

- 136.** (3) Sri Lanka is separated from the Indian subcontinent by the Gulf of Mannar (a large shallow bay forming part of the Laccadive Sea in the Indian Ocean) and Palk Strait (a strait between the Tamil Nadu state of India and the Mannar district of Sri Lanka). It is located in the Indian Ocean southwest of the Bay of Bengal.
- 137.** (1) The Nilgiri Hills or the Blue mountains form the meeting point of the Western Ghats and the Eastern Ghats. These hills are part of the Western Ghats. They are separated from the Karnataka Plateau (north) by the Noyar River and from the Anaimalai and Palni hills (south) by the Palghat Gap.
- 138.** (4) Marina Beach, a natural urban beach in Chennai, is the longest beach of India with a length of 6.5 km. The beach runs from near Fort St. George in the north to Foreshore Estate in the south. It is the second longest beach in the world after Praia do Cassino beach of Brazil.
- 139.** (2) Nanda Devi is part of the Garhwal Himalayas, and is located in Uttarakhand, between the Rishiganga valley on the west and the Gorikanga valley on the east. The peak, whose name means "Bliss-Giving Goddess", is regarded as the patron-goddess of the Uttarakhand Himalaya. It is the second highest mountain in India, and the highest located entirely within the country.
- 140.** (2) The Ten Degree Channel is a channel that separates the Little Andaman and Car Nicobar in the Bay of Bengal. The two sets of islands together form the Indian Union Territory (UT) of Andaman and Nicobar Islands. The channel is so named as it lies on the 10-degree line of latitude, north of the equator.
- 141.** (3) The Great Karakoram range, also known as Krishnagiri, forms India's frontiers with Afghanistan and China and acts as watershed between India and Turkestan. It extends eastwards from the Pamir for about 800 km. It is the northern most range of the Trans Himalayan ranges in India.
- 142.** (1) Konkan, also known as the Konkan Coast or Kōkan, is the northern section of the western coast of India. It is a 720-km long coastline. It consists of the coastal districts of western Indian states of Karnataka, Goa, and Maharashtra. The Southern part of the western coast from Goa to Kanyakumari is called Malabar Coast.
- 143.** (3) The Vindhya Range is considered as the traditional boundary between North India and South India. It is a complex, discontinuous chain of mountain ridges, hill ranges, and plateau escarpments in west-central India. It runs north of and roughly parallel to the Narmada River in Madhya Pradesh and extends up to Gujarat in the west, and Uttar Pradesh and Bihar in the east.
- 144.** (3) Mount Abu is a popular hill station in the Aravalli Range in Sirohi district of Rajasthan near the border with Gujarat. The mountain forms a distinct rocky plateau. The highest peak on the mountain is Guru Shikhar at 1,722 m above sea level. It is referred to as 'an oasis in the desert' as its heights are home to rivers, lakes, waterfalls and evergreen forests.

TYPE-II

- 1.** (3) The Indira Gandhi Canal is the largest canal project in India. It starts from the Harike Barrage at Sultanpur, a few kilometers below the confluence of the Sutlej and Beas rivers in Punjab state. It provides irrigation facilities to the north-western region of Rajasthan, a part of the Thar Desert. It consists of the Rajasthan feeder canal (with the first 167 km in Punjab and Haryana and the remaining 37 km in Rajasthan) and 445 km of the Rajasthan main canal which is entirely within Rajasthan. This canal enters into Haryana from Punjab near Lohgarh village of Haryana, then running in western part of district Sirsa it enters into Rajasthan near Kharakhera village.
- 2.** (4) An estuary is a body of water formed where freshwater from rivers and streams flows into the ocean, mixing with the seawater. Estuaries and the lands surrounding them are places of transition from land to sea, and from freshwater to saltwater. Although influenced by the tides, estuaries are protected from the full force of ocean waves, winds, and storms by the reefs, barrier islands, or fingers of land, mud, or sand that surround them. Most of the west flowing rivers of India do not form delta, they form estuary. The Narmada makes an estuary with Gulf of Kambhat near Bharuch.
- 3.** (2) The 1,500-MW Nathpa-Jhakri hydel project, one of Asia's first mega project having an underground power station commissioned in 2003, is an hydel project in Himachal Pradesh. It supplies power to nine states, including Rajasthan, UP, Haryana, Punjab, Jammu and Kashmir, Delhi, Uttaranchal, Himachal Pradesh and Chandigarh. Built on Sutlej River, the project is being executed by Sutlej Jal Nigam (formerly Nathpa Jhakri Power Corporation). The 1500 MW hydro electric power project is situated in Kinnaur district, Himachal Pradesh.
- 4.** (4) The Betwa is a river in Northern India, and a tributary of the Yamuna. Also known as the Vetravati, the Betwa rises in the Vindhya Range just north of Hoshangabad in Madhya Pradesh and flows north-east through Madhya Pradesh and flow through Orchha to Uttar Pradesh. Nearly one-half of its course, which is not navigable, runs over the Malwa Plateau before it breaks into the upland. A tributary of the Yamuna River, the confluence of the Betwa and the Yamuna Rivers takes place in the Hamirpur town in Uttar Pradesh, in the vicinity of Orchha.
- 5.** (2) Nandgaon is a city and a municipal council in Nashik district in the Indian state of Maharashtra. There are two important dams in Nandgaon taluka. One is Girana Dam under major project and another is Nagyasakya under medium project.
- 6.** (4) In the Deccan region, most of the major river systems flowing generally in east direction fall into Bay of Bengal. The major east flowing rivers are Godavari, Krishna, Cauvery, Mahanadi, etc. Narmada and Tapi are major West flowing rivers. The Godavari in the southern Peninsula has the second largest river basin covering 10 per cent of the area of India. Next

to it is the Krishna basin in the region, while the Mahanadi has the third largest basin. The basin of the Narmada in the uplands of the Deccan, flowing to the Arabian Sea, and of the Kaveri in the south, falling into the Bay of Bengal are about the same size, though with different character and shape.

7. (1) Farakka Barrage is a barrage across the Ganges River, located in the Indian state of West Bengal, roughly 16.5 kilometres from the border with Bangladesh near Chapai Nawabganj District. Construction was started in 1961 and completed in 1975. The barrage was built to divert up to 44,000 cu ft/s (1,200 m³/s) of water from the Ganges River into the Hooghly River during the dry season, from January to June, in order to flush out the accumulating silt which in the 1950s and 1960s was a problem at the Port of Kolkata (Calcutta) on the Hooghly River.
8. (1) The Gandhi Sagar Dam is one of the four dams built on India's Chambal River. The dam is located in the Mandasaur district of the state of Madhya Pradesh. The Jaikawadi project is one of the largest irrigation projects in the Indian state of Maharashtra. It is a multipurpose project. Nagarjuna Sagar Dam is the world's largest masonry dam at the time of its construction, which is built across Krishna River at Nagarjuna Sagar in Guntur district & Nalgonda district of Andhra Pradesh. The Tehri Dam is a multi-purpose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in Uttarakhand, India. It is the primary dam of the THDC India Ltd. and the Tehri hydroelectric complex.
9. (3) Farakka Barrage is a barrage across the Ganges River, located in the Indian state of West Bengal, roughly 16.5 kilometres from the border with Bangladesh near Chapai Nawabganj District. The Tehri Dam is a multi-purpose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in Uttarakhand. The Ranjit Sagar Dam, also known as the Thein Dam, is part of a hydroelectric project constructed by the Government of Punjab on the Ravi River in the state of Punjab. Nagarjuna Sagar Dam is the world's largest masonry dam at the time of its construction, which is built across Krishna River at Nagarjuna Sagar in Guntur district & Nalgonda district of Andhra Pradesh.
10. (1) Damodar River is a river flowing across the Indian states of Jharkhand and West Bengal. Rich in mineral resources, the valley is home to large scale mining and industrial activity. Earlier known as the "River of Sorrows" because of its ravaging floods in the plains of West Bengal, the Damodar and its tributaries have somewhat been tamed with the construction of several dams.
11. (1) Hirakud Dam is built across the Mahanadi River, about 15 km from Sambalpur in the state of Orissa in India. Built in 1957, the dam is one of the world's longest earthen dam. Behind the dam extends a lake, Hirakud Reservoir, 55 km long. Hirakud Dam is the longest man-made dam in the world, about 26 km in length. It is one of the first major multipurpose river valley project started after India's independence. The name of the dam is mostly mis-pronounced in North India as Hirakund which is actually Hirakud.
12. (3) The Ranjit Sagar Dam, also known as the Thein Dam, is part of a hydroelectric project constructed by the Government of Punjab on the Ravi River in the state of Punjab. The project is situated near Pathankot city in Pathankot District of the state of Punjab. The project is the largest hydroelectric dam in the state of Punjab. The dam is one of the highest earth-fill dams in India and has the largest diameter penstock pipes in the country. It is located upstream of the Madhopur Barrage at Madhopur.
13. (2) The Godavari is a river in the south-central India. It starts in the western state of Maharashtra and flows through the modern state of Andhra Pradesh before reaching the Bay of Bengal. It forms one of the largest river basins in India. With a length of 1465 km, it is the second longest river in India, second to The Ganges, and the longest in southern India. It originates near Trimbak in Nashik District of Maharashtra state and flows east across the Deccan Plateau into the Bay of Bengal near Yanam and Antarvedi in East Godavari district of Andhra Pradesh.
14. (3) The Tungabhadra dam is constructed across the Tungabhadra River, a tributary of the Krishna River. The dam is located near the town of Hospet in Karnataka. The Bhavanisagar Dam and Reservoir, also called Lower Bhavani Dam, is located on the Bhavani River between Mettupalayam and Sathyamangalam in Erode District, Tamil Nadu. The Idukki Dam, located in Kerala, India, is a 168.91 m tall arch dam. The dam stands between the two mountains - Kuravanmala and Kurathimala. Nagarjuna Sagar Dam is the world's largest masonry dam at the time of its construction, which is built across Krishna River at Nagarjuna Sagar in Guntur district & Nalgonda district of Andhra Pradesh.
15. (4) Karnali or Ghaghara River is a perennial trans-boundary river originating on the Tibetan Plateau near Lake Mansarovar. It cuts through the Himalayas in Nepal and joins the Sarda River at Brahmaghat in India. Together they form the Ghaghara River, a major left bank tributary of the Ganges. With a length of 507 kilometres (315 mi) it is the largest river in Nepal.
16. (2) Hirakud Dam is built across the Mahanadi River, about 15 km from Sambalpur in the state of Orissa in India. Built in 1957, the dam is one of the world's longest earthen dam. The Mettur Dam is one of the largest dams in India built in 1934. It was constructed in a gorge, where the Kaveri River enters the plains. The dam is one of the oldest in India. It provides irrigation facilities to parts of Salem, the length of Erode, Namakkal, Karur, Tiruchirappali and Thanjavur district. Hirakud Dam is built across the Mahanadi River, about 15 km from Sambalpur in the state of Orissa in India. The Almatti Dam is a dam project on the Krishna River in North Karnataka, India which was completed in July 2005.
17. (2) The Brahmaputra, also called Tsangpo-Brahmaputra, is a transboundary river and one of the major rivers of Asia. With its origin from Talung Tso Lake in

southwestern Tibet as the Yarlung Tsangpo River, it flows across southern Tibet to break through the Himalayas in great gorges (including the Yarlung Tsangpo Grand Canyon) and into Arunachal Pradesh (India) where it is known as Dihang or Siang. It flows southwest through the Assam Valley as Brahmaputra and south through Bangladesh as the Jamuna (not to be mistaken with Yamuna of India). In the vast Ganges Delta it merges with the Padma, the main distributary of the Ganges, then the Meghna, before emptying into the Bay of Bengal.

18. (1) Ukai Dam, constructed across the Tapti River, is the largest reservoir in Gujarat. It is also known as Vallabh Sagar. The Rana Pratap Sagar Dam is a gravity masonry dam of 53.8 metres height built on the Chambal River at Rawatbhata in Rajasthan. The Ranjit Sagar Dam, also known as the Thein Dam, is part of a hydroelectric project constructed by the Government of Punjab on the Ravi River in the state of Punjab. Hirakud Dam is built across the Mahanadi River, about 15 km from Sambalpur in the state of Orissa in India. Built in 1957, the dam is one of the world's longest earthen dam.
19. (3) The Indira Gandhi Canal is one of the biggest canal projects in India. It starts from the Harike Barrage at Sultanpur, a few kilometers below the confluence of the Sutlej and Beas rivers in Punjab state. Irrigation facilities to the north-western region of Rajasthan, a part of the Thar Desert. It consists of the Rajasthan feeder canal (with the first 167 km in Punjab and Haryana and the remaining 37 km in Rajasthan) and 445 km of the Rajasthan main canal which is entirely within Rajasthan. This canal enters into Haryana from Punjab near Lohgarh village of Haryana, then running in western part of district Sirsa it enters into Rajasthan near Kharakhera village (Tehsil: Tibbi, district: Hanumangarh) of Rajasthan. The IGNP traverses seven districts of Rajasthan: Barmer, Bikaner, Churu, Hanumangarh, Jaisalmer, Jodhpur, and Sriganganagar.
20. (3) Durgapur Barrage is across the Damodar River at Durgapur in Bardhaman district in the Indian state of West Bengal. The Damodar River Valley Project on the Damodar River and its principal tributary, the Barakar River, is located in eastern India. The four main multipurpose dams located at Tilaiya, Konar, Maithon and Panchet were commissioned during 1953-1959. In addition, a single purpose reservoir on the main stream, the Damodar, at Tenughat was constructed later in 1974. In 1932, the Anderson weir was constructed at Randiha. As a result, irrigation facility has been available in the lower Damodar basin before the advent of dams by means of the diversion weir on the Damodar River and Eden canal. It is about 19 kilometres downstream of Durgapur Barrage.
21. (2) Tala Hydroelectricity project is the biggest hydroelectric joint project between India and Bhutan so far, generating 4865 GWh/yr. Tala is located in Chukha Dzongkhag in western Bhutan, a small constitutional monarchy in the Himalayas. It is located on the Wangchhu River and, and is at a height of 860 metres. Tala is located in Chukha Dzongkhag in western Bhutan, a small kingdom in the Himalayas. The run-of-the-river project is being managed by Tala Hydroelectric Project Authority (THPA). It is located on the Wangchu River and, at 860m, is the region's largest high-head project. Commissioning of the plant was planned for June 2005, but because of geological problems this was delayed until March 2007.
22. (4) The Sabaragiri project is located in 48 kms from Pathanamthitta district, through tea estates and thick forest is the famous Hydro Electric Project called Sabaragiri. This is constructed across the many mountains rivers and the water collected in reservoir passed through huge tunnels to a main reservoir at place Anamudi and from through large pipes to the Muziyoor power house.
23. (4) The Sardar Sarovar Dam is a gravity dam on the Narmada River near Navagam, Gujarat, India. It is the largest dam and part of the Narmada Valley Project, a large hydraulic engineering project involving the construction of a series of large irrigation and hydroelectric multi-purpose dams on the Narmada River. The project took form in 1979 as part of a development scheme to increase irrigation and produce hydroelectricity. It is the 30th largest dams planned on river Narmada, Sardar Sarovar Dam (SSD) is the largest structure to be built.
24. (4) Canal is the second largest source of irrigation providing water to 29.24 percent of the net area under irrigation. The country has one of the world's largest canal systems stretching over more than one lakh kilometres. Canal irrigation is widely practiced in the Sutlej-Ganga plain. Uttar Pradesh, Punjab, Haryana, Bihar and Rajasthan have a number of such canals. In the Peninsular region canals are mostly found in the lower valleys and deltas of large rivers. Over 63 per cent of the total canal irrigated area of the country lies in Uttar Pradesh. Madhya Pradesh, Andhra Pradesh, Punjab, Rajasthan and Haryana. Canals also feed a sizeable part of the irrigated area in Bihar, Orissa, Karnataka, Tamil Nadu and West Bengal.
25. (2) The Tehri Dam is a multi-purpose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in Uttarakhand, India. It is the primary dam of the THDC India Ltd. and the Tehri hydroelectric complex. The Tehri Dam has been the object of protests by environmental organizations and local people of the region. In addition to the human rights concerns, the project has spurred concerns about the environmental consequences of locating a large dam in the fragile ecosystem of the Himalayan foothills.
26. (1) The Ganges or Ganga Canal is a canal system that irrigates the Doab region between the Ganges River and the Yamuna River in India. The canal system irrigates nearly 9,000 km² of fertile agricultural land in ten districts of Uttar Pradesh and Uttarakhand. Today the canal is the source of agricultural prosperity in much of these states, and the irrigation departments of these states actively maintain the canal against a fee system charged from users.
27. (3) The Indira Gandhi Canal is one of the biggest canal projects in India. It starts from the Harike Barrage at Sultanpur, a few kilometers below the confluence

ence of the Sutlej and Beas rivers in Punjab state. It consists of the Rajasthan feeder canal (with the first 167 km in Punjab and Haryana and the remaining 37 km in Rajasthan) and 445 km of the Rajasthan main canal which is entirely within Rajasthan. This canal enters into Haryana from Punjab near Lohgarh village of Haryana, then running in western part of district Sirsa it enters into Rajasthan near Kharakhera village of Rajasthan. The IGNP traverses seven districts of Rajasthan: Barmer, Bikaner, Churu, Hanu-mangarh, Jaisalmer, Jodhpur, and Sriganganagar.

28. (4) Ukai Dam, constructed across the Tapi River, is the largest reservoir in Gujarat. It is also known as Vallabh Sagar. Constructed in 1971, the dam is meant for irrigation, power generation and flood control. Having a catchment area of about 62,255 km² and a water spread of about 52,000 hectare, its capacity is almost same as that of the Bhakra Nangal Dam. The site is located 94 km from Surat.
29. (1) The Sutlej River, is the longest of the five rivers that flow through the historic crossroad region of Punjab in northern India and Pakistan. The Sutlej is sometimes known as the Red River. It is the eastern-most tributary of the Indus River. Its source is from Lowangko Co, Tibet near Lake Rakshastal in Tibet, China, near Mount Kailas, and it flows generally west and southwest entering India through the Shipki La pass in Himachal Pradesh. In Pakistan, it waters the ancient and historical former Bahawalpur state. The region to its south and east is arid, and is known as Cholistan a part of Bahawalpur Division.
30. (3) Gujarat has the largest proportion of its net irrigated area under well irrigation. Uttar Pradesh has the largest area under irrigation in terms of total acreage.
31. (1) The Idukki Hydroelectric Project is the biggest hydroelectric Project in Kerala (India). It comprises of three dams at Idukki, Cheruthony and Kulamavu and related systems. The power house at Moolamattom is the longest underground power station in India and the pressure shaft is the largest in the country. The Idukki dam is one of the highest dams in the world and the first arch dam in India. Cheruthony is the largest and highest gravity dam in Kerala.
32. (3) The Nathpa Jhakri Dam is a concrete gravity dam on the Sutlej River in Himachal Pradesh, India. The primary purpose of the dam is hydroelectric power production and it supplies a 1,500 MW underground power station with water. Construction on the project began in 1993 and it was complete in 2004. It is owned by SJVN Ltd.
33. (2) Devprayag is a town and a nagar panchayat in Tehri Garhwal district in the state of Uttarakhand, India, and is one of the Panch Prayag of Alaknanda River where Alaknanda and Bhagirathi rivers meet and take the name Ganga or Ganges River. The Alaknanda rises at the confluence and feet of the Satopanth and Bhagirath Kharak glaciers in Uttarakhand near the border with Tibet. The headwaters of the Bhagirathi are formed at Gaumukh, at the foot of the Gangotri glacier and Khatling glaciers in the Garhwal Himalaya. These two sacred rivers join to form the Ganges (Ganga) in Devprayag.
34. (2) Yarlung Tsangpo is a watercourse that originates at Tamlung Tso lake in western Tibet, southeast of Mount Kailash and Lake Mansarovar. It later forms the South Tibet Valley and Yarlung Tsangpo Grand Canyon, before passing through the state of Arunachal Pradesh, India, where it is known as the Dihang. Downstream from Arunachal Pradesh the river becomes wider and at this point is called the Brahmaputra River. From Assam (India) the river enters Bangladesh at Ramnabazar.
35. (4) Bhakra Dam is a concrete gravity dam across the Sutlej River, and is near the border between Punjab and Himachal Pradesh in northern India. The dam, located at a gorge near the (now submerged) upstream Bhakra village in Bilaspur district of Himachal Pradesh, is India's second tallest at 225.55 m high next to the 261m Tehri Dam. In terms of storage of water, it withholds the second largest reservoir in India, the first being Indira Sagar Dam in Madhya Pradesh with capacity of 12.22 billion cu. m.
36. (2) Canal is the second largest source of irrigation providing water to 29.24 percent of the net area under irrigation. The country has one of the world's largest canal systems stretching over more than one lakh kilometres. Well Irrigation is a principal method of irrigation used in India. Underground water is tapped for drinking purposes and at the same time it is also tapped for irrigating the cultivated land. For implementation of this procedure, a hole is dug in the ground for providing perennial supply of soft water. Well irrigation is definitely more popular in those regions where ground water is in plenty and where there are very few canals.
37. (3) Most of the west flowing rivers of Indian peninsula do not form delta. They form estuary. Narmada is one of them. It is so because rocky terrain of the Western Ghats does not allow the rivers to spread out much, and there is not sufficient plain stretch of land between the Arabian sea and Western Ghats for Narmada to slowdown and bifurcate into distributaries. Narmada forms an estuary of 21 km at the Gulf of Khambat. The river is presently partially navigable in the estuary reach around Bharuch but the river has never been a transport artery.
38. (2) The Godavari (Vridha Ganga or Dakshina Ganga) is the largest river system of the peninsular India and rises near Nasik in Maharashtra. Godavari is considered the Dhakshin (Southern) Ganga and Draksharama Dhakshin Kasi.
39. (2) The Kaveri, also spelled Cauvery in English, is a large Indian river. The origin of the river is traditionally placed at Talakaveri, Kodagu in the Western Ghats in Karnataka, flows generally south and east through Karnataka and Tamil Nadu and across the southern Deccan plateau through the southeastern lowlands, emptying into the Bay of Bengal through two principal mouths. Rising in southwestern Karnataka, it flows southeast some 800 km to enter the Bay of Bengal.
40. (2) Loktak Lake, the largest freshwater lake in north-east India, also called the only Floating lake in the world due to the floating phumdis on it, is located near Moirang in Manipur state. The Keibul Lamjao

National Park, which is the last natural refuge of the endangered sangai or Manipur brow-antlered deer, one of three subspecies of Eld's Deer, covering an area of 40 km², is situated in the southeastern shores of this lake and is the largest of all the phumdis in the lake. It serves as a source of water for hydropower generation, irrigation and drinking water supply.

41. (4) The Kaveri, also spelled Cauvery in English, is a large Indian river. The origin of the river is traditionally placed at Talakaveri, Kodagu in the Western Ghats in Karnataka, flows generally south and east through Karnataka and Tamil Nadu and across the southern Deccan plateau through the southeastern lowlands, emptying into the Bay of Bengal through two principal mouths.
42. (3) The Tehri Dam is a multi-purpose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in Uttarakhand, India. It is the primary dam of the THDC India Ltd. and the Tehri hydroelectric complex. Tehri Dam withholds a reservoir for irrigation, municipal water supply and the generation of 1,000 MW of hydroelectricity. The Tehri Dam has been the object of protests by environmental organizations and local people of the region.
43. (2) The Narmada basin, hemmed between Vindhya and Satpura ranges, extends over an area of 98,796 km² and lies between east longitudes 72 degrees 32' to 81 degrees 45' and north latitudes 21 degrees 20' to 23 degrees 45' lying on the northern extremity of the Deccan Plateau. The basin covers large areas in the states of Madhya Pradesh (86%), Gujarat (14%) and a comparatively smaller area (2%) in Maharashtra.
44. (4) The study found that some of the Indian deltas — Brahmani delta in Orissa, and Godavari and Mahanadi in Andhra Pradesh — are at a greater risk as the rate of sediment Aggradation (raising the level of the delta through sediment deposition) no longer exceeds relative sea-level rise. While there are no Indian deltas in the peril category (where the Aggradation and compaction of the delta sediments overwhelms the rate of sea-level rise), the Krishna delta in Andhra Pradesh falls in the last category of greater peril. In the case of the greater peril category, the deltas have virtually no sediment deposition (Aggradation) and/or have very high accelerated compaction of sediments. Here the relative sea-level rise is about 3 mm per year. The maximum relative sea-level rise of 13-150 mm per year is seen in the Chao Phraya delta in Thailand.
45. (3) Rihand Dam is a concrete gravity dam located at Pipri in Sonbhadra District in Uttar Pradesh, India. It is on the border of Chhattisgarh and Uttar Pradesh. It is on the Rihand River which is the tributary of the Son River. The Rihand River flows through the Indian states of Chhattisgarh and Uttar Pradesh. The Rihand rises from Matiranga hills, in the region south west of the Mainpat plateau, which is about 2,100 meters above mean sea level. The river flows north roughly through the central part of Surguja district for 160 kilometres. The Rihand and its tributaries form a fertile plain in the central part of the district stretching from around Ambikapur to Lakhanpur and

Pratapour. Thereafter, it flows north into Sonbhadra district of Uttar Pradesh via Singrauli district of Madhya Pradesh, where it is called Rhed and finally joins the Son.

46. (3) Shivanasamudra Falls is on the Kaveri River after the river has wound its way through the rocks and ravines of the Deccan Plateau and drops off to form waterfalls. The island town of Shivanasamudra divides the river into twin waterfalls. This creates the fourth largest island in the river's course. Asia's second hydro-electric power station after Sidrapong is located at the waterfall and is still functional. This station was commissioned by the Diwan of Mysore, Sir K. Seshadri Iyer.
47. (3) Rihand dam is the largest multi-purpose project of Uttar Pradesh. The water collected in the Govind Ballabh Pant Sagar reservoir is diverted to the Son canal which irrigates about 2.5 lakh hectares of the agricultural land in Champaran, Darbhanga and Muzaffarpur districts of Bihar.
48. (3) The Indira Gandhi Canal is the world's longest irrigation canal. It starts from the Harike Barrage at Sultanpur, a few kilometers below the confluence of the Sutlej and Beas rivers in Punjab state. It provides irrigation facilities to the north-western region of Rajasthan, a part of the Thar Desert. It consists of the Rajasthan feeder canal (with the first 167 km in Punjab and Haryana and the remaining 37 km in Rajasthan) and 445 km of the Rajasthan main canal which is entirely within Rajasthan. This canal enters into Haryana from Punjab near Lohgarh village of Haryana, then running in western part of district Sirsa it enters into Rajasthan near Kharakhera village of Rajasthan. The IGNP traverses seven districts of Rajasthan: Barmer, Bikaner, Churu, Hanumangarh, Jaisalmer, Jodhpur, and Sriganganagar.
49. (4) Indus is a major river which flows through Pakistan. It also has courses through western Tibet (in China) and Northern India. Originating in the Tibetan plateau in the vicinity of Lake Mansarovar, the river runs a course through the Ladakh region of Jammu and Kashmir, Gilgit, Baltistan and flows through Pakistan in a southerly direction along the entire length of Pakistan to merge into the Arabian Sea near the port city of Karachi in Sindh. The traditional source of the river is the Sengge Khabab or 'Lion's Mouth', a perennial spring, not far from the sacred Mount Kailash, and is marked by a long low line of Tibetan chortens.
50. (4) Most of the west flowing rivers do not form delta. They form estuary. Examples are Narmada and Tapi.
51. (1) Brahmaputra River, also called Tsangpo-Brahmaputra, is a transboundary river and one of the major rivers of Asia. With its origin from Talung Tso Lake in southwestern Tibet as the Yarlung Tsangpo River, it flows across southern Tibet to break through the Himalayas in great gorges (including the Yarlung Tsangpo Grand Canyon) and into Arunachal Pradesh (India) where it is known as Dihang or Siang. It flows south-west through the Assam Valley as Brahmaputra and south through Bangladesh as the Jamuna (not to be

mistaken with Yamuna of India). In the vast Ganges Delta it merges with the Padma, the main distributary of the Ganges, then the Meghna, before emptying into the Bay of Bengal.

52. (1) Surat, previously known as Suryapur, is a well-developed commercial city of the Indian state of Gujarat. The city is located 306 km south of state capital Gandhinagar, and is situated on the left bank of the Tapi River (Tapi). The city is largely recognized for its textile and diamond businesses. It is also known as the diamond capital of the world and the textile capital/Manchester textile city of India, a distinction it took over from Ahmedabad. It is also known as the "Embroidery capital of India" with the highest number of embroidery machines than any other city.
53. (2) Guwahati — formerly known as Pragjyotishpura and Durjoya in ancient Assam, and Gauhati in the modern era — is an ancient urban area, the largest city of Assam, the largest metropolitan area in north-eastern , one of the fastest developing cities in India and often referred as "gateway" of the North East Region. It is also the third largest city in Eastern India after Kolkata and Patna respectively. The city is between the southern bank of the Brahmaputra river and the foothills of the Shillong plateau.
54. (4) The Tapi River ancient original name Tapi River, is a river in central India. It is one of the major rivers of peninsular India with a length of around 724 kilometres. It is one of only three rivers in peninsular India that run from east to west - the others being the Narmada River and the Mahi River. The river rises in the eastern Satpura Range of southern Madhya Pradesh state, and flows westward, draining Madhya Pradesh's Nimar region, Maharashtra's Kandesh and east Vidarbha regions in the northwest corner of the Deccan Plateau and south Gujarat, before emptying into the Gulf of Cambay of the Arabian Sea, in the Surat District of Gujarat. The river, along with the northern parallel Narmada river, form the boundaries between North and South India.
55. (2) Hirakud Dam is built across the Mahanadi River, about 15 km from Sambalpur in the state of Orissa in India. Built in 1957, the dam is one of the world's longest earthen dam.
56. (1) The Godavari is a river in the south-central India. It originates in the Western Ghats Trimbakeshwar, in the Nasik Subdivision of the western state of Maharashtra and flows through the modern state of Andhra Pradesh before reaching the Bay of Bengal.
57. (1) Masonry dams are dams made out of masonry; mainly stone and brick. They are either the gravity or the arch type. The largest masonry dam in the world is Nagarjunasagar Dam in India which is built across Krishna River at Nagarjunasagar in Guntur and Nalgonda districts of Andhra Pradesh.
58. (2) The Mullaperiyar Dam is a masonry gravity dam on the Periyar River in the Kerala state of India. The control and safety of the dam and the validity and fairness of the lease agreement have been points of dispute between Kerala and Tamil Nadu.
59. (1) This multinational power generation company from the United States was involved in one of the eight "fast-track" power projects that were chosen as examples of the benefits of "reform" in the power sector. Cogentrix and Hong Kong's China Light and Power International were to set up a \$1.3 billion, 1000 MW project in Karnataka.
60. (2) With its origin in the Angsi Glacier, located on the northern side of the Himalayas in Burang County of China's Tibet Autonomous Region as the Yarlung Tsangpo River, Brahmaputra flows across southern Tibet to break through the Himalayas in great gorges (including the Yarlung Tsangpo Grand Canyon) and into Arunachal Pradesh (India) where it is known as Dihang or Siang.
61. (1) The name Ganges is used for the river between the confluence of the Bhagirathi and Alaknanda rivers, in the Himalayas, and the India-Bangladesh border, near the Farakka Barrage and the first bifurcation of the river. The river's source is usually assumed to be the source of the Bhagirathi River, Gangotri Glacier at Gomukh, and its mouth being the mouth of the Meghna River on the Bay of Bengal. Sometimes the source of the Ganges is considered to be at Haridwar, where its Himalayan headwater streams debouch onto the Gangetic Plain.
62. (3) The Almatti Dam is a dam project on the Krishna River in North Karnataka, India which was completed in July 2005. The dam is located on the edge of Bijapur and Bagalkot districts. The height of Almatti dam was originally restricted to 52.26 meters by the Supreme Court of India.
63. (2) The Nagarjunasagar Dam is the world's largest masonry dam at the time of its construction, which is built across Krishna River at Nagarjunasagar in Guntur and Nalgonda districts of Andhra Pradesh. It was the earliest in the series of large infrastructure projects initiated for the Green Revolution in India; it also is one of the earliest multi-purpose irrigation and hydro-electric projects in India.
64. (1) An estuary is an area where a freshwater river or stream meets the ocean. One of the major estuaries of the Ganges, the largest as well as longest river of Indian subcontinent, is the Hooghly estuary. It has a width of 3 to 12 kms and is a live estuary supporting biodiversity and better known for its Hilsa fishery and the famous Sunderban mangroves.
65. (4) Immediately after independence, policy planners sought a solution to the recurring flood menace faced by people of North Bihar from the Kosi and other rivers flowing from Nepal to India. The Kosi project was thus conceptualized (based on investigations between 1946 to 1955), in three continuous interlinked stages. The third part envisaged a high multipurpose dam within Nepal at Barakshetra to provide substantial flood cushion along with large irrigation and power benefits to both countries.
66. (4) Meghna River is the combined stream of the Ganges and Brahmaputra. It is an important river in Bangladesh, one of the three that forms the Ganges Delta, the largest on earth fanning out to the Bay of Bengal.

67. (2) The Rana Pratap Sagar Dam is a gravity masonry dam of 53.8 metres height built on the Chambal River at Rawatbhata in Rajasthan in India. It was officially declared open on 9 February 1970 by Indira Gandhi, the then Prime Minister of India.
68. (3) Son is the principal southern tributary of the Ganges (Ganga) River, rising in Madhya Pradesh state. The river cuts through the Kaimur Range and joins the Ganges above Patna, after a 487-mile (784-km) course. The Son valley is geologically almost a continuation of that of the Narmada River to the southwest.
69. (3) The Narmada is the largest of all west flowing peninsular rivers. It forms estuary in the Gulf of Khambat. There are several islands in the estuary of the Narmada of which Aliabet is the largest.
70. (*)The Brahmaputra river (also called as "Burlung-Buthur" by the Bodo people of Assam), called Yarlung Tsangpo in Tibetan language, originates on the Angsi Glacier located on the northern side of the Himalayas in Burang County of Tibet and not Chema-Yungdung glacier, which was previously identified by geographer Swami Pranavananda in the 1930s.
71. (2) Shivasamudram holds the distinction of being the site of India's first hydro-electric power station built in 1902. It was set up mainly to supply power to the Kolar goldmines 147 km away, making the 78 kv transmission line the longest in the world at the time. In fact, when the Mettur dam in Tamil Nadu was being constructed in the 1930's, the power was supplied from Shivasamudram.
72. (2) Damodar Valley Corporation came into existence on 7 July, 1948 as the first multipurpose river valley project of independent India. It emerged as a culmination of attempts made over a whole century to control the wild and erratic Damodar River. The river spans over an area of 25,000 km² covering the states of Bihar (now Jharkhand) & West Bengal.
73. (2) Narmada River flows through the states of Madhya Pradesh, and Maharashtra, then along the border between Madhya Pradesh and Maharashtra and the border between Madhya Pradesh and Gujarat and in Gujarat. These states have been at loggerhead over the sharing of waters of the river.
74. (3) The Pong Dam, also known as the Beas Dam, is an earth-fill embankment dam on the Beas River just upstream of Talwara in the state of Himachal Pradesh. The purpose of the dam is water storage for irrigation and hydroelectric power generation. At the time of its completion, the Pong Dam was the tallest of its type in India.
75. (4) The Sardar Sarovar Irrigation Canal is the largest lined canal in the world. It covers four major states - Maharashtra, Madhya Pradesh, Gujarat and Rajasthan. With 40000 cusecs capacity at the head regulator, and 532 km. length, the Narmada Main Canal would be the largest irrigation canal in the world.
76. (2) Chhukha Hydropower Project was Bhutan's first mega power project. Commissioned in 1986, this 336 MW project was funded by the Government of India which provided a 60 percent grants and 40 percent loan at 5 percent per annum repayable in 15 years in equated annual installments.
77. (1) The Ganges Delta (also known as the Ganges-Brahmaputra Delta, or the Sunderbans Delta) is a river delta in the South Asia region of Bengal, consisting of Bangladesh and the state of West Bengal, India. It is the world's largest delta, and empties into the Bay of Bengal. It is also one of the most fertile regions in the world, thus earning the nickname The Green Delta. The delta stretches from the Hooghly River on the west to the Meghna River on the east.
78. (3) The Brahmaputra River is a trans-boundary river. With its origin in the Angsi Glacier, located on the northern side of the Himalayas in Burang County of China's Tibet Autonomous Region as the Yarlung Tsangpo River, it flows across southern Tibet to break through the Himalayas in great gorges and into Arunachal Pradesh. It flows southwest through the Assam Valley as Brahmaputra and south through Bangladesh as the Jamuna. In the vast Ganges Delta it merges with the Padma, the main distributary of the Ganges, then the Meghna, before emptying into the Bay of Bengal.
79. (4) The Padma is the name used in Bangladesh for a major trans-boundary river, known in India as the main distributary of the Ganges, the river system that originated in the western Himalayas. The Padma enters Bangladesh from India near Chapai Nababganj. It meets the Jamuna near Aricha and retains its name, but finally meets with the Meghna near Chandpur and adopts the name 'Meghna' before flowing into the Bay of Bengal.
80. (*) Nagarjuna Sagar Dam is the world's largest masonry dam with a height of 124 meters, built across Krishna River in Andhra Pradesh. Nagarjuna Sagar Dam is certainly the pride of India-considered the largest man-made lake in the world.
81. (3) Bhakra Dam is a concrete gravity dam across the Sutlej River, and is near the border between Punjab and Himachal Pradesh in northern India. It is India's second tallest dam at 225.55 m high next to the 261m Tehri Dam. In terms of storage of water, it withholds the second largest reservoir in India, the first being Indira Sagar Dam in Madhya Pradesh.
82. (2) Kosi is known as the "sorrow of Bihar", as it has caused widespread human suffering in the past due to flooding and very frequent changes in course, when it flows from Nepal to Bihar. Over the last 250 years, the Kosi River has shifted its course over 120 km from east to west. Its unstable nature has been attributed to the heavy silt it carries during the monsoon season and flooding in India has extreme effects.
83. (2) The Alaknanda rises at the confluence and feet of the Satopanth and Bhagirath Kharak glaciers in Uttarakhand near the border with Tibet. The headwaters of the Bhagirathi are formed at Gaumukh, at the foot of the Gangotri glacier and Khatling glaciers in the Garhwal Himalaya. These two sacred rivers join to form the Ganges (Ganga) in Devprayag.
84. (1) The Luni is a river of western Rajasthan state, India. It originates in the Pushkar valley of the Aravalli Range, near Ajmer and ends in the marshy lands of Rann of Kutch in Gujarat, after travelling a distance of 530 km. It is first known as Sagarmati, then after passing Govindgarh, it meets its tributary Sarsuti,

which originates from Pushkar Lake, and from then on it gets its name Luni.

85. (1) Nagarjuna Sagar Dam is the world's largest masonry dam at the time of its construction, which is built across Krishna River at Nagarjuna Sagar in Guntur district & Nalgonda district of Andhra Pradesh. It was the earliest in the series of large infrastructure projects initiated for the Green Revolution in India; it also is one of the earliest multi-purpose irrigation and hydro-electric projects in India.
86. (1) Narmada forms an estuary in the Gulf of Kambhat. There are several islands in the estuary of the Narmada of which Aliabet is the largest.
87. (4) Shivanasamudra is a small town in the Mandya District of the state of Karnataka, India. It is situated on the banks of the river Kaveri, which forms here the boundary to the Chamarajanagar District, and is the location of one of the first Hydro-electric Power stations in Asia, which was set up in the year 1902.
88. (4) Nasik, also known as the Wine Capital of India, or as India's Napa Valley, is located in Maharashtra in the Western Ghats, on the western edge of the Deccan peninsula on the banks of the Godavari.
89. (1) Srinagar is situated in the Kashmir Valley and lies on the banks of the Jhelum River, a tributary of the Indus. The city is famous for its gardens, lakes and houseboats.
90. (1) India has about 14,500 km of navigable waterways, which consists of the Ganges-Bhagirathi-Hooghly rivers, the Brahmaputra, the Barak river, the rivers in Goa, the backwaters in Kerala, inland waters in Mumbai and the deltaic regions of the Godavari - Krishna rivers. National Waterway-1: Allahabad-Haldia stretch of the Ganges-Bhagirathi-Hooghly river of total length 1620 km was declared as National Waterway-1 (NW-1) in the year 1986.
91. (3) Guwahati: between the southern bank of the Brahmaputra river and the foothills of the Shillong plateau; Rajahmundry: on banks of the River Godavari; Tiruchirapalli: situated at the head of the Kaveri Delta; and Lucknow: on the northwestern shore of Gomti river, which flows through it.
92. (1) The Indira Gandhi Canal starts from the Harike Barrage at Sultanpur, a few kilometers below the confluence of the Sutlej and Beas rivers in Punjab state. The reservoir for the canal is built on the Sutlej River.
93. (3) The Manas River is a trans-boundary river in the Himalayan foothills between southern Bhutan and India. It is met by three other major streams before it again debouches into India in western Assam. The total length of the river is 376 kilometres, flows through Bhutan for 272 kilometres and then through Assam for 104 kilometres before it joins the mighty Brahmaputra River at Joghghopa.
94. (*) The correct answer should be: a-4; b-1; c-2; and d-3. Hirakud Dam: built across the Mahanadi River, about 15 km from Sambalpur in Odisha; Pong Dam: also known as the Beas Dam, is an earth-fill embankment dam on the Beas River just upstream of Talwara in the state of Himachal Pradesh; Tehri Dam: a multi-pur-

pose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in Uttarakhand; and Thein Dam: part of a hydroelectric project constructed by the Government of Punjab on the Ravi River.

95. (3) Hirakud Dam is not only India's, but one of the world's largest & longest dams. This dam is built across the Mahanadi River, about 15 km from Sambalpur in the state of Odisha in India. Built in 1956, the dam is the world's largest earthen dam.
96. (3) The sharing of waters of the river Kaveri has been the source of a serious conflict between the Indian states of Karnataka and Tamil Nadu. The genesis of this conflict rests in two controversial agreements—one signed in 1892 and another in 1924—between the erstwhile Madras Presidency and Princely State of Mysore. The 802 km Kaveri River has 32,000 sq km basin area in Karnataka and 44,000 sq km basin area in Tamil Nadu.
97. (3) Ambala is located on the water divide between the Indus and the Ganges river systems.
98. (1) Indravati is a tributary of the Godavari River, located in central India.
99. (3) The Ganges is the longest river of India and is the second greatest river in the world by water discharge. In November 2008, it was declared a "National River".
100. (2) The Chenab Bridge is an arch bridge under construction in India. It spans the Chenab River between Bakkal and Kauri, in Reasi district of Jammu and Kashmir.
101. (4) Narmada river rises near Amarkantak plateau. Its length is about 1,312 km.
102. (3) The Idukki hydroelectric plant is on the river Periyar in Kerala.
103. (*) The rivers Ganga and Yamuna are known as the open sewer.
104. (4) The Brahmaputra, one of the largest rivers of the world, has its origin in the Chemayungdung glacier of the Kailash range near the Mansarovar lake.
105. (2) Salal Hydroelectric Power Station is constructed on river Chenab in the state of Jammu & Kashmir. The project was conceived in 1920. The project is located near Reasi about 100 km from Jammu.
106. (2) The Padma is the name used in Bangladesh for a major trans-boundary river, known in India as the main distributary of the Ganges, the river system that originated in the western Himalayas. The Padma enters Bangladesh from India near Chapai Nababganj.
107. (3) Annular pattern refers to a ring-shaped drainage system. Over circular underground rock structures such as batholiths, the drainage network may develop into a series of concentric rings.
108. (3) Narmada is the only river in India that flows in a rift valley, flowing west between the Satpura and Vindhya ranges. The Tapi River and Mahi River also flow through rift valleys, but between different ranges.
109. (4) The Godavari (1450 km) is the longest river of peninsular India, followed by Krishna (about 1300 km). It has the second largest river basin in India after the Ganges. It is often referred to as the Vridha (Old) Ganga or the Dakshina (South) Ganga.

110. (3) The Godavari originates in the Western Ghats Trim-bakeshwar, in the Nashik Subdivision or District of Maharashtra at a height of 920 m. The Krishna River rises in the Western Ghats, at an elevation of about 1337 m just north of Mahabaleshwar. The headwaters of the Mahanadi River are situated at an elevation of 442 meters over sea surface. The source of the Narmada is located at Amarkantak on the Amarkantak hill (1,057 m), in the Anuppur District zone of the Shahdol of eastern Madhya Pradesh.
111. (4) The Vindhya Range constitutes the main dividing line between the geological regions of the Indo-Gangetic Plain and the Peninsula. This range lies north of the Narmada River which flows through a narrow gorge between Vindhya in the north and Satpuras in the south.
112. (3) Fresh water is a renewable resource. River Ganges, Yamuna River and Jaisamand Lake come under this category. However, Chilka Lake is a brackish water lagoon, spread over the Puri, Khurda and Ganjam districts of Odisha.
113. (1) The entire Ganga basin system effectively drains eight states.
114. (3) Wular Lake, located in Bandipora district of Jammu and Kashmir, is often referred to as the largest freshwater lake in India. It measures more than 24 km across its basin. It is a natural lake that is a major part of the Jhelum River basin. It is one of the 23 Indian wetlands designated as a Ramsar site.
115. (3) The Brahmaputra also called Tsangpo-Brahmaputra, is a trans-boundary river. It originates in Tibet as the Yarlung Tsangpo River, from where it flows across southern Tibet to Arunachal Pradesh (India), where it is known as Dihang or Siang. It flows southwest through the Assam Valley as Brahmaputra and south through Bangladesh as the Jamuna.
116. (3) The 4.5 megawatt hydroelectric power station near Sivasamudram falls of the Cauvery in Karnataka was the first major power station in India. Owned by a few British companies, it was set up by General Electric of the US. It was commissioned in 1902. The first small hydro power plant, a 130 kilowatt plant, started functioning in 1897 at Darjeeling.
117. (4) The Indira Gandhi Canal, earlier known as Rajasthan Canal, begins at the Harike Barrage—at the confluence of the Sutlej and Beas rivers in Punjab. One of the largest canal projects in India, it utilizes the surplus water from these rivers for irrigating vast areas in Rajasthan.
118. (3) The sharing of waters of the Kaveri river has been the source of a serious conflict between Karnataka and Tamil Nadu. The genesis of this conflict rests in two agreements in 1892 and 1924 between the erstwhile Madras Presidency and Princely State of Mysore. Karnataka contends that it does not receive its due share of water from the river.
119. (1) Talcher, located in Angul district of Odisha, is famous for Heavy Water Plant. This plant is a Government of India organisation under the aegis of Ministry of Atomic Power & Energy. It is involved in production of organic solvents like TBP, D2EFHA, TAPO & TOPO etc. and other allied chemicals required as a part of the nuclear power programme of the country.
120. (3) Alaknanda joins Bhagirathi at Devprayag to form the Ganges. Devprayag is a town and a nagar panchayat in Tehri Garhwal district in the state of Uttarakhand. It is one of the Panch Prayag (five confluences) of Alaknanda River. Traditionally, it is considered to be the place where sage Devasharma led his ascetic life, giving birth its present name, Devprayag.
121. (2) The Trans-Himalayan Rivers originate beyond the Great Himalayas. These are the Indus, the Sutlej and the Brahmaputra rivers. The Trans Himalayan Indus River rises near the Mansarovar Lake on the Tibetan plateau. It enters the Himalayas in southeastern Ladakh near its confluence with the River Gurtang at an elevation of 4,200 m.
122. (3) Given the seasonal and erratic nature of rainfall throughout the year, South India is known to use tank irrigation as time-tested technology for storing rainfall and runoff for a number of uses: crop irrigation, groundwater recharge, domestic use, cattle watering, etc. Tank irrigation currently accounts for more than 30 percent of all irrigated cropland in the state of Tamil Nadu and Karnataka. There exist approximately 39,000 irrigation tanks of various sizes in Tamil Nadu alone.
123. (3) Rainwater harvesting has been made compulsory for every building in Tamil Nadu to avoid ground water depletion. Since its implementation, Chennai saw a 50 percent rise in water level in five years and the water quality significantly improved. Rainwater harvesting is the accumulation and deposition of rainwater for reuse on-site, rather than allowing it to run off.
124. (2) The Tehri Dam is a multi-purpose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in Uttarakhand. It is the tallest dam in India. It is the primary dam of the THDC India Ltd. and the Tehri hydroelectric complex.
125. (3) Jog Falls is created by the **Sharavathi River** dropping 253 m (830 ft), making it the second-highest plunge waterfall in India after the Nohkalikai Falls with a drop of 335 m (1100 ft) in Meghalaya. It is located near Sagara taluk, Shimoga district, Karnataka.
126. (4) The Nubra River is a tributary of the River Shyok that originates from the Rimo Glacier, one of the tongues of Siachen Glacier. It flows through the Nubra valley in the northern part of Ladakh and then joins the Indus River in Skardu, Pakistan.
127. (4) Vembanad Lake of Kerala is the longest lake in India with a length of 95.6 km. Besides, with a surface area of 2033 km², it is the largest lake in Kerala and spans several districts of the state. The Nehru Trophy Boat Race is conducted in a portion of the lake.
128. (4) The Brahmaputra goes by a number of names during its journey from the Angsi glacier in the Himalayas to the sea (Bay of Bengal). It begins as the Yarlung Tsangpo in southwestern Tibet and becomes the Dihang or Siang in China and Arunachal Pradesh. It flows

- southwest through the Assam Valley as Brahmaputra and south through Bangladesh as the Jamuna. In the vast Ganges Delta, it merges with the Padma (name of the river Ganges in Bangladesh) and finally the Meghna. From here, it is known as Meghna before emptying into the Bay of Bengal.
129. (2) In terms of length, catchment area and discharge, the Godavari river is the largest in peninsular India. It has a total length of 1465 km. It is also the second longest river in India after the Ganges and is, thus, also known as Dakshin ganga. It forms one of the largest river basins in the Indian subcontinent, with only the Ganges and Indus rivers having larger drainage basins.
 130. (2) Koshi River is known as the "Sorrow of Bihar". It leads to annual floods that affect about 21,000 km² of fertile agricultural lands and impact heavily upon the state's rural economy. During floods, the average discharge of Koshi increases to 18 times the average, inundating large areas in its spate.
 131. (3) Loktak Lake is the largest freshwater lake in Northeast India. It is located near Moirang in Manipur. It is famous for the phumdis (heterogeneous mass of vegetation, soil, and organic matter at various stages of decomposition) floating over it.
 132. (1) Damodar Valley Corporation (DVC), having its headquarters at Kolkata, is a statutory body created under the Damodar Valley Corporation Act, 1948. It operates several power stations in the Damodar River area of West Bengal and Jharkhand. The corporation operates both thermal power stations and hydel power stations under the Union Ministry of Power.
 133. (2) The Godavari is the longest river of peninsular India with a length of 1465 km. It is also the second longest river in India after the Ganges. It is due to its vast length, catchment area and discharge, it has been dubbed as the '*Dakshina Ganga*'. It drains the states of Maharashtra, Telangana, Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Odisha and Karnataka.
 134. (3) The Brahmaputra River is known by several names in the four countries (China, India, Bhutan and Bangladesh) that it flows through. With its origin in the Angsi glacier, located on the northern side of the Himalayas in Burang County of Tibet, the upper stream of Brahmaputra in Tibet is called Yarlung Tsangpo.
 135. (2) The Indira Gandhi Canal is the largest irrigation project India. It starts from the Harike Barrage at Firozpur, below the confluence of the Satluj and Beas rivers in the Indian state of Punjab and terminates in irrigation facilities in the Thar Desert in Rajasthan. It runs through Punjab, Haryana and Rajasthan.
 136. (2) The Indira Gandhi Canal is the longest canal in India and the largest irrigation project in the world. It starts from the Harike Barrage at Firozpur, a few kilometers below the confluence of the Sutlej and Beas rivers in the Indian state of Punjab and terminates in irrigation facilities in the Thar Desert in the north west of Rajasthan. It was previously known as the Rajasthan Canal.
 137. (1) Sideways form of erosion is called lateral erosion. In lateral erosion, the river erodes away at its banks and widens the river channel. Together, vertical and lateral erosion create the distinctive V-shaped valley that is found in rivers in their upper course. As the river gets closer to the sea, there is more lateral erosion than vertical erosion and the V flattens out into a much wider shape.
 138. (1) Brahmaputra, Indus & Sutlej have their source of origins in Tibet. The Brahmaputra originates in the Angsi glacier, located on the northern side of the Himalayas in Burang County of Tibet as the Yarlung Tsangpo River. The Indus originates in the western part of Tibet in the vicinity of Mount Kailash and Lake Manasarovar. The source of the Sutlej is near Lake Rakshastal in Tibet.
 139. (4) Punjab has large number of the Sutlej inundation canals, which are taken out from the rivers without any regulating system like weirs etc. at their head. Such canals provide irrigation mainly in the rainy season when the river is in flood and there is excess water. Some of such inundation canals are Sirhind, Bhakra, etc.
 140. (2) Dakshin Gangotri was the first scientific base station of India situated in Antarctica, part of the Indian Antarctic Program. Established during the third Indian expedition to Antarctica in 1983-84, it was an unmanned station, set up using indigenous Indian equipment, powered by Solar energy. The station was entirely computerized to record all data that was researched.
 141. (4) Any elevated area, such as a mountain or upland, that separates two drainage basins is known as water divide; for example, the water divide between the Indus and the Ganga river systems. Ambala is located on this water divide. Similarly, the Western Ghats form the main water divide in Peninsular India.
 142. (4) The Farakka Barrage was created by India in 1975 to divert water from the Ganges River to the Bhagirathi-Hooghly river system. It was designed to check water flow to Bangladesh by diverting water from Ganges-Brahmaputra-Meghna basin. Besides, it aimed to serve the need of preservation and maintenance of the Kolkata Port by improving the regime and navigability of the Bhagirathi-Hooghly river system. It aimed to flush out the sediment deposition from the Kolkata harbour and thus prevent erosion of Kolkata port.
 143. (1) After the Ganga river basin, the Godavari River Basin has the second largest river basin with a drainage area of 312,812 km². In terms of length, catchment area and discharge, the Godavari river is the largest in peninsular India and had been dubbed as the '*Dakshina Ganga*' - the South Ganges river.
 144. (4) Vembanad is the longest lake in India, and the largest lake in the state of Kerala. Spanning several districts in the state of Kerala, it is known as Punnamada Lake in Kuttanad, Kochi Lake in Kochi. The Vembanad wetland system covers an area of over 2033.02 km² thereby making it the largest wetland system in India.
 145. (1) It is at Dev Prayag in Tehri Garhwal district of Uttarakhand that Alaknanda and Bhagirathi rivers meet and take the name Ganga or Ganges River. It is one of the Panch Prayag (five confluences) of Alaknanda River. The Alaknanda rises at the feet of the Satopanth and Bhagirath Kharak glaciers in Uttarakhand. The headwaters of the Bhagirathi are formed at Gaumukh, at the foot of the Gangotri glacier and Khatling glaciers in the Garhwal Himalaya.

- 146.** (3) The Ganga is the largest and the most important river of India. The 2,525 kilometres long river carries off the drainage of a vast basin area 861,404 kilometres covering 26.2 percent area of India's total geographical area. The watershed of the river Ganga is spread over ten States of India, namely Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Himachal Pradesh, Rajasthan, Haryana, Madhya Pradesh and Delhi.
- 147.** (4) West-flowing rivers in India such as Narmada and Tapi do not form deltas. They flow through fault region created by the mountains Vindhya and Satpura which is rocky and devoid of any alluvial material. Thus they don't carry much sediments to form deltas.
- 148.** (2) Kaveri is the only perennial river in peninsular India. Though not snow fed like the rivers of north India, Kaveri receives rain water almost all through the year, mainly due to occurrence of reverse Monsoon in Tamil Nadu, in which monsoon brings significant amount of rains even during its retreat from the Indian subcontinent.
- 149.** (2) Bhakra Nangal Project is a concrete gravity dam on the Satluj River in Bilaspur, Himachal Pradesh. It is a joint venture of the Punjab, Haryana and Rajasthan states designed to harness the precious water of the Satluj for the benefit of the concerned states.
- 150.** (1) Ahmedabad is located on the banks of the Sabarmati River in north-central Gujarat. The river flows through the middle of the city and divides it into two physically distinct eastern and western regions. The river originates in the Aravalli Range of Udaipur District of Rajasthan.

TYPE-III

- 1.** (1) Pune is on the leeward side of the western ghats and so lies on a rain shadow area. The south west monsoon empties all moisture on the windward side of the mountain range and reaches Pune with less moisture after crossing the mountain range. But Mumbai lies on the windward side and hence experiences heavy rainfall.
- 2.** (4) Rainfall decreases as winds move westwards up the Ganga Plains. Rajasthan receives very little rain as it lies in the rain-shadow of the Aravali Hills. The climate of Rajasthan varies greatly throughout the state. It is very hot and dry in summer in the desert areas, where dust storms also occur, while it is very cold during the winters. To the west of the Aravali range, the weather is characterized by low rainfall with erratic distribution, extremes of diurnal and annual temperatures, low humidity and high wind velocity. While in the east of the Aravali range, the weather is characterized by relatively low wind velocity and high humidity with better rainfall.
- 3.** (2) India's geography and geology are climatically pivotal: the Thar Desert in the northwest and the Himalayas in the north work in tandem to effect a culturally and economically break-all monsoonal regime. As Earth's highest and most massive mountain range, the Himalayan system bars the influx of frigid katabatic winds from the icy Tibetan Plateau and northerly Central Asia. Most of North India is thus kept warm or is only mildly chilly or cold during winter; the same thermal dam keeps most regions in India hot in summer. Ocean current do not any role in the climate of India.
- 4.** (2) Rainfall distribution in India is uneven. Areas of Inadequate Rainfall (it implies rainfall less than 50 cm a year): There are basically two belts that receive inadequate rainfall. These belts are of small extent and some parts of these belts receive exceptionally very low rainfall. Like for instance, the Karakoram Mountains and area lying to the north of the Zaskar Himalaya range. This region is situated in the north of the Himalayas. It, therefore, receives little rainfall during the summer monsoon rainy season. Further, a little rainfall is also caused in the months of January, February and March by the westerly depressions.
- 5.** (4) Mawsynram is a village in the East Khasi Hills district of Meghalaya state in north-eastern India, 65 kilometers from Shillong. It is reportedly the wettest place on Earth, with an annual rainfall of 11,872 millimetres. According to the Guinness Book of World Records Mawsynram received 26,000 millimetres (1,000 in) of rainfall in 1985. Mawsynram is located about 16 km west of Cherrapunji, on the Khasi Hills.
- 6.** (4) Derived from the Arabic word 'mausam', monsoon implies a seasonal reversal in wind direction. These changes lead to changes in the seasonal distribution of rainfall and temperature. Although the Andaman & Nicobar Islands receive monsoon as early as mid-May, the southwest monsoon enters the subcontinent's mainland through the Kerala coast. The monsoon then gets divided into two parts: the Arabian Sea branch and the Bay of Bengal branch. It normally reaches Mangalore on the west coast and Vishakhapatnam on the east coast within four days. Both the branches move to reach Mumbai and Kolkata on average between June 10 and 13. The monsoon crosses Varanasi, Ahmedabad and Bhopal by June 15. Agra has to wait for another five days and Delhi by June 29. The two branches merge over Punjab and Himachal. By mid-July the southwest monsoon engulfs the entire subcontinent.
- 7.** (2) The frequency of severe cyclonic storms is maximum for Andhra Pradesh while that of cyclone is maximum for Orissa. Considering west coast only, Gujarat is most vulnerable. The average annual frequency of tropical cyclones in the north Indian Ocean (Bay of Bengal and Arabian Sea) is about 5 (about 5-6 % of the Global annual average) and about 80 cyclones form around the globe in a year. The frequency is more in the Bay of Bengal than in the Arabian Sea, the ratio being 4:1.
- 8.** (3) Often during early summer, dusty squalls followed by spells of thunderstorm and heavy rains lash Assam and West Bengal, bringing relief from the humid heat. These thunderstorms are convective in nature and are locally known as Kal Baisakhi or calamity of the month of Baisakh.
- 9.** (2) Marwar is a region of southwestern Rajasthan state in western India. It lies partly in the Thar Desert which is the driest region of India. It includes the present-day districts of Barmer, Jalore, Lakshman