

# NEXT IAS

## UPSC CSE PRELIMS

*Topicwise*

**PREVIOUS YEARS SOLVED PAPERS**

**2011-2024**

## GENERAL STUDIES

**14** YEARS  
SOLVED  
PAPERS

- ✓ Detailed explanation of options with additional information.
- ✓ Pictographic presentation through maps & graphs.
- ✓ Matched and Verified with the official answer key of UPSC.

[www.madeeasypublications.org](http://www.madeeasypublications.org)



**MADE EASY Publications Pvt. Ltd.**

Corporate Office: 44-A/4, Kalu Sarai  
(Near Hauz Khas Metro Station), New Delhi-110016  
Contact: 011-45124660, 8860378007  
E-mail: infomep@madeeasy.in  
Visit us at: [www.madeeasypublications.org](http://www.madeeasypublications.org)

**UPSC CSE (PRELIMS) PREVIOUS YEARS SOLVED PAPERS: GENERAL STUDIES**

© Copyright, by MADE EASY Publications Pvt. Ltd.

All rights are reserved. No part of this publication may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photo-copying, recording or otherwise), without the prior written permission of the above mentioned publisher of this book.

**First Edition: Jan 2023**

**Second Edition: July 2023**

**Third Edition: September 2024 (Revised & Updated)**

MADE EASY PUBLICATIONS has taken due care in collecting the data and providing the solutions, before publishing this book. In spite of this, if any inaccuracy or printing error occurs then MADE EASY PUBLICATIONS owes no responsibility. MADE EASY PUBLICATIONS will be grateful if you could point out any such error. Your suggestions will be appreciated.

---

© All rights reserved by MADE EASY PUBLICATIONS PVT. LTD. No part of this book may be reproduced or utilized in any form without the written permission from the publisher.



*Director's  
Message*

History is full of lessons, and History of UPSC Civil Services Examination lies in its previous year questions. I often tell students that the first and most important step to conquer an examination like UPSC Civil Services is to understand it thoroughly. The best way to understand the exam is through the syllabus and analysis of the previous year's questions. This book is an effort to make sure that you learn the most out of the history of the Civil Services Examination.

The book contains solved previous year questions of UPSC Civil Services (Preliminary) Examination from 2011-2024. The questions have been segregated subject-wise as well as topic-wise to make it more accessible for the students. The rationale behind including the questions starting from 2011 is the major shift in the pattern and difficulty level of the preliminary examination post-2011. A compilation from 2011-2024 ensures that the questions are in-line with the latest trend of the exam.

There are three distinctive features that make this book stand apart from the existing options. First, the answers have been thoroughly verified with the official answer key of UPSC. Second, all the options have been explained comprehensively with special emphasis on conceptual clarity. Third and the most important distinctive feature is its futuristic approach through a section of "Additional information" for each question. The recent trend shows that UPSC often frames questions around the core theme and the options of previous year questions. The section of "Additional Information" is intended to make students future-ready for such types of questions.

The NEXT IAS team has put sincere efforts in preparing this valuable resource for students. I hope this book will stand up to the expectations of aspirants and my desire to serve the student community by providing the best study material will get accomplished.

**B. Singh (Ex. IES)**

CMD, NEXT IAS & MADE EASY Group

# CSE (PRELIMS) PREVIOUS YEARS SOLVED PAPERS (2011-2024)

---

## C O N T E N T S

1.	Indian Economy	1-120
2.	Indian Polity	121-216
3.	Geography	217-305
4.	History of Ancient India	306-333
5.	History of Medieval India	334-351
6.	History of Modern India	352-400
7.	Art and culture	401-427
8.	Ecology and environment	428-527
9.	Science and Technology	528-610
10.	Current Affairs and Miscellaneous	611-662

# GEOGRAPHY

## UNIT III

### CONTENTS

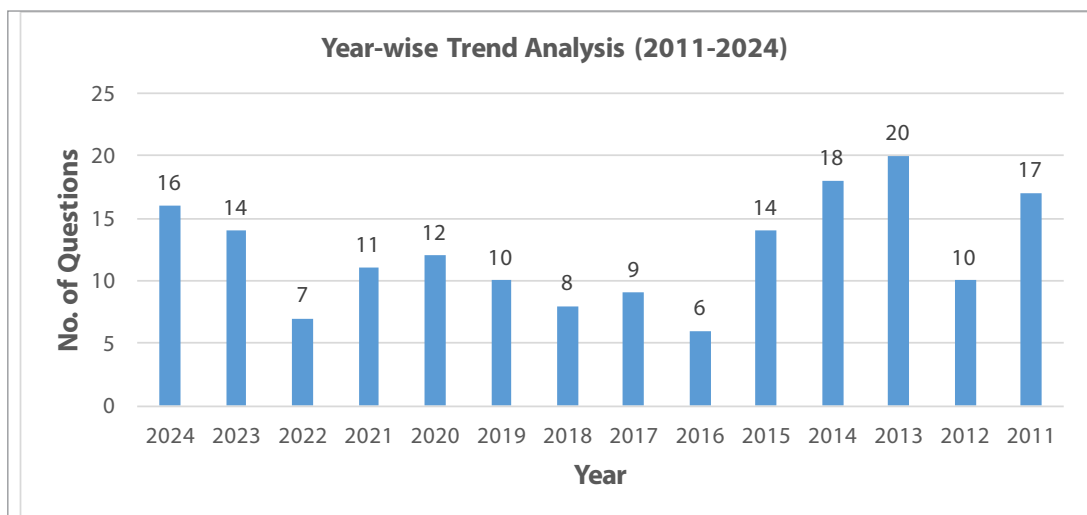
#### INDIAN GEOGRAPHY

1.	India Location Setting & Physiographic Regions	219
2.	Indian Drainage System	231
3.	Indian Climate	240
4.	Indian Soils	243
5.	Natural Vegetation of India	246
6.	Indian Agriculture	251
7.	Mineral Resources - India	268

#### PHYSICAL AND WORLD GEOGRAPHY

1.	Geomorphology	274
2.	Oceanography	278
3.	Climatology	281
4.	Mapping	292
5.	Distribution of Key Natural Resources Across the World	299
6.	Miscellaneous	301

# GEOGRAPHY



## TOPIC-WISE TREND ANALYSIS (2011-2024)

S.No.	Topics	Total Number of Questions
<b>Indian Geography</b>		
1.	India Location Setting & Physiographic Regions	24
2.	Indian Drainage System	16
3.	Indian Climate	5
4.	Indian Soils	5
5.	Natural Vegetation of India	12
6.	Indian Agriculture	31
7.	Mineral Resources - India	10
<b>Physical and World Geography</b>		
1.	Geomorphology	9
2.	Oceanography	4
3.	Climatology	23
4.	Mapping	17
5.	Distribution of Key Natural Resources Across the World	6
6.	Miscellaneous	9

# UNIT III

# GEOGRAPHY

## 1. INDIA LOCATION SETTING & PHYSIOGRAPHIC REGIONS

1. Consider the following statements:
1. Amarkantak Hills are at the confluence of Vindhya and Sahyadri Ranges.
  2. Biligirirangan Hills constitute the easternmost part of Satpura Range.
  3. Seshachalam Hills constitute the southernmost part of Western Ghats.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

(2023)

Ans. (d)

- **Statement 1 is not correct:** Amarkantak Hill is situated in Anuppur district of Madhya Pradesh at an altitude of 1065m at the meeting place of the Vindhya and Satpura mountain ranges. Amarkantak is the highest peak of the Maikal ranges.
- **Statement 2 is not correct:** The Biligirirangana Hills commonly called BR Hills, is a hill range situated in south-eastern karnataka, at its border with Tamil nadu. The area is called **Biligiriranganatha Swamy Temple Wildlife Sanctuary** or simply BRT Wildlife Sanctuary. Whereas, the Satpura range includes the Mahadeo Hills to the north, the Maikala range to the east and Rajpipla Hills to the west. Therefore, the Maikala range would be the easternmost part of Satpura range.
- **Statement 3 is not correct:** Seshachalam Hills are part of the **Eastern Ghats** in the state of Andhra Pradesh. The hills are also known as **Venkatachalam**. Whereas, the Western Ghat stretches from the Mahanadi valley to the Nilgiris in the south.
- **Hence, option (d) is the correct answer.**

## ADDITIONAL INFORMATION

- **Western Ghats:**
  - ♦ A chain of mountains running **parallel to India's western coast**, approximately 30-50 km inland. The Ghats traverse the States of **Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra and Gujarat**.
  - ♦ Their average elevation is **900–1600 metres**. The height of the Western Ghats progressively increases from north to south.
  - ♦ The highest peaks include the **Anai Mudi (2,695 metres)** and the Doda Betta (2,637 metres).
  - ♦ Older than the great Himalayan Mountain chain.

2. Gandikota canyon of South India was created by which one of the following rivers?

- (a) Cauvery
- (b) Manjira
- (c) Pennar
- (d) Tungabhadra

(2022)

Ans. (c)

- A canyon is a type of valley. It is characterised by steep step like side slopes and may be as deep as a gorge. A canyon is wider at its top than at its bottom. In fact, a canyon is a variant of a gorge. Canyons commonly form in horizontal bedded sedimentary rocks. **Gandikota canyon** is on the **right bank of river Pennar** near Jammalamadugu in the Kadapa district of Andhra Pradesh. **Hence, option (c) is the correct answer.**

## ADDITIONAL INFORMATION

**Other famous canyons in India are as:**

- Gangani Grand Canyon, West Bengal on the bank of River Silabati.
- Marble Rock Gorge, Jabalpur on the bank of Narmada river.
- Raneh Falls Canyon, Khajurao on the Ken river.
- Laitlum Canyon, Meghalaya.
- Chambal Canyon, Rajasthan.

River	About	Significant Feature
Cauvery	It originates from Talakaveri on Brahmagiri range (Karnataka).	<ul style="list-style-type: none"> <li>• Shivasamudram Falls.</li> <li>• Mekedatu project by Karnataka government.</li> </ul>
Pennar River	Rises from the Chenna Kesava hills of the Nandi ranges (Karnataka).	The principal tributaries of the river are Jayamangal, Kunderu, Sagileru, Chitravati, Papagni and Cheyyeru.
Manjira river	It is a tributary of Godavari river.	Singur Dam is located on this river.
Tungabhadra river	It is a tributary of Krishna river.	Hampi is on the bank of this river.

3. Consider the following pairs:

Peak	Mountains
1. Namcha Barwa	– Garhwal Himalaya
2. Nanda Devi	– Kumaon Himalaya
3. Nokrek	– Sikkim Himalaya

Which of the statements given above is/are correctly matched?

- (a) 1 and 2                      (b) 2 only  
(c) 1 and 3                      (d) 3 only

(2022)

Ans. (b)

- **Pair 1 is not correctly matched:** The mountain peak Namcha Barwa is located in the **Arunachal Himalayas**. The Brahmaputra flows through a deep gorge after crossing Namcha Barwa.
- **Pair 2 is correctly matched: Nanda Devi Peak**, a part of the **Kumaon Himalayas**, is located in **Uttarakhand**. The part of the Himalayas lying between the **Satluj and Kali rivers** is known as Kumaon Himalayas. Nanda Devi peak is one of the highest peaks (3<sup>rd</sup>) in India with a height of 7817 m.
- **Pair 3 is not correctly matched:** Nokrek is the highest peak in Garo Hills. The Nokrek Biosphere Reserve is located in the northeast of India on the Tura Range, which forms part of the Meghalaya Plateau.

#### ADDITIONAL INFORMATION

Sub-division of Himalayas	Major Features
Kashmir or Northwestern Himalayas	Karakoram, Ladakh, Zaskar and Pir Panjal, Dal Lake, Baltoro and Siachen glaciers, Karewa formations
Himachal and Uttarakhand Himalayas	'Shivalik' and 'Dun formations', Summer grasslands known as Bugyals found here, 'Valley of flowers', Panch Prayag
Darjiling and Sikkim Himalayas	'Duar formations', Kanchenjunga (Kanchengiri) peak in this range
Arunachal Himalayas	General direction is from southwest to northeast; Kangtu and Namcha Barwa mountain peaks; Jhumming or slash and burn agriculture
Eastern Hills and Mountains	General alignment from the north to the south direction. Patkai Bum, Naga hills, the Manipur hills and Mizo or Lushai hills. Molasses basin, Loktak lake

4. With reference to India, Didwana, Kuchaman, Sargol and Khatu are the names of

- (a) Glaciers  
(b) Mangrove areas  
(c) Ramsar sites  
(d) Saline lakes

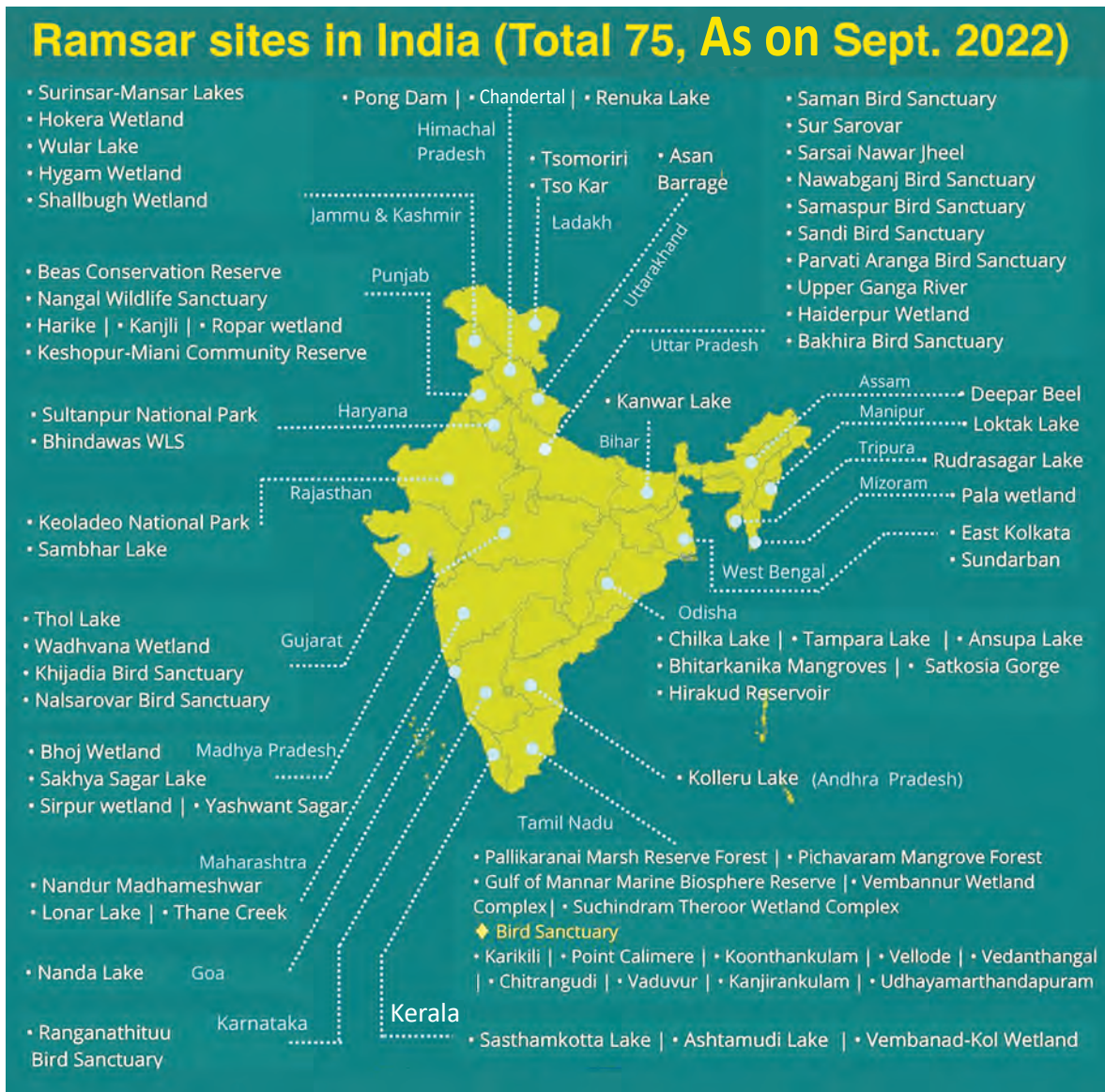
(2021)

Ans. (d)

- Didwana, Kuchaman, Sargol and Khatu are saline lakes of Rajasthan. A **playa/salt lake or saline lake** is a landlocked body of water that has a concentration of salts and other dissolved minerals significantly higher than most lakes.



- Small lakes with flat floors and undrained basins in which water collects after rains and evaporates quickly are called playas; they are mostly saline.



5. Siachen Glacier is situated to the
- East of Aksai Chin
  - East of Leh
  - North of Gilgit
  - North of Nubra Valley

(2020)

Ans. (d)

**Siachen Glacier**

- The **Siachen Glacier** is located in the Eastern Karakoram range in the Himalayas and is the largest glacier outside the polar and subpolar regions.



- It lies to the **west of Aksai Chin, north of Nubra valley, and east of Gilgit. Hence, option (d) is the correct answer.**

**ADDITIONAL INFORMATION**

- Nubra river passes through the Nubra valley and it is the tributary of the Shyok river.
- Nubra valley acts as a gateway to enter into the Karakoram range and hence, the Siachen glacier.
- Important glaciers of South Asia such as the Baltoro and Siachen are situated in Kashmir or Northwestern Himalayas.



- On April 13, 1984, India launched Operation Meghdoot to capture the 76.4-km glacier on the Saltoro ridge, preempting Pakistan's move to occupy it. The operation on the world's highest battlefield continues to date, making it the longest continuous operation of its kind in the world.

6. Among the following cities, which one lies on a longitude closest to that of Delhi?  
 (a) Bengaluru (b) Hyderabad  
 (c) Nagpur (d) Pune

(2018)

Ans. (a)

- Delhi is at 28°40'N (Latitude) and 77°20'E (Longitude).

City	Longitude
Bengaluru	77° 38'E
Hyderabad	78° 30'E
Nagpur	79° 09'E
Pune	73° 55'E

- As Longitude of Delhi is the closest to Bengaluru among the four cities, **Hence, option (a) is the correct answer.**

7. Which one of the following is an artificial lake?  
 (a) Kodaikanal (Tamil Nadu)  
 (b) Kolleru (Andhra Pradesh)

- (c) Nainital (Uttarakhand)  
 (d) Renuka (Himachal Pradesh) (2018)

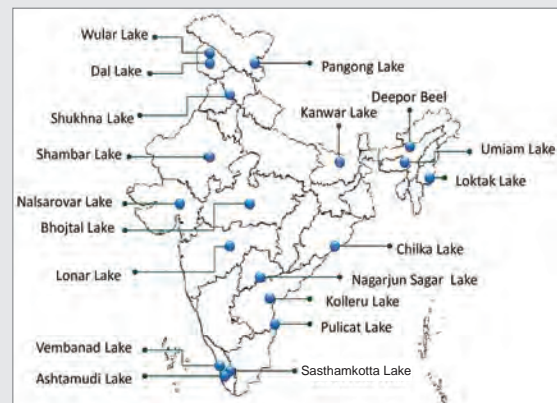
Ans. (a)

- Kodaikanal lake (Tamilnadu):** It is a **star-shaped artificial lake**. **Kurinji or Strobilanthes Cynthiana**, which blooms once in 12 years, is found in the catchment area of Kodai Lake. **Hence, option (a) is the correct answer.**

**ADDITIONAL INFORMATION**

- Kolleru Lake (Andhra Pradesh):** Kolleru Lake is a **freshwater lake** in Andhra Pradesh located between **Krishna and Godavari deltas** in the coastal districts of West Godavari and Krishna. It is a shallow lake with an area of 901 sq. Kms which was declared a **wildlife sanctuary** in November 1999 under India's **Wildlife Protection Act of 1972**, and designated a wetland of international importance in November 2002 under the **Ramsar Convention**. The **vulnerable Grey Pelican (Pelecanus philippensis)** is found here.
- Nainital Lake (Uttarakhand):** Nainital Lake also known as Naini Lake. This **lunar-shaped freshwater lake** was formed from depression in Nainital due to **tectonic movements**. The lake has been divided into two segments- Tallital and Mallital. The upper segment is called Mallital and the lower one is called Tallital. Naini Lake is surrounded by three mountain peaks - Naini Peak on the northwest; Tiffin Top on the southwest; snow-capped peaks on the north.
- Renuka Lake (Himachal Pradesh):** Renuka lake, a **Ramsar site**, is the largest natural lake in the state of Himachal Pradesh. This lake has been designated as a Ramsar site since November 2005.

**IMPORTANT LAKES IN INDIA**



8. Consider the following statements:  
 1. The Barren Island volcano is an active volcano located in Indian territory.  
 2. Barren Island lies about 140 km east of Great Nicobar.



3. The last time the Barren Island volcano erupted was in 1991 and it has remained inactive since then.

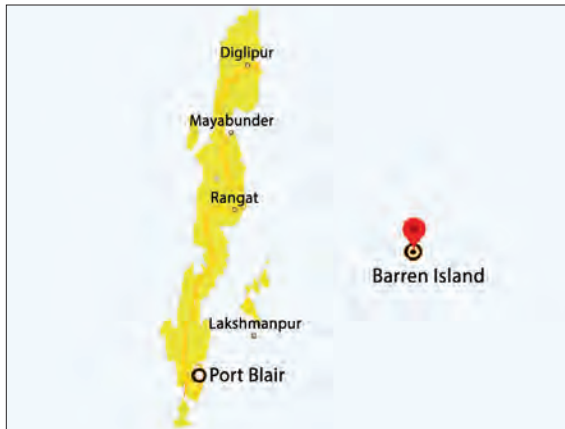
Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3
- (c) 3 only
- (d) 1 and 3

(2018)

Ans. (a)

- **Statement 1 is correct:** Barren Island is **India's only active volcano** located in the Andaman Sea near Andaman and Nicobar Islands. It is a **stratovolcano** composed of lava, rock fragments, and volcanic ash. On the west side of the island is a caldera formed by an explosive eruption in the Pleistocene era.
- **Statement 2 is not correct:** The Barren Island, an active volcano, lies in the Andaman Sea, northeastern Indian Ocean. It lies about 140 km northeast of Port Blair which is located on the east coast of the South Andaman Island.



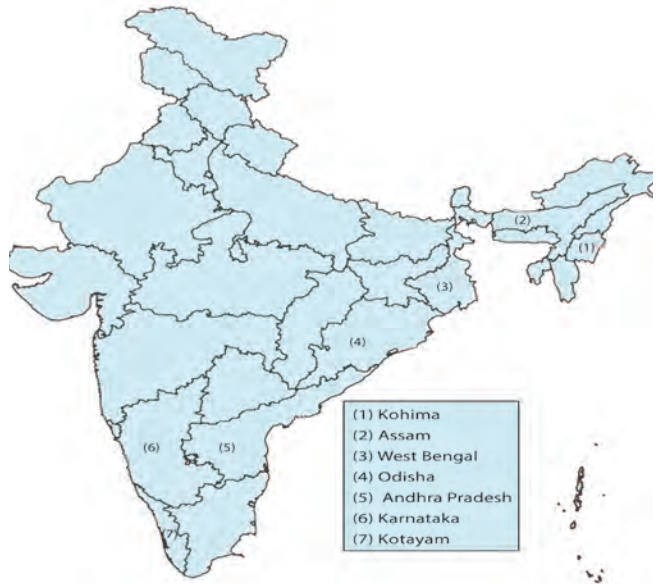
- **Statement 3 is not correct:** It erupted in 1994-95 and then in 2005. A team of scientists from the **Goa-based National Institute of Oceanography (NIO)** has observed that the barren island volcano has ejected ash in 2017.

9. If you travel by road from Kohima to Kottayam, what is the minimum number of states within India through which you can travel, including the origin and the destination?

- (a) 6
- (b) 7
- (c) 8
- (d) 9

(2017)

Ans. (b)



- **Kohima** is the capital city of **Nagaland** and **Kottayam** is in **Kerala**. Minimum states to be covered while travelling from Kohima to Kottayam. These states are:

Nagaland (Origin State) → Assam → West Bengal → Odisha → Andhra Pradesh → Karnataka → Kerala (Destination)

- **One alternate route is also possible:**

Nagaland (Origin State) → Assam → West Bengal → Odisha → Andhra Pradesh → Tamilnadu → Kerala (Destination)

Hence, option (b) is the correct answer.

10. Which of the following is geographically closest to Great Nicobar?

- (a) Sumatra
- (b) Borneo
- (c) Java
- (d) Sri Lanka

(2017)

Ans. (a)



- **Great Nicobar** is the southernmost island of the Nicobar Islands Archipelago. The Great Channel in the Indian Ocean separates the Great Nicobar Island of India and Aceh Province of Indonesia at the **Sumatra Island**. Hence, option (a) is the correct answer.

#### ADDITIONAL INFORMATION

- **Sumatra Islands:** It is the second largest island (after Borneo) of the Greater Sunda Islands, in the Malay Archipelago. The island is separated in the northeast from the Malay Peninsula by the Strait of Malacca and in the south from Java by the Sunda Strait. The great Nicobar islands share their boundaries with Aceh, Sumatra. Sumatra islands are also located on the Equator.
- **Java Islands:** Java is home to roughly half of Indonesia's population and dominates the country politically and economically. The largest city of Indonesia, **Jakarta** is also located on this island. The island is formed by volcanic eruptions due to the geological subduction of the Australian Plate under the Sunda Plate.
- **Borneo Islands:** Borneo is Indonesia's largest and the world's third-largest island. The Equator passes through this island.

11. Consider the following statements:

1. In India, the Himalayas are spread over five States only.
2. Western Ghats are spread over five States only.
3. Pulicat Lake is spread over two States only.

Which of the statements given above is/are correct?

- (a) 1 and 2 only      (b) 3 only  
(c) 2 and 3 only      (d) 1 and 3 only

(2017)

Ans. (b)

- **Statement 1 is not correct:** The Himalayas, geologically young and structurally fold mountains stretch over the northern borders of India. The Indian Himalayan Region is spread across 13 Indian States/Union Territories (**namely Jammu and Kashmir, Ladakh, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Assam and West Bengal**), stretching across 2500 km. Their width varies from 400 Km in Kashmir to 150 Km in Arunachal Pradesh. The altitudinal variations are greater in the eastern half than those in the western half. The part of the Himalayas lying between the Indus and Satluj has been traditionally known as

**Punjab Himalaya**, but it is also known regionally as **Kashmir and Himachal Himalaya** from west to east respectively. The part of the Himalayas lying between the Satluj and Kali rivers is known as **Kumaon Himalayas**. The Kali and Teesta rivers demarcate the **Nepal Himalayas** and the part lying between Teesta and Dihang rivers is known as **Assam Himalayas**. Beyond the Dihang gorge, the Himalayas bend sharply to the south and spread along the eastern boundary of India. They are known as the **Purvachal or the Eastern hills and mountains**.

- **Statement 2 is not correct:** The **Western Ghats** lie parallel to the western coast. They are continuous and can be crossed through passes only. They are higher than the Eastern Ghats and are known by different local names. The height of the Western Ghats progressively increases from north to south. The highest peaks include the Anai Mudi (2,695 metres) and the Doda Betta (2,637 metres). They spread over **six states** — Karnataka, Gujarat, Goa, Tamil Nadu, Kerala and Maharashtra.
- **Statement 3 is correct:** **Pulicat Lake** is the **second-largest brackish water lake in the country**. The beautiful Pulicat Lake lies at the **border of the states of Andhra Pradesh and Tamil Nadu**. It is famous for its wonderful flora and fauna. A large number of migratory birds visit this place during winter.

12. **At one of the places in India, if you stand on the seashore and watch the sea, you will find that the sea water recedes from the shoreline a few kilometres and comes back to the shore, twice a day, and you can actually walk on the seafloor when the water recedes. This unique phenomenon is seen at:**

- (a) Bhavnagar
- (b) Bheemunipatnam
- (c) Chandipur
- (d) Nagapattinam

(2017)

Ans. (c)

- **Chandipur beach** is in the state of **Odisha** where a unique phenomenon occurs every day. The sea recedes from the coast by as much as five km during the ebb (low tide) and water returns during high tide and also brings less spotted sea life like the horseshoe crab or red crab. During this period, one can walk on the seabed.

- Chandipur also has the DRDO (Defence Research and Development Organisation) Integrated Research Range. In this range, ballistic missiles are test-fired. **Hence, option (c) is the correct answer.**

**ADDITIONAL INFORMATION**

**Bheemunipatnam Beach:** It is in Visakhapatnam. Recently, the foundation stone for a missile park "Agnееprastha" was laid at INS Kalinga, Bheemunipatnam beach.

**Nagapattinam:** This district has around 200 beaches.

13. **Consider the following pairs:**

Famous Place	Region
1. Bodh Gaya	: Baghelkhand
2. Khajuraho	: Bundelkhand
3. Shirdi	: Vidarbha
4. Nasik (Nashik)	: Malwa
5. Tirupati	: Rayalaseema

**Which of the pairs given above are correctly matched?**

- (a) 1, 2 and 4
- (b) 2, 3, 4 and 5
- (c) 2 and 5 only
- (d) 1, 3, 4 and 5

(2016)

Ans. (c)

- **Pair 1 is not correctly matched:**
  - ♦ **Bodhgaya** is in Bihar. It is one of the most sacred Buddhist pilgrimage centres in the world. It was here under a banyan tree, Gautama attained supreme knowledge to become Buddha, the enlightened one.
  - ♦ The Mahabodhi Temple, one of the few surviving examples of early brick structures is in Bodhgaya. The emperor Asoka made a pilgrimage to this spot around 260 BC and built this temple at the site of the Bodhi Tree.
- **Pair 2 is correctly matched:**
  - ♦ **Khajuraho** is in Bundelkhand, known for its ornate temples, was built by the Chandela rulers between 900 CE to 1130 CE. The first mention of Khajuraho and its temples is in the accounts of Abu Rahyan al Biruni (1022 CE) and Ibn Batuta (1335 CE). The temples were said to have been spread across 20 square kilometres and there were around 85 temples in the 12th century.

- **Pair 3 is not correctly matched:**
  - ♦ **Shirdi** is not in Vidarbha region. It is located in Ahmednagar district which is a part of Madhya Maharashtra.
- **Pair 4 is not correctly matched:**
  - ♦ **Nashik** lies on the western edge of the Deccan Plateau which is a volcanic formation. **Trimbakeshwar** is a place of Jyotirlinga from where the river Godavari originates. It is a part of Madhya Maharashtra.
  - ♦ The city's tropical location and high altitude combine to give it a relatively mild version of a tropical wet and dry climate.
  - ♦ The Western Ghats or Sahyadri range stretches from north to south across the western portion of the district.
  - ♦ Other than Godavari, important rivers like Vaitarana, Bhima, Girana, Kashyapi and Darana flow across Nashik.
- **Pair 5 is correctly matched:**
  - ♦ **Tirupati** is in **Rayalaseema** of the state of Andhra Pradesh.
  - ♦ Tirupati Laddu has been designated with the Geographical Indication (GI) tag in the year 2009.

14. Which one of the following pairs of States of India indicates the easternmost and westernmost State?

- (a) Assam and Rajasthan  
 (b) Arunachal Pradesh and Rajasthan  
 (c) Assam and Gujarat  
 (d) Arunachal Pradesh and Gujarat

(2015)

Ans. (d)

- The mainland of India extends from Kashmir in the north to Kanyakumari in the south and **Arunachal Pradesh in the east to Gujarat in the west. Hence, option (d) is the correct answer.**
- **Ghuar Mota** in the Kutch region of Gujarat is the Westernmost point of India and **Kibithoo** in Arunachal Pradesh is the Easternmost point of India.

15. Consider the following pairs:

Place of Pilgrimage	Location
1. Srisailam	: Nallamala Hills
2. Omkareshwar	: Satmala Hills
3. Pushkar	: Mahadeo Hills

Which of the above pairs is/are correctly matched?

- (a) 1 only                      (b) 2 and 3 only  
 (c) 1 and 3 only              (d) 1, 2 and 3

(2015)

Ans. (a)

- **Pair 1 is correctly matched: Srisailam** is one of the twelve Jyotirlingas of Lord Shiva, situated on the banks of River Krishna in Kurnool district of Andhra Pradesh. The temple is built on the **Nallamala Hills**.
- **Pair 2 is not correctly matched: Omkareshwar** is one of the twelve jyotirlingas situated on the **Mandhata hills** in the Vindhya Mountains of Madhya Pradesh. It is situated on the north bank of Narmada.
- **Pair 3 is not correctly matched: Pushkar** is located on the **Ratnagiri hills in Rajasthan**. There is a savitri temple in Pushkar, which is situated atop the Ratnagiri Hill and is devoted to Savitri, wife of Lord Brahma.

#### ADDITIONAL INFORMATION

##### MAHADEO HILLS

- The **Mahadeo Hills** are a range of hills in the state of **Madhya Pradesh**. The hills are situated in the northern part of the **Satpura Range**.
- It runs east and west through Betul, Chhindwara, and Seoni districts, **separating the basin of the Narmada River to the north from that of the Wainganga and Wardha rivers** (tributaries of the Godavari). The highest peak of Mahadeo hills is **Dhupgarh (1350mt)** and Pachmarhi is an important hill station.
- **Satmala Hills** is located in Maharashtra.

16. In a particular region in India, the local people train the roots of living trees into robust bridges across streams. As the time passes these bridges become stronger. These unique 'Living Root Bridges' are found in:

- (a) Meghalaya                      (b) Himachal Pradesh  
 (c) Jharkhand                      (d) Tamil Nadu

(2015)

Ans. (a)

- Living root bridges are Ficus elastica-based suspension bridges seen throughout the **East Khasi Hills of Meghalaya** and is grown by indigenous **Khasi tribes. Hence, option (a) is the correct answer.**
- The structure of the bridge is entirely made from tree branches, trunks, and roots.

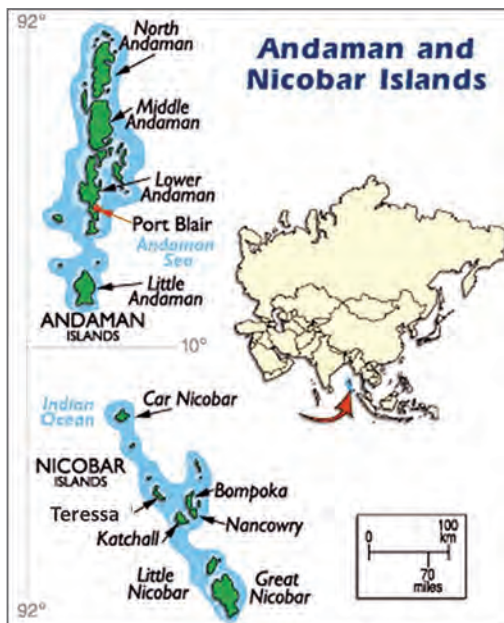


17. Which one of the following pairs of islands is separated from each other by the 'Ten Degree Channel'?
- Andaman and Nicobar
  - Nicobar and Sumatra
  - Maldives and Lakshadweep
  - Sumatra and Java

(2014)

Ans. (a)

- Andaman and Nicobar Islands are divided into two broad categories – the Andaman in the north and the Nicobar in the south. They are separated by a water body which is called the Ten-degree channel (150 km wide). Hence, option (a) is the correct answer.



**ADDITIONAL INFORMATION**

- Nine Degree Channel separates the island of Minicoy from the main Lakshadweep archipelago.
- Eight Degree Channel separates the islands of Minicoy and Maldives. Thus, it is the channel separating Lakshadweep from the Maldives.
- Sri Lanka is separated from India by a narrow channel of sea formed by the Palk Strait and the Gulf of Mannar.
- Duncan Passage separates Rutland Island (part of Great Andaman) and Little Andaman.
- Sumatra and Java islands of Indonesia are separated by the Sunda Strait.
- Nicobar and Sumatra are separated by the Andaman Sea.

18. Consider the following pairs:
- Dampa Tiger Reserve : Mizoram
  - Gumti Wildlife Sanctuary : Sikkim
  - Saramati Peak : Nagaland
- Which of the above pairs is/are correctly matched?
- 1 only
  - 2 and 3 only
  - 1 and 3 only
  - 1, 2 and 3

(2014)

Ans. (c)

Pair 1 is correctly matched:

- Dampa Tiger Reserve is in the western limit of Mizoram.
- The Reserve is bound by the Chittagong hill tracts (Sazek hill range) of Bangladesh in the west. The vegetation of the reserve ranges from tropical evergreen to semi-evergreen forests.
- The highest point of the reserve is the Chhawrpialtlang with an altitude of 1095m. Other peaks are Dampatlang (869 M) and Pathlawilunglentlang (780 m). The habitat is drained by the River Khawtlang Tuipui to the West and the Taieri River to the East.

Pair 2 is not correctly matched:

- Gumti wildlife sanctuary is located in the southern part of Tripura, spread across the districts of Dhalai, Khowai and Gumti.
- This WLS is a biodiversity-rich semi-evergreen and deciduous forest.
- Gumti River is formed on the periphery of the Sanctuary by the confluence of the Raima and Saima rivers originating in the watersheds within the Sanctuary.
- The Sanctuary is also boarded by the Khowai River, Dhumbur Reservoir and Bangladesh border on different sides.

Pair 3 is correctly matched:

- The Patkai Mountain Range is the longest mountain range in Nagaland and forms the international boundary with Myanmar.
- Mount Saramati (12,000 ft. (3,840 metres) is the highest peak in Nagaland. It is in this region where Naga Hill merges with the Patkai range in Myanmar.
- The southernmost point of this range is the Molhe Pass through which the Japanese entered Nagaland during World War II. At the foot of the Molhe Pass is the Shilloi/Lachem Lake.

19. Which of the following have coral reefs?

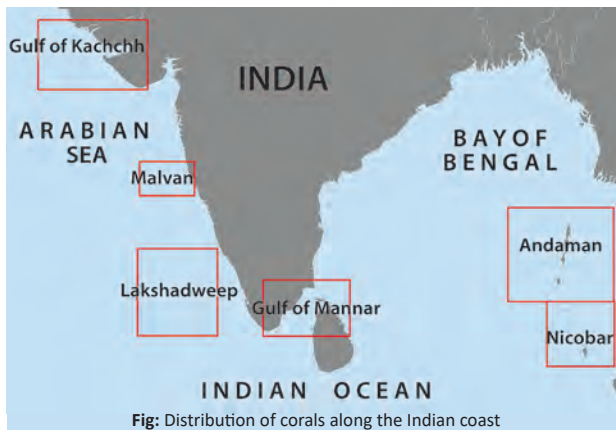
1. Andaman and Nicobar Islands
2. Gulf of Kachchh
3. Gulf of Mannar
4. Sunderbans

Select the correct answer using the code given below.

- (a) 1, 2 and 3 only      (b) 2 and 4 only  
(c) 1 and 3 only      (d) 1, 2, 3 and 4

(2014)

Ans. (a)



- **Statements 1, 2 and 3 are correct:** Coral reefs in India are found in a lot of areas including the Gulf of Kutch, Gulf of Mannar, Palk Bay, Andaman and Nicobar and Lakshadweep Islands.
- **Statement 4 is not correct:** Sundarban is the largest **deltaic region** of the world and encompasses hundreds of islands (105), with a maze of innumerable rivers, rivulets, and creeks but does not have any coral reef. It is due to sedimentation.

#### ADDITIONAL INFORMATION

- Coral polyps are **short-lived microscopic organisms** which live in colonies. They flourish in shallow, mud-free and warm waters. They secrete calcium carbonate.
- The coral secretion and their skeletons from coral deposits in the form of reefs. They are mainly of three kinds: **barrier reefs, fringing reefs and atolls**.
- They are also described as an 'underwater tropical rainforest, fairyland underwater, biologist's paradise, a magnificent repository of resources, genetic garden, submerged meadows and a treasure house of wealth'.
- They act as barriers against waves and thus prevent coastal erosion.
- Coral reefs face threats due to anthropogenic activities such as coastal development, destructive fishing methods and pollution from domestic and industrial sewage.

- The **Great Barrier Reef of Australia** is a good example of the first kind of coral reefs.
- Atolls are circular or horseshoe-shaped coral reefs.

20. Consider the following pairs:

Hills	Region
1. Cardamom Hills	: Coromandel Coast
2. Kaimur Hills	: Konkan Coast
3. Mahadeo Hills	: Central India
4. Mikir Hills	: North-East India

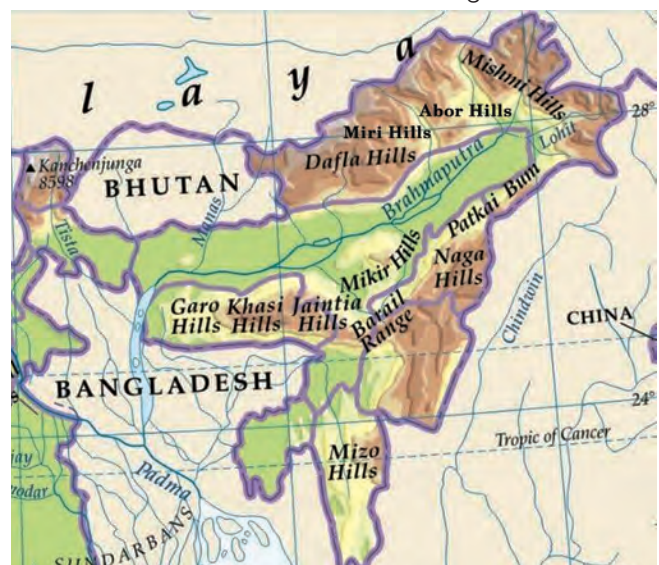
Which of the above pairs are correctly matched?

- (a) 1 and 2      (b) 2 and 3  
(c) 3 and 4      (d) 2 and 4

(2014)

Ans. (c)

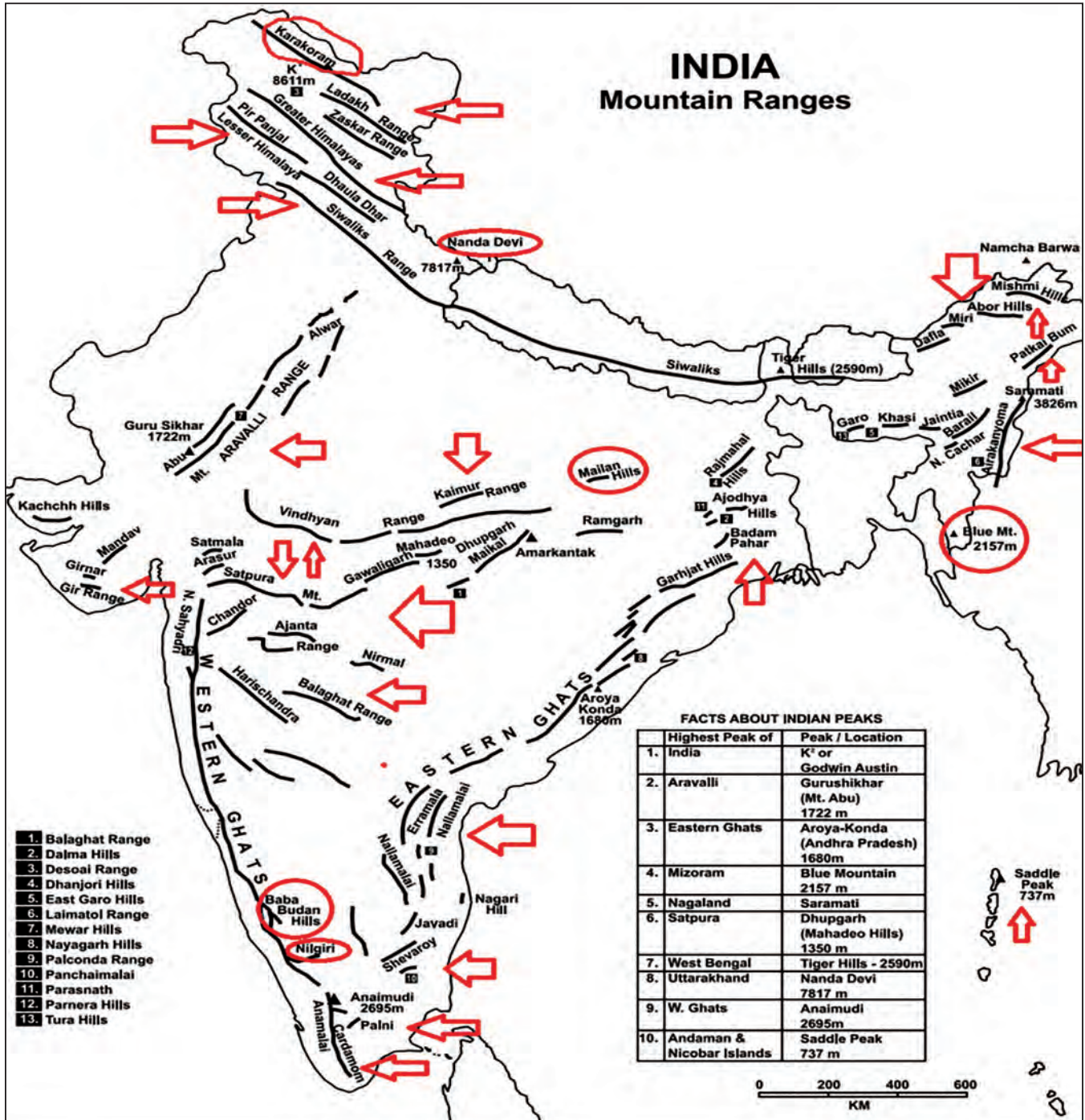
- **Pair 1 is not correctly matched:** The **Cardamom hills** denote the entire Western Ghats that lie south of the Palakkad gap. Straddling both **Kerala and Tamil Nadu**, the crest of the hills forms the boundary between the two states. The average elevation of the Cardamom hills is 2,637 metres with **Anaimudi as the highest peak**. The Anaimudi peak is located where the Cardamom, Anaimalai and Palani hills meet. One can spot the Nilgiri Tahr, an endangered animal endemic to the Nilgiri hills, in Anaimudi enclosed by the Eravikulam National Park. Other wildlife found here are Indian gaur, Bengal tigers, Asian elephants and Nilgiri martens. The Periyar Wildlife Sanctuary lies in the centre of the Cardamom hills. This area, including the Western Ghats and the Periyar sub-cluster, is one of the UNESCO World Heritage Sites.





- **Pair 2 is not correctly matched:** Kaimur Hills is in the eastern portion of the Vindhya Range, present in Madhya Pradesh, Uttar Pradesh and Bihar. The Hills which are **one of the oldest rock formations** along with the Aravallis in the Indian sub-continent, **mainly consist of old igneous rocks**.
- **Pair 3 is correctly matched:** Mahadeo Hills is located in the northern part of the Satpura

- **Pair 4 is correctly matched:** Assam is dominated by alluvial plains of the Brahmaputra and Barak, apart from its tributaries. The **Mikir Hills plateau** (Karbi Anglong), the North Cachar Hills and marginal plateau and hills from the adjoining states make up the highland in Assam.



21. Consider the following pairs:

1. Nokrek Biosphere reserve: Garo Hills
2. Logtak (Loktak) Lake : Barail Range
3. Namdapha National Park : Dafla Hill

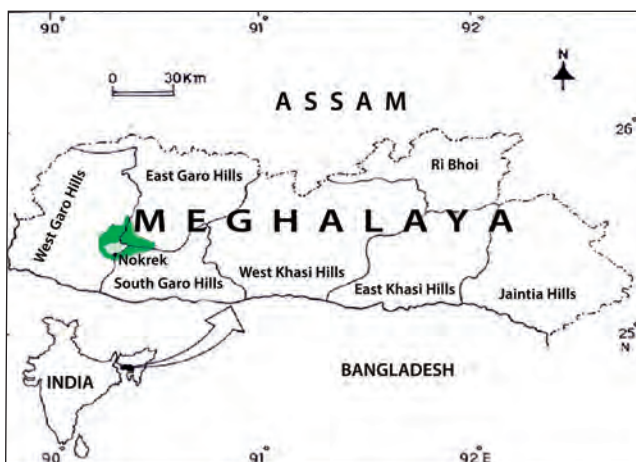
Which of the above pairs is/are correctly matched?

- (a) 1 only                      (b) 2 and 3 only  
(c) 1, 2 and 3                (d) None

(2013)

Ans. (a)

- **Pair 1 is correctly matched: Nokrek Biosphere** in **Garo hills** district of Meghalaya. The Nokrek Biosphere Reserve is located in the northeast of India on the **Tura Range, which forms part of the Meghalaya Plateau** (average altitude: 600 metres). The entire area is mountainous and **Nokrek is the highest peak of the Garo hills**, rising up 1,412 metres. The Nokrek Biosphere Reserve is the first Biosphere Reserve in North-East India to be designated for inclusion in the **World Network of Biosphere Reserve of Man and the Biosphere Programme, UNESCO** in May 2009.
- **Pair 2 is not correctly matched:** The only floating National Park in the world, the **Keibul Lamjao National Park** located on the **Loktak Lake** is the last natural habitat of the "Sangai" (*Rucervus eldii eldii*), the dancing deer of **Manipur**. Fishermen living on floating islands called **Phumdis** in floating huts known as **Phumsangs** are unique sights of this lake.
- **Pair 3 is not correctly matched: Namdapha National Park** is located in the Changlang district of **Arunachal Pradesh**. Namdapha and its adjoining areas are flanked by the Patkai hills to the south and southeast and by the Himalayas to the north.



#### ADDITIONAL INFORMATION

- The Barail Mountain Range runs in the east-to-west direction and becomes progressively lower from east to west.
- This mountain range system extends from Nagaland to Manipur and from Manipur to Meghalaya.
- The Barail is the **highest hill range in Assam**. It includes the North Cachar Hill Reserve Forest (RF) of the Cachar district, Barail RF of the Cachar and North Cachar Hills districts and the unclassified forests stretching from the Simleng river valley in the west to Lake in the east (in North Cachar Hills district). The Barail Range is the **watershed between the Brahmaputra and Barak rivers**.
- The **Japfu range**, which is 3,014 metres high, is the easternmost point of this mountain range. The **Dzukou valley**, which is in the easternmost part of the Barail Mountain System, is the **only place in the world where elephants are found at an altitude of more than 2,400 metres**.
- **Pakhui Wildlife Sanctuary** lies in the **Dafla range in the state of Arunachal Pradesh**.

22. When you travel in Himalayas, you will see the following:

1. Deep gorges
2. U-turn river courses
3. Parallel mountain ranges
4. Steep gradients causing land-sliding

Which of the above can be said to be the evidence for Himalayas being young fold mountains?

- (a) 1 and 2 only                (b) 1, 2 and 4 only  
(c) 3 and 4 only                (d) 1, 2, 3 and 4

(2012)

Ans. (d)

- The following features are evidence for the Himalayas being geologically young and structurally fold mountains stretch over the northern borders of India.
- It has a vast expanse of rugged topography consisting of a **series of mountain ranges** with varied peaks, beautiful valleys, deep gorges and U-turn.
  - ♦ **Brahmaputra** river takes a **U-turn** on reaching the Namcha Barwa and enters India in Arunachal Pradesh through a gorge.
  - ♦ The Himalayas consists of **three parallel ranges** in their longitudinal extent. A number

of valleys lie between these ranges such as **Himadri and Himachal Himalayas.**

- ◆ These features are the characteristic of Himalayan youthful topography, **Hence all statements are correct.**

• **Hence, option (d) is the correct answer.**

**23. The Himalayan Range is very rich in species diversity. Which one among the following is the most appropriate reason for this phenomenon?**

- (a) It has a high rainfall that supports luxuriant vegetative growth
- (b) It is a confluence of different biogeographical zones
- (c) Exotic and invasive species have not been introduced in this region
- (d) It has less human interference

(2011)

**Ans. (b)**

- The Himalayan range is a confluence of the Trans-Himalayan zone, Himalayan zone and Northeast zone which are part of Biodiversity as well. These zones have tropical, temperate, and Tundra types climate which makes them rich in flora and fauna. **Hence, option (b) is correct.**

**24. A state in India has the following characteristics:**

1. Its northern part is arid and semi-arid.
2. Its central part produces cotton.
3. Cultivation of cash crops is predominant over food crops.

**Which one of the following states has all of the above characteristics?**

- (a) Andhra Pradesh      (b) Gujarat
- (c) Karnataka            (d) Tamil Nadu

(2011)

**Ans. (b)**

- The above description of a state resembles the Indian state of Gujarat.

ADDITIONAL INFORMATION	
GUJARAT	
Features	Characteristics
State Boundaries	Rajasthan, Madhya Pradesh, Maharashtra, UT of Daman & Diu, Dadar & Nagar Haveli
Rivers	Luni, Sabarmati, Mahi, Narmada, Tapti, Banas, Saraswati, Damanganga

Ecosystem	Ranges from deserts, Scrublands, Grasslands, deciduous forests, Wetlands to mangroves, coral reefs, estuaries and gulfs
Physiography	Dry Desert Coastal region Semi-arid Kachchh region towards west Kathiawar Peninsula (Saurashtra) Alluvial Plain
Major crops	Cotton (30% of total production in the country), Groundnuts, Tobacco – All Cash crops
Major Minerals and Petroleum	Bauxite, Salt and Shale Gas
National Parks	Gir National Park, Vansda National Park, Black Buck National Park, Marine National Park
Biosphere Reserve	Great rann of Kutch biosphere reserve
UNESCO World Heritage Sites	Dholavira Rani-Ki-Vav, Patan Champaner-Pavagarh Archeological Park Historic city of Ahmedabad

## 2. INDIAN DRAINAGE SYSTEM

**1. Consider the following information:**

Waterfall	Region	River
1. Dhuandhar	Malwa	Narmada
2. Hundru	Chota Nagpur	Subarnarekha
3. Gersoppa	Western Ghats	Netravati

**In how many of the above rows is the given information correctly matched?**

- (a) Only one                      (b) Only two
- (c) Only three                    (d) None

(2024)

**Ans. (a)**

- **Pair 1 is not correct:** Dhuandhar Falls is situated in Jabalpur, Madhya Pradesh. The shade of this fall falling from a height of 10 metres is unique. It **originates from Narmada river**, but **does not fall in the Malwa region.**
- **Pair 2 is correct:** The Hundru Falls of Ranchi (eastern side of **Chota Nagpur Plateau**) is created on the course of the **Subarnarekha River**, where it falls from a height of 320 feet creating the highest waterfalls of Jharkhand.



- **Pair 3 is not correct:** Jog Falls or Gersoppa Falls is created by the **Sharavathi River** falling from a height of 253 m, making it the second-highest plunge waterfall in India. It is located near Sagara, Shimoga District of Karnataka state, and lies in **Western Ghats**. (Malenadu).
2. With reference to the Himalayan rivers joining the Ganga downstream of Prayagraj from West to East, which one of the following sequences is correct?

- (a) Ghaghara – Gomati – Gandak – Kosi
- (b) Gomati – Ghaghara – Gandak – Kosi
- (c) Ghaghara – Gomati – Kosi – Gandak
- (d) Gomati – Ghaghara – Kosi – Gandak

(2024)

Ans. (b)

- **Option (b) is the correct answer:** The correct sequence from west to east is as follows: Gomati, Ghaghara, Gandak and Kosi. Please refer to the map given below:



3. Consider the following statements:
1. Jhelum River passes through Wular Lake.
  2. Krishna River directly feeds Kolleru Lake.
  3. Meandering of Gandak River formed Kanwar Lake.
- How many of the statements given above are correct?
- (a) Only one                      (b) Only two  
(c) All three                      (d) None

(2023)

Ans. (a)

- **Statement 1 is correct:** Jhelum river, an important tributary of the Indus, rises from a spring at Verinag situated at the foot of the Pir Panjal in the south-eastern part of the valley of Kashmir. It

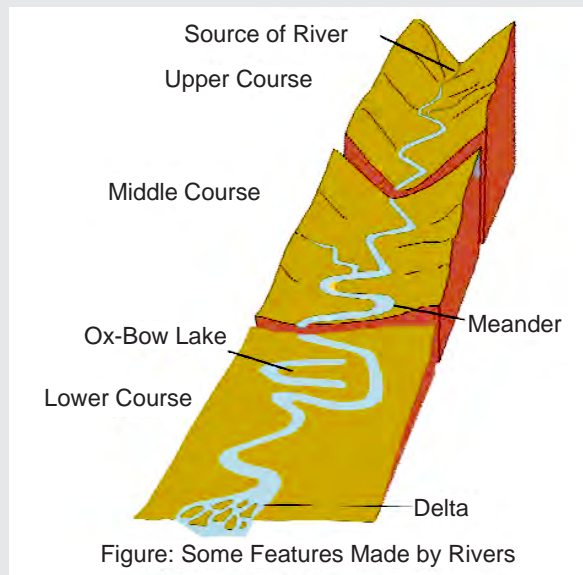
flows through Srinagar and the Wular lake before entering Pakistan through a deep narrow gorge. It joins the Chenab near Jhang in Pakistan.

- **Statement 2 is not correct:** Kolleru, one of the largest freshwater lakes in India, is situated between the Krishna and West Godavari districts of the state. **Krishna River does not directly feed Kolleru Lake.** The lake is fed directly by the seasonal Budameru and Tammileru rivers and is connected to the Krishna and Godavari systems by 67 inflowing drains and channels. Kolleru lake has been designated as a **Wildlife sanctuary and Ramsar site**. It was also identified as an **“Important Bird Area”** of India by the Bombay Natural History Society.

- **Statement 3 is not correct:** Kanwar lake (also known as Kabartal Wetland) is Asia's largest oxbow lake situated in the Begusarai district of Bihar. It is a residual oxbow lake, formed due to meandering of Burhi Gandak river, a tributary of Ganga. Covering the majority of the Indo-Gangetic plains in northern Bihar, this lake was declared a Ramsar site in 2020, making it the first wetland in Bihar to be included in the Ramsar convention.
- **Hence, option (a) is the correct answer.**

**ADDITIONAL INFORMATION**

- A meander is a bend in a river, also known as an **oxbow loop**. A stream or river flowing through a wide valley or flat plain will tend to form a meandering stream course as it alternatively erodes and deposits sediments along its course. The result is a snaking pattern as the stream meanders back and forth across its floodplain. When a meander gets cut off from the mainstream body, an **oxbow lake** is formed.



4. Consider the following pairs:
- | Reservoirs      | States           |
|-----------------|------------------|
| 1. Ghataprabha  | — Telangana      |
| 2. Gandhi Sagar | — Madhya Pradesh |
| 3. Indira Sagar | — Andhra Pradesh |
| 4. Maithon      | — Chhattisgarh   |
- How many pairs given above are not correctly matched?
- (a) Only one pair      (b) Only two pairs  
 (c) Only three pairs      (d) All four pairs
- (2022)

Ans. (c)

Pair 1 is not correctly matched:

- **Ghataprabha reservoir** is located in Belgaum district (also known as Belagavi) of **Karnataka**.
- Ghataprabha reservoir (also known as **Raja Lakhamagouda Jalashay**) has a hydroelectric dam at Hidkal.

Pair 2 is correctly matched:

- **Gandhisagar** is an important reservoir built on the **Chambal river**. It is located in Mandasaur, Neemuch district of the **state of Madhya Pradesh**.
- A total of four reservoirs have been constructed on this river. The other three reservoirs are - **Rana Pratap Sagar Dam, Jawahar Sagar Dam and Kota Barrage**.

Pair 3 is not correctly matched:

- **Indira Sagar** dam is a multipurpose project with an installed capacity of 1000 MW on the **Narmada** river in the Khandwa district of the state of **Madhya Pradesh**.
- **Hanumantiya**, an island, has been developed to exploit the backwater of this dam for tourism development in this region.

Pair 4 is not correctly matched:

- **Maithon** reservoir is on the **Barakar river** in the **state of Jharkhand**.
- This is also the site of the country's first multipurpose project. It came into existence in 1958 and is the biggest reservoir of Damodar Valley Corporation (DVC).
- The Maithon dam is also known for its **underground hydel power station**, the first of its kind in Southeast Asia.

5. **With reference to the Indus river system, of the following four rivers, three of them pour into one of them which joins the Indus directly. Among the following, which one is such a river that joins the Indus direct?**
- (a) Chenab  
 (b) Jhelum  
 (c) Ravi  
 (d) Sutlej

(2021)

Ans. (d)

- **Chenab river** receives the water of the **Jhelum River** near **Trimmu** and thereafter **Ravi river** joins the **Chenab** at **Sarai Sidhu**.

- The **Chenab** meets the **Sutlej River**, a tributary of the Indus River and forms 'Panjnad' (**Name given to the five rivers of Punjab** such as the Satluj, the Beas, the Ravi, the Chenab and the Jhelum).
- The **Indus river** receives 'Panjnad' a little above **Mithankot** and the **Indus** finally discharges into the Arabian sea near Karachi.
- **Satluj** receives the water from three other rivers (**Chenab, Jhelum and Ravi**) of the Indus system and joins the Indus at the end. **Hence, option (d) is the correct answer.**



#### ADDITIONAL INFORMATION

##### INDUS RIVER:

- Indus is one of the largest river basins of the world, covering an area of 11,65,000 sq. km (in India it is 321,289 sq. km) and a total length of 2,880 km (in India 1,114 km)
- It originates from a glacier near Bokhar Chu lake in the Kailash Mountain range.
- It is known as 'Singi Khamban; or Lion's mouth in Tibet.
- It enters Pakistan near Chillar in the Dardistan region.
- The Shyok, the Gilgit, the Zaskar, the Hunza, the Nubra, the Shigar, the Gasting and the Dras are the tributaries of the Indus.
- It emerges from the hills near Attock and receives the Kabul river on its right bank. Other important right bank tributaries are the Khurram, the Tochi, the Gomal, the Viboa and the Sangar.
- The river flows southward and receives 'Panjnad' a little above Mithankot and finally falls into the Arabian sea.

##### SATLUJ:

- The Satluj originates in the Rakas lake near Mansarovar at an altitude of 4,555 m in Tibet where it is known as Langchen Khambab.
- It flows almost parallel to the Indus for about 400 km before entering India and comes out of a gorge at Rupar. It passes through the Shipki La on the Himalayan ranges and enters the Punjab plains.
- It is an antecedent river. It is a very important tributary as it feeds the canal system of the Bhakra Nangal project.

##### CHENAB:

- The Chenab is the largest tributary of the Indus. It is formed by the confluence of two streams, Chandra and Bhaga in the Punjab Himalayas. It enters Pakistan and flows through the Punjab province.
- It receives the water of the Jhelum River near Trimmu and thereafter Ravi river joins the Chenab at Sarai Sidhu.

##### BEAS:

- The Beas is an important tributary of the Indus, originating from the Beas Kund near the Rohtang Pass at an elevation of 4,000 m above the mean sea level.
- The river flows through the Kullu valley and forms gorges at Kati and Largi in the Dhauladhar range.
- It enters the Punjab plains where it meets the Satluj near Harike.

##### RAVI:

- It rises west of the Rohtang pass in the Kullu hills of Himachal Pradesh and flows through the Chamba valley of the state.
- Before entering Pakistan it drains the area lying between the southeastern part of the Pir Panjal and the Dhauladhar ranges.

#### 6. Consider the following rivers:

1. Brahmani
2. Nagalwali
3. Subarnarekha
4. Vamsadhara

Which of the above rise from the Eastern Ghats?

- (a) 1 and 2                      (b) 2 and 4  
(c) 3 and 4                      (d) 1 and 3

(2021)

Ans. (b)

- **Statement 1 is not correct:** The **Brahmani**, known as the South Koel river in the upper reaches, **originates near Nagri village in Ranchi district** of Jharkhand at an elevation of about 600m. The principal tributaries of this river are **Sankh, Tikra and Karo**.
- **Statement 2 is correct:** The **Nagavali River** originates in the **Eastern Ghats** in the Kalahandi district of the state of Odisha.
- **Statement 3 is not correct:** The **Subarnarekha originates from the Ranchi Plateau** in Jharkhand forming the boundary between West Bengal and Odisha in its lower course.
- **Statement 4 is correct:** The **Vamsadhara river** rises in the **Eastern Ghats** of Odisha State. It is an important east-flowing river between **Mahanadi and Godavari**. Its drainage area includes Odisha and Andhra Pradesh states in India.



MAJOR RIVERS OF WESTERN AND EASTERN GHATS	
Western Ghat River	Eastern Ghat River
Periyar, Bharathappuzha, Netravati, Sharavathi, Mandovi, Godavari, Krishna and Kaveri, Tunga, Bhadra, Bhima, Malaprabha, Ghataprabha, Hemavathi, Kabini.	Rushikulya, Vamsadhara, Nagavali, Champavathi, Vegavathi, Sarada, Indravathi, Swarnamukhi.

7. Consider the following pairs:

Famous place	River
1. Pandharpur	: Chandrabhaga
2. Tiruchirappalli	: Cauvery
3. Hampi	: Malaprabha

Which of the pairs given above are correctly matched?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

(2019)

Ans. (a)

- **Pair 1 is correctly matched:** Pandharpur is a pilgrimage town on the banks of Chandrabhaga River (also known as Bhima river) in Solapur District, Maharashtra. Vithoba Temple is situated here. The temple was built by King Vishnuvardhana of the Hoysala Empire between 1108–1152 CE. The city is mentioned in the Rashtrakuta copper plate inscription (516 CE).
- **Pair 2 is correctly matched:** Tiruchirappalli is situated on the banks of the river Cauvery. It is the fourth largest city in Tamil Nadu. It was a citadel of the early Cholas which later fell to the Pallavas. But the Pallavas lost it to the Pandyas several times. Cholas reasserted themselves in the 10th century. Later, it became a Vijayanagara stronghold. When this empire collapsed in 1565, Trichy came to be occupied in turn by the Nayaks of Madurai, the Marathas, the Nawabs of Carnatic, the French and finally the British.
- **Pair 3 is not correctly matched:** Hampi was the capital of the Vijayanagar Empire around 1500 AD. It is located on the banks of the Tungabhadra River.

ADDITIONAL INFORMATION

About Hampi:

- Hampi is a UNESCO World Heritage Site.
- Virupaksha Temple is the most famous temple in Hampi and dates back to the 7th century. It is dedicated to Lord Shiva.

- Lotus Mahla and Vithala Temple are also situated here.
- The Vijaya Vithala Temple with a magnificent stone chariot standing temple courtyard has the large Ranga Mantapa with 56 musical pillars that resound with musical chimes when struck.
- Abdul Razzaq, a Persian envoy in the court of Devaraya II (1424–1446), used Arabic terms such as "zenana" to describe some of the Hampi monuments.

8. Consider the following pairs:

Glacier	River
1. Bandarpunch	: Yamuna
2. Bara Shigri	: Chenab
3. Milam	: Mandakini
4. Siachen	: Nubra
5. Zemu	: Manas

Which of the pairs correctly matched?

- (a) 1, 2 and 4
- (b) 1, 3 and 4
- (c) 2 and 5
- (d) 3 and 5

(2019)

Ans. (a)

- **Pair 1 is correctly matched:** The Yamuna is the longest and Westernmost tributary of the Ganga. Its source lies in the Yamunotri Glacier on the Western slopes of Banderpunch which is a mountain massif in the Garhwal Himalaya in Uttarakhand, India.
- **Pair 2 is correctly matched:** Chenab originates near the Bara Lacha Pass of the Lahul-Spiti part of the Zaskar range. The river is formed by the confluence of two rivers, Chandra and Bhaga in Himachal.
  - ♦ **Dams on Chenab:** Baglihar, Salal Dam, Dul Hasti Hydroelectric Plant, Pakal Dul Dam, and Ratle Hydroelectric Plant.
- **Pair 3 is not correctly matched:** The river Mandakini is the most important river coming down from the slopes of Kedarnath peak. It joins the Alaknanda at Rudraprayag. The river actually originates from the springs fed by the melting snow of the Charabari glacier.
- **Pair 4 is correctly matched:** The Nubra River is a river in the Nubra Valley of Ladakh in India. It is a tributary of the Shyok River (a part of the Indus River system). It originates from the Siachen Glacier. It was known as Yarma Tsangpo in Tibet.
- **Pair 5 is not correctly matched:** Manas is a transboundary river in the Himalayan foothills between southern Bhutan and India. It is the largest river system in Bhutan.

### ADDITIONAL INFORMATION

#### ZEMU GLACIER

- It is the largest glacier in the Eastern Himalayas.
- It is located at the base of Kangchenjunga in the Himalayan region of Sikkim.
- It is the source of the Teesta river.

#### PANCH PRAYAG



9. With reference to river Teesta, consider the following statements:

1. The source of river Teesta is the same as that of Brahmaputra but it flows through Sikkim.
2. River Rangeet originates in Sikkim and it is a tributary of river Teesta.
3. River Teesta flows into Bay of Bengal on the border of India and Bangladesh.

Which of the statements given above is/are correct?

- (a) 1 and 3 only      (b) 2 only  
(c) 1 and 3 only      (d) 1, 2 and 3

(2017)

Ans. (b)

- **Statement 1 is not correct:**
  - ♦ The Teesta River originates from the **Pahunri (or Teesta Kangse) glacier** and flows southward through gorges and rapids in the **Sikkim Himalaya**.  
The river then flows past the town of Rangpo where the **Rangpo River** joins, and it forms the **border between Sikkim and West Bengal**.  
The origin of the **Brahmaputra** river is in the **Chemayungdung glacier of the Kailash range** near the **Mansarovar lake**. Hence, the origins of the Teesta river and Brahmaputra river are different.
- **Statement 2 is correct: Rangeet is a tributary of the Teesta river**, which is the largest river in the Indian state of Sikkim. The Rangeet river and its

tributaries originate in the **Talung glacier in West Sikkim**.

- **Statement 3 is not correct: Teesta river ultimately drains into the Brahmaputra** at Teestamukh Ghat in Kamarjani- Bahadurabad in the Rangpur district of Bangladesh. The Teesta basin in India lies in the states of Sikkim (72.43%) and West Bengal (27.57%).

10. Which of the following is/are tributary/tributaries of Brahmaputra?

1. Dibang
2. Kameng
3. Lohit

Select the correct answer using the code given below:

- (a) 1 only      (b) 2 and 3 only  
(c) 1 and 3 only      (d) 1, 2 and 3

(2016)

Ans. (d)

- **Brahmaputra** origin is in the **Chemayungdung glacier** of the Kailash range near the Mansarovar lake. From here, it traverses eastward longitudinally for a distance of nearly 1,200 km in a dry and flat region of southern Tibet, where it is known as the **Tsangpo**, which means “the purifier”.
- On reaching the **Namcha Barwa**, it takes a ‘U’-turn and enters India through a gorge in the west of Sadiya town in **Arunachal Pradesh**. Flowing southwest, it receives its main left bank tributaries, viz **Dibang or Sikang** and **Lohit**. Thereafter, it is **known as the Brahmaputra**.
- The Brahmaputra receives numerous tributaries in its 750 km long journey through the Assam valley. Its **major left bank tributaries are the Burhi Dihing and Dhansari (South)** whereas the important right bank tributaries are the **Subansiri, Kameng, Manas and Sankosh**. The **Rango Tsangpo** is the major **right-bank tributary** of this river in **Tibet**. Hence, option (d) is the correct answer.

Left Tributaries	Right Tributaries
<ul style="list-style-type: none"> <li>• Dibang River</li> <li>• Lohit River</li> <li>• Dhansiri River</li> <li>• Kolong River</li> </ul>	<ul style="list-style-type: none"> <li>• Kameng River</li> <li>• Manas River</li> <li>• Beki River</li> <li>• Raidak River</li> <li>• Jaldhaka River</li> <li>• Teesta River</li> <li>• Subansiri River</li> <li>• Sankosh</li> </ul>