , Block Name : Exercise A

Q3 Find out the map distance between E and F and convert it into ground distance.

Answer. The map distance is 2 cm. The equivalent ground distance is $2 \times 2 = 4$ kilometres.

Page : 65 , Block Name : Exercise A

Q4 Name the type of slope between A and B; C and D and E and F. 5.

Answer. The slope between A and B is gentle, between C and D is steep and between E and F is gentle.

Page : 65 , Block Name : Exercise A

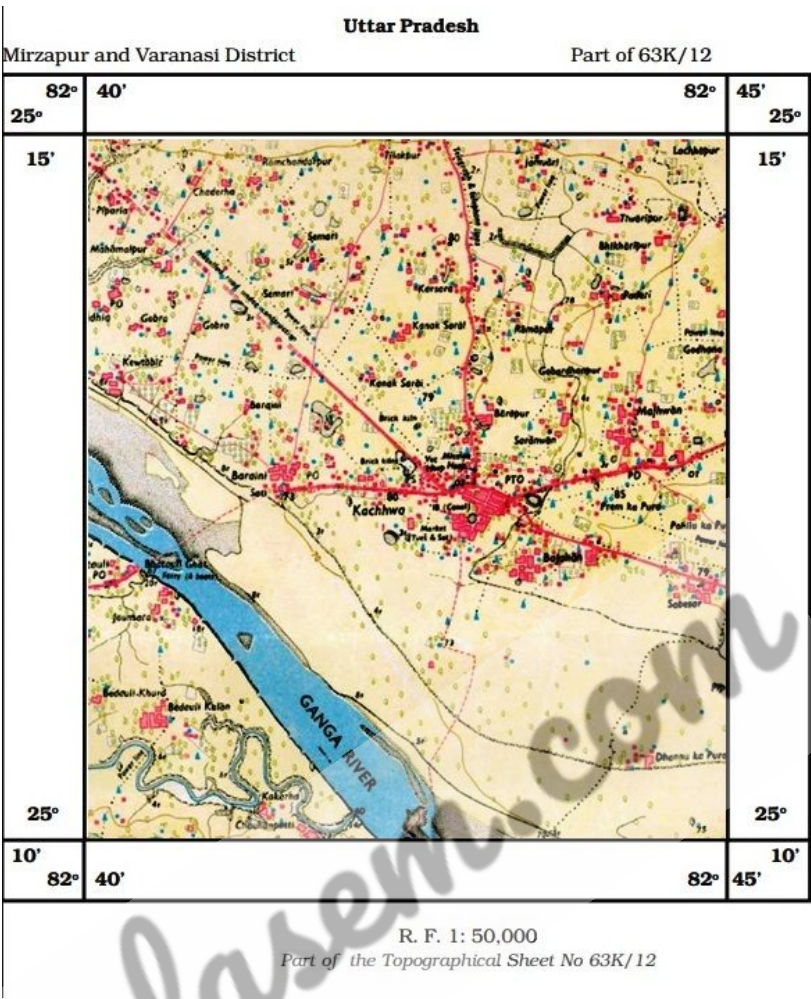
Q5 Find out the direction of E, D and F from G.

Answer. The direction of E, D and F from G is West, North and Southwest respectively.

Page : 65 , Block Name : Exercise A

Study the extract from the topographical sheet No. 63K/12, as shown in the figure below and answer the following questions—

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Q1 Convert 1:50,000 into a statement of scale.

Answer. 1 cm represents 50000 cm on the map.

Page : 66 , Block Name : Exercise B

Q2 Name the major settlements of the area.

Answer. Mirzapur and Varanasi

Page : 66 , Block Name : Exercise B

Q3 What is the direction of flow of the river Ganga?

Answer. Southeast

Page : 66 , Block Name : Exercise B

Q4 At which one of the banks of river Ganga, Bhatauli is located?

Answer. South Bank

Page : 67 , Block Name : Exercise B

Q5 What is the pattern of rural settlements along the right bank of river Ganga?

Answer. Scattered

Page : 67 , Block Name : Exercise B

Q6 Name the villages/settlements where Post Office/Post and Telegraph Office are located?

Answer. Bhatauli, Kachhwa, Dhia

Page : 67 , Block Name : Exercise B

Q7 What does the yellow colour in the area refer to?

Answer. It represents agricultural land.

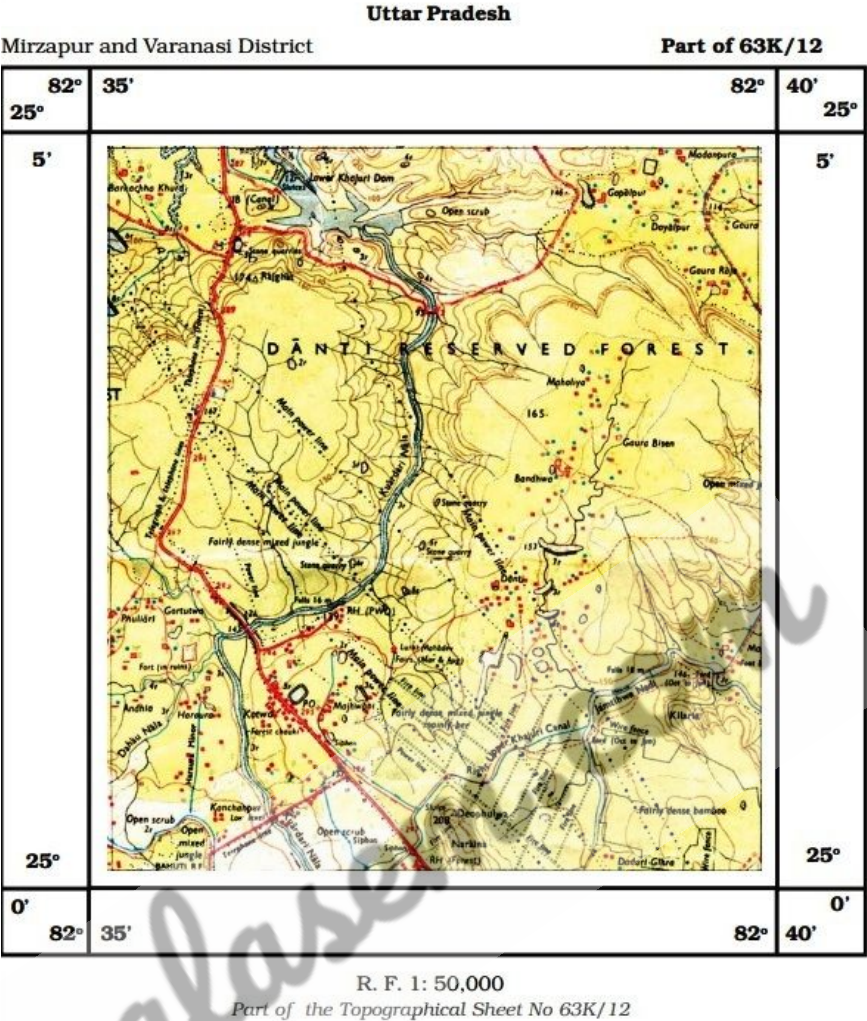
Page : 67 , Block Name : Exercise B

Q8 What means of transportation is used to cross the river by the people of Bhatauli village ?

Answer. Ferry

Page : 67 , Block Name : Exercise B

Study the extract for topographical sheet 63K/12 shown in the figure on page 68 and answer the following questions.



Q1 Give the height of the highest point on the map.

Answer. 200 metres

Page : 67 , Block Name : Exercise C

Q2 River Jamtihwa Nadi is flowing through which quarter of the map ?

Answer. Southeast quarter

Page : 67 , Block Name : Exercise C

Q3 Which is the major settlement located in the east of the Kuardari Nala ?

Answer. Kotwa

Page : 67 , Block Name : Exercise C

Q4 What type of settlement does the area have ?

Answer. Scattered settlements

Page : 67 , Block Name : Exercise C

Q5 Name the geographical feature represented by white patches in the middle of Sipu Nadi.

Answer. Plain area

Page : 67 , Block Name : Exercise C

Q6 Name the two types of vegetation shown on part of the topographical sheet.

Answer. Thorny and deciduous forests

Page : 67 , Block Name : Exercise C

Q7 What is the direction of the flow of the Kuadari ?

Answer. Southwest

Page : 67 , Block Name : Exercise C

Q8 In which part of the sheet area is Lower Khajuri Dam located?

Answer. North

Page : 67 , Block Name : Exercise C