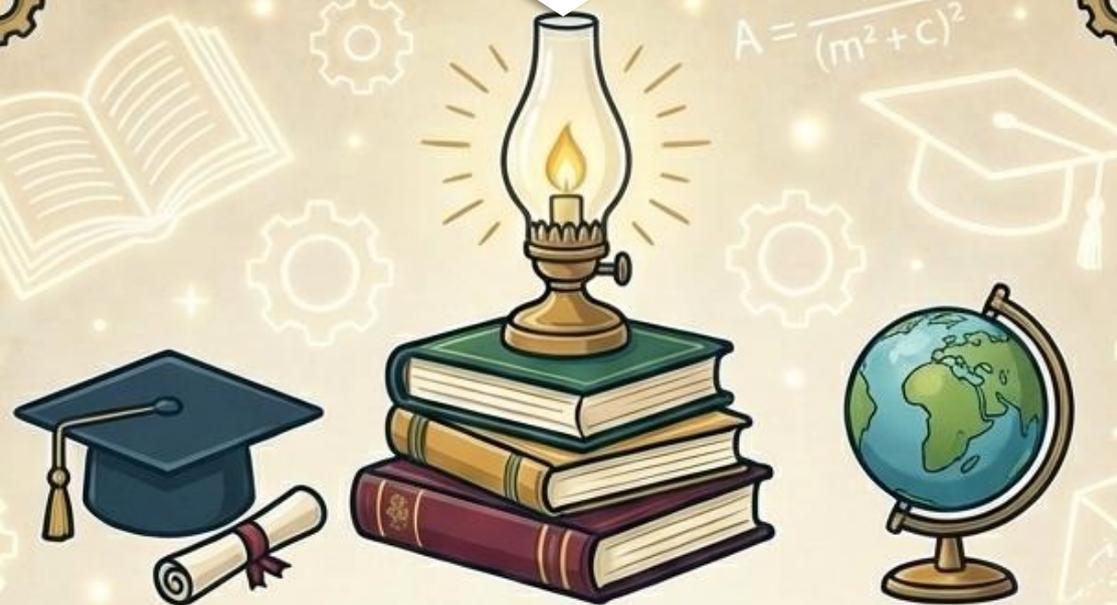




$$A = \frac{m}{(m^2 + c)^2}$$



NIOS PYQ's SOLUTIONS

$$fa = bc^2$$

$$\sqrt{h-x^2}$$

PREVIOUS YEARS' QUESTIONS & ANSWERS



APRIL-2024

Your Path to Success

SECTION - A

A.
B.
C.



Q 1 - Which river flows through a rift valley?

- (A) Chambal (B) Yamuna
(C) Godavari (D) Narmada

Answer - (D) Narmada

Or

Which one is an example of periodic wind?

- (A) Land and sea breezes (B) Westerlies
(C) Monsoon (D) Fohn

Answer - (C) Monsoon

Q 2. Which one of the following factors affects the salinity of the ocean?

- (A) Denudation (B) Deposition
(C) Evaporation (D) Erosion

Answer - (C) Evaporation

Or

Which one of the following is an ocean zone divided on the basis of vertical distribution of temperature?

- (A) High latitude (B) Medium latitude
(C) Mediterranean (D) Thermocline

Answer - (D) Thermocline

Q 3 - Which one of the following is an example of local winds?



(D) (A) is false but (R) is true

Answer - (B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

Q 7. The Government of India observes the 'National Forest Martyrs Day' on which of the following dates?

- (A) 12th September (B) 11th September
(C) 10th September (D) 9th September

Answer - (B) 11th September

Q 8. Arabari Reserve Forest Range is located in which of the following?

- (A) Haldia (B) West Medinipur (C) Kolkata (D) Darjeeling

Answer - (B) West Medinipur

Q 9. Choose the correct statement regarding the significance of Operation Flood.

- (A) Operation Flood empowered the jute farmers.
(B) Operation Flood empowered the millet farmers.
(C) Operation Flood empowered the tea farmers.
(D) Operation Flood empowered the dairy farmers.

Answer - (D) Operation Flood empowered the dairy farmers.

Q10. Match Column—I with Column—II and choose the correct option :

Column—I (Crops)	Column—II (Leading Producer State)
(a) Wheat	(i) West Bengal
(b) Rice	(ii) Uttar Pradesh
(c) Tea	(iii) Karnataka



Column—I (Crops)	Column—II (Leading Producer State)
(d) Coffee	(iv) Assam

Options:

(A) (a)-(ii) (b)-(i) (c)-(iii) (d)-(iv)

(B) (a)-(ii) (b)-(i) (c)-(iv) (d)-(iii)

(C) (a)-(i) (b)-(ii) (c)-(iv) (d)-(iii)

(D) (a)-(i) (b)-(ii) (c)-(iii) (d)-(iv)

Answer - (B) (a)-(ii) (b)-(i) (c)-(iv) (d)-(iii)

Or

Match Column-I with Column-II and choose the correct option:

Column—I (Minerals)	Column—II (Mines)
(a) Bauxite	(i) Neyveli
(b) Petroleum	(ii) Katni
(c) Coal	(iii) Ratnagiri
(d) Iron	(iv) Digboi

Options :

(A) (a)-(i) (b)-(ii) (c)-(iii) (d)-(iv)

(B) (a)-(ii) (b)-(iv) (c)-(i) (d)-(iii)

(C) (a)-(iv) (b)-(iii) (c)-(ii) (d)-(i)

(D) (a)-(iii) (b)-(iv) (c)-(i) (d)-(ii)

Answer - (B) (a)-(ii), (b)-(iv), (c)-(i), (d)-(iii)



Q 11. In which of the following Census years, the percentage of urban population was highest in India?

- (A) 2011 (B) 2001
(C) 1991 (D) 1981

Answer - (A) 2011

Or

Which one of the following States has the highest sex ratio in the country?

- (A) Maharashtra (B) West Bengal
(C) Kerala (D) Gujarat

Answer - (C) Kerala

Q 12 - Who among the following has started Sarva Shiksha Abhiyan in the country?

- (A) State Government of Uttar Pradesh (B) State Government of Haryana
(C) Government of India (D) Government of Delhi

Answer - (C) Government of India

Q 13 - Which one of the following States has the highest rank in the Human Development Index?

- (A) Goa (B) Gujarat (C) Kerala (D) Tamil Nadu

Answer - (C) Kerala

Or

Which one of the following is a pillar of human development?

- (A) Equity (B) Justice (C) Democracy (D) Religion

Answer - (A) Equity

Q 14 - Which one of the following comes under the Millennium Development Goals?

- (A) Achieve universal higher education



Q 16 - Which one of the following is cold wind?

- (A) Bora
- (B) Föhn
- (C) Chinook
- (D) Sirocco

Answer - (A) Bora

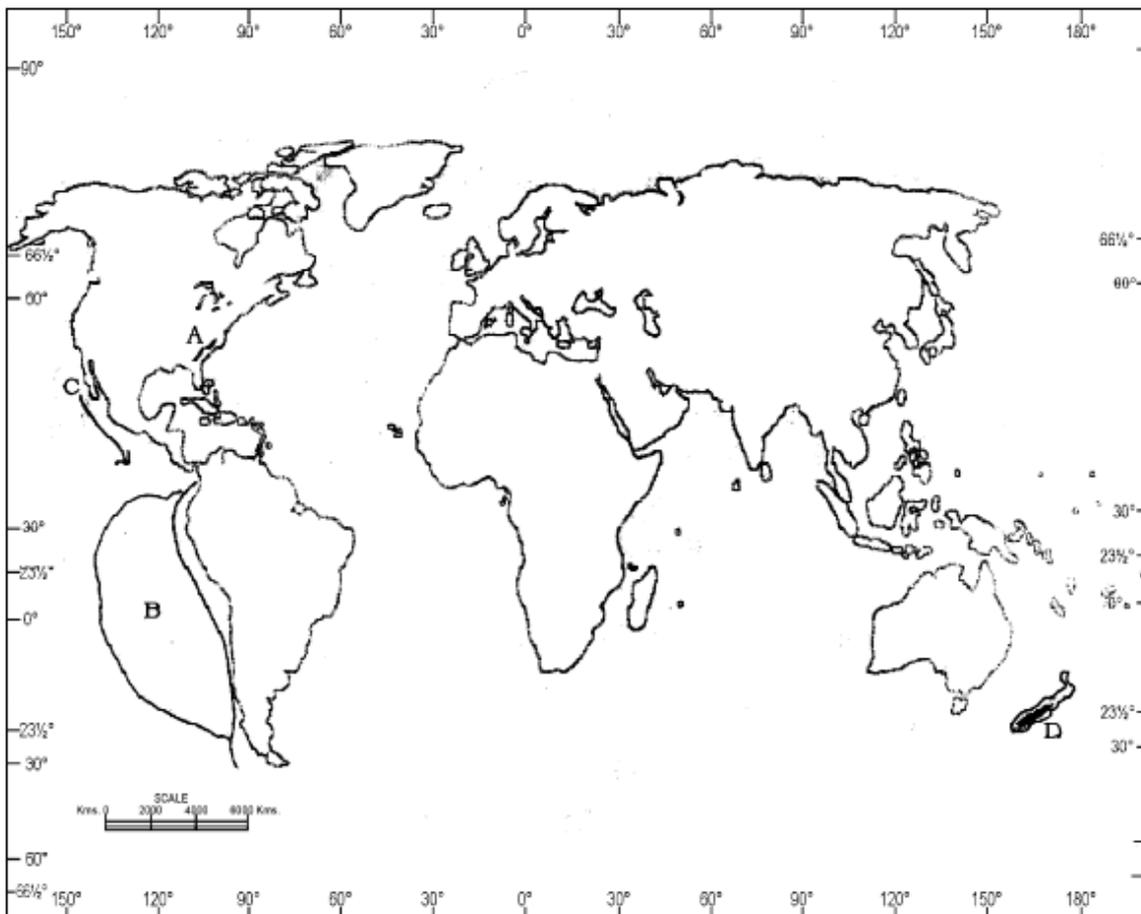
Or

Buran cold wind is related to which one of the following regions?

- (A) Central Asia and Russia
- (B) Rocky Mountain
- (C) Alps Mountain
- (D) Plains of North India

Answer - (A) Central Asia and Russia

Note : Study the given map carefully and answer the Map-based Question Nos. 17, 18, 19 and 20.



Q 17 - Identify the mountain marked as 'A' on the map and choose the correct option.



- (A) Appalachian (B) Alps
(C) Rocky (D) Andes

Answer - (A) Appalachian

Q 18 - Identify the plate marked 'B' on the map and choose the correct option.

- (A) Caribbean plate (B) Scotia plate
(C) Nazca plate (D) Philippine plate

Answer - (C) Nazca plate

Q 19 - Identify the current marked 'C' on the map and choose the correct option.

- (A) California (B) Equatorial
(C) Benguela (D) Peru

Answer - (A) California

Q 20 - Identify the grassland marked 'D' on the map and choose the correct option.

- (A) Prairies (B) Pampas
(C) Canterbury (D) Downs

Answer - (C) Canterbury

Q 21 - Answer any two of the following questions in one or two words each :

(a) Name the volcanic mountain of Japan.

Answer - Mount Fuji (Fujiyama)

(b) The Malwa plateau is an example of which type of plateau?

Answer - volcanic Lava Plateau

(c) The Mexican plateau is an example of which type of plateau?

Answer - Intermontane Plateau

(d) The Colorado plateau is an example of which type of plateau?



Answer - Intermontane Plateau

Q 22 - Read the given paragraph carefully and answer any two of the following questions in one or two words each :

Human Sustainability

Human development is a core of SDGs and most of the goals are directly and indirectly related to this. To maintain human sustainability need to improve human capital. Therefore to end poverty and remove hunger need to invest in poverty eradication. Apart from this, investment is also required in the health and education sector, access to services, nutrition, and knowledge and skill enhancement for improvement of health and completing economic wellbeing for all. For maintaining good health and wellbeing have to end preventable death of newborns and children of age below 5 years in all countries, ends the epidemics of Aids, tuberculosis, malaria, water-borne diseases and other communicable diseases, etc. Through development of skills and capacity building, we can promote the wellbeing of communities and society.

(a) Identify the core of sustainable development goals (SDGs).

Answer - Human development

(b) Mention the need to maintain human sustainability.

Answer - To improve human capital

(c) What is required to end poverty and remove hunger?

Answer - Invest in poverty eradication

(d) How can we promote the wellbeing of communities and society?

Answer - Through development of skills and capacity building

Q 23 - Match any two correct combinations from Column-A with Column-B :

Column-A (Crops)

(a) Sugarcane

(b) Floriculture

(c) Cotton

Column-B (Leading producer)

(i) West Bengal

(ii) Jharkhand

(iii) Bihar



- (d) Paddy
- (iv) Karnataka
- (v) Uttar Pradesh
- (vi) Kerala
- (vii) Gujarat

Answer -

Column-A (Crops)	Column-B (Leading producer)
(a) Sugarcane	(v) Uttar Pradesh
(b) Floriculture	(iv) Karnataka
(c) Cotton	(vii) Gujarat
(d) Paddy	(i) West Bengal

Q 24 - Answer any two of the following questions in one or two words each :

(a) Name any two main sub-branches of regional geography.

Answer - Regional Planning and Regional Development

(b) The study and practice of making maps and diagrams is known as what?

Answer - Cartography

(c) Name any two branches of physical geography.

Answer - Geomorphology and Climatology

(d) Name any two branches of human geography.

Answer - Economic Geography and Population Geography

Q 25 - Match any two correct combinations from Column-A with Column-B :

Column-A

Column-B

- (a) Thermal power plant
- (i) Katni



- | | |
|-------------------------|-------------------|
| (b) Hydro power plant | (ii) Khetri |
| (c) Thorium | (iii) Bellary |
| (d) Nuclear power plant | (iv) Hirakund |
| | (v) Visakhapatnam |
| | (vi) Kaiga |
| | (vii) Singrauli |

Answer -

Column—A	Column—B
(a) Thermal power plant	(vii) Singrauli
(b) Hydro power plant	(iv) Hirakund
(c) Thorium	(v) Visakhapatnam
(d) Nuclear power plant	(vi) Kaiga

Q 26 - Answer any two of the following by filling the blanks with appropriate words :

(a) ____ is the continental margin which starts from the shoreline and extended up to the continental edge.

Answer - The Continental Shelf

(b) The flat-topped mountains (seamounts) are known as ____.

Answer - Guyots

(c) The surface temperature of the oceans declines from the equator towards ____.

Answer - Poles

(d) The Northern Hemisphere has more ____ area than that of the Southern Hemisphere

Answer - Land



Q 27 - Read the given paragraph carefully and answer the following questions in one or two words :

Difference Between Weather and Climate

Weather and climate are sometimes used as synonyms but they are not the same. The state of general atmospheric conditions with respect to temperature and pressure is called weather. An important characteristic of weather is it changes everyday and can be erratic. That is why we get daily weather updates and alerts. The meteorological agencies like Indian Meteorological Department (IMD) provide weather forecasts. On the other hand, climate refers to the long-term averaged weather conditions of a particular area or region.

(a) Who provides the weather forecast for India?

Answer - Indian Meteorological Department (IMD)

(b) Mention the main factor that differentiates climate from weather

Answer - Time period (Weather – short-term, Climate – long-term)

Q 28 - Answer the following questions in one or two words each :

(a) Who builds the coral reefs?

Answer - Coral Polyps

(b) The low islands found in the tropical oceans consisting coral reefs surrounding a central depression is known as what?

Answer - Atoll

Q 29 - Answer of the following questions in one or two words each :

(a) Name the two major sources of energy which empower the various exogenic processes.

Answer - Solar energy and Gravity

(b) Mention an example of Intermontane plateau.

Answer - Tibetan Plateau

Q 30 - Answer the following questions in one or two words each :



(a) Name any two continents where the low pressures exist in the month of January.

Answer - Australia and Africa

(b) What is the other name for inter tropical convergence zone?

Answer – Doldrums

Q 31 - Explain two main features of the Western Ghats in India.

Answer - There are two main features of the Western Ghats in India is :

1. **Continuity** : The Western Ghats run parallel to the western coast as a continuous wall and can be crossed only through passes.
2. **Orographic Rain** : They block the moisture-laden South-West monsoon winds, causing heavy rainfall on the western coastal plains.

Q 32 - Explain any two negative impacts of green revolution on Indian agriculture.

Answer - Two negative effects of the Green Revolution on Indian agriculture :

1. **Soil Degradation** : Excessive use of chemical fertilizers and pesticides has reduced the natural fertility of the soil.
2. **Depletion of Water Table** : Over-exploitation of groundwater to meet high irrigation demands has led to a significant drop in the water table.

Q 33 - "Sun is the most vital, abundant and direct source of energy." Explain the statement in the context of India.

Answer - Yes, in the context of India, solar energy is the most important, abundant, and direct source of energy because the country receives ample sunlight on most days of the year. It is a renewable and pollution-free source that can meet India's growing energy needs and reduce dependence on fossil fuels.

Q 34 - Explain the role of NITI (National Institute for Transforming India) Aayog to achieve the objectives of sustainable development goals.

Answer - NITI Aayog plays an important role in achieving the Sustainable Development Goals (SDGs). It ensures coordination between the central and state governments, develops indices and monitoring



mechanisms for the SDGs, and promotes sustainable development through policy formulation, planning, and evaluation.

Q 35 - How are humans affecting the environment and its quality? Explain any two ways.

Answer - The two major ways in which humans are affecting the environment and its quality are :

- 1. Pollution :** Human activities are increasing gases like carbon dioxide, leading to air pollution and global warming.
- 2. Exploitation of resources :** Deforestation and changes in land use are disturbing environmental balance and affecting biodiversity.

Q 36 - On the given Political Map of India mark and label the following :

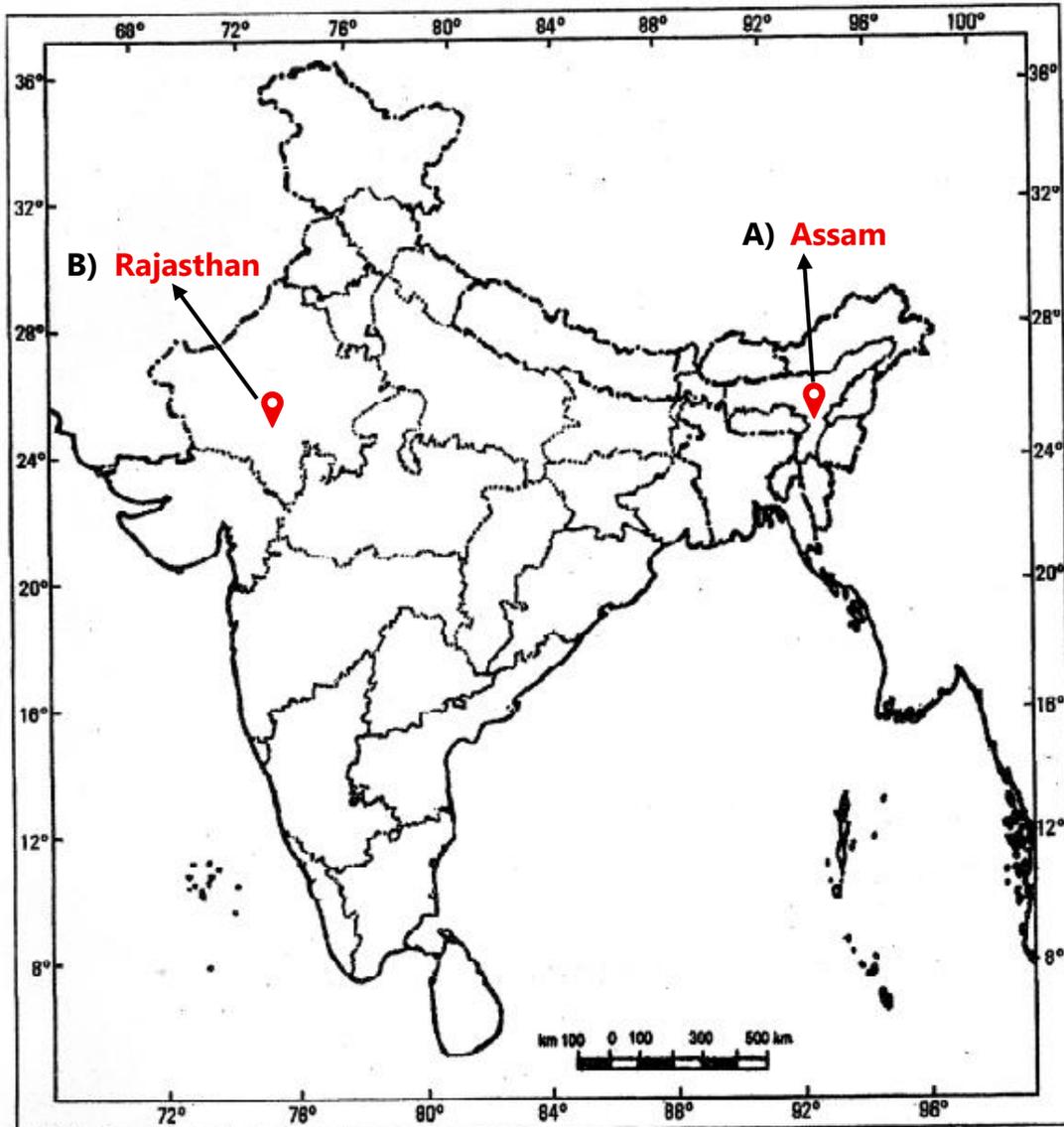
(a) Eastern State having 18 wildlife sanctuaries

Answer - Assam

(b) Western State having 25 wildlife sanctuaries

Answer - Rajasthan





Q 37 - On the given Outline Map of India mark and label the following :

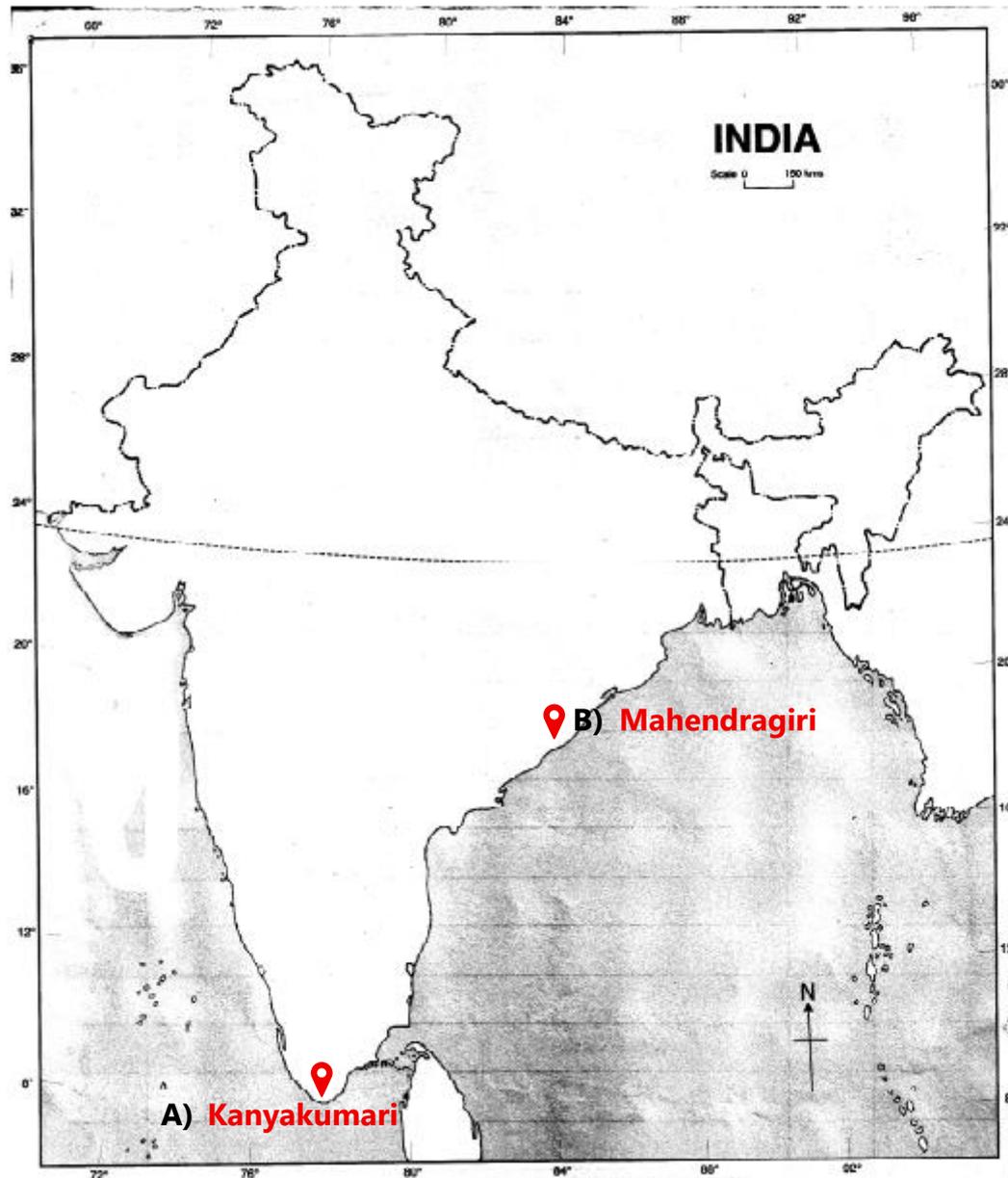
(a) The southern-most place on the mainland of India.

Answer - Kanyakumari

(b) The highest peak of Eastern Ghats.

Answer - Mahendragiri





Q 38 - Describe the different meanings of development for different people.

Answer - The meaning of development is different for different people because their situations and life goals are different. For example, for an unemployed youth in a city, employment opportunities mean development, while for a farmer, better prices for crops and irrigation facilities represent development.

Q 39 - Describe any two characteristics of the dry deciduous forests in India.

Answer - Two important characteristics of dry deciduous forests in India are :-

- 1. Rainfall :** These forests are found in areas receiving rainfall between 70 cm and 100 cm.



2. **Shedding of Leaves :** As the dry season begins, the trees shed their leaves completely to conserve moisture, making the forest appear like a vast grassland with naked trees.

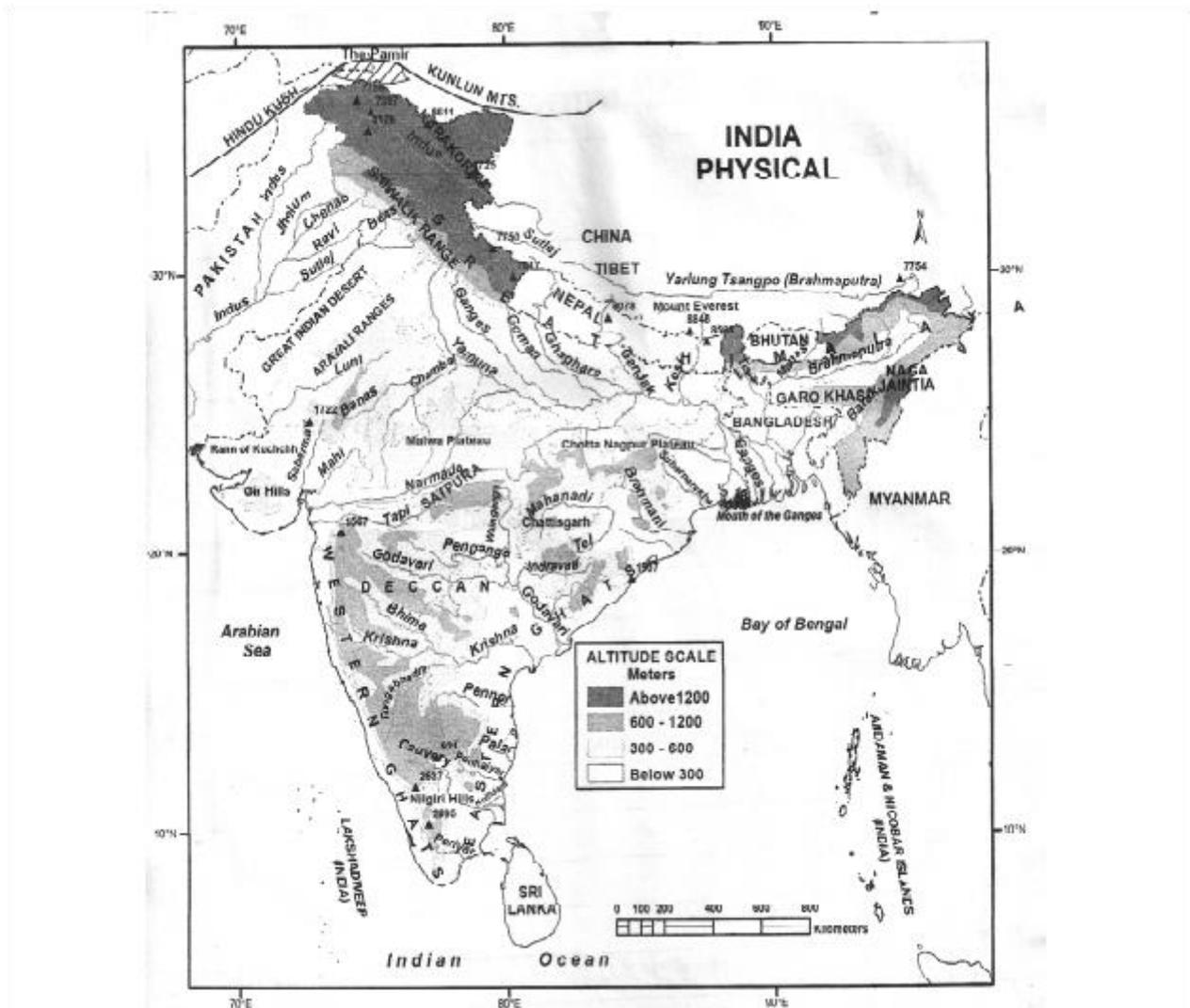
Q 40 - Answer the following questions on the basis of the given map :

(a) Name the State where the Gir Hills are located.

Answer - Gujarat

(b) Name the Island located in the Bay of Bengal.

Answer - Andaman & Nicobar Islands



Q 41 - Describe three main features of the 'Block Mountains'.

Answer - Three Major Characteristics of Block Mountains :



1. **Process of Formation** : Block mountains are formed due to faulting in the Earth's crust. When one part of the land surface rises and the surrounding part sinks, block mountains are formed.
2. **Structure** : These mountains have flat tops and very steep sides. They are also known as "horsts."
3. **Presence of Rift Valleys** : Along with block mountains, rift valleys are formed, which are called grabens. These valleys are found between the mountains.

Examples : The Vosges in France and the Black Forest Mountains in Germany are important examples.

Q 42 - Explain any three features of temperate grassland biome.

Answer - Three Major features of temperate grassland biome :

1. **Location** : This biome is found in the interior parts of continents in the middle latitudes, such as the Prairie region in North America and the Steppe region in Eurasia.
2. **Vegetation** : Trees are very few or almost absent in these regions. Short, dense, and nutritious grasses are found here, which are highly suitable for animal husbandry.
3. **Soil and Agriculture** : The chernozem soil found here is highly fertile. Therefore, this region is famous for the cultivation of crops like wheat and is known as the "granary of the world."

Q 43 - Analyze any three factors affecting the atmospheric pressure.

Answer - Three Factors Affecting Atmospheric Pressure :

1. **Temperature** : There is an inverse relationship between temperature and pressure. When temperature rises, air expands, becomes lighter, and ascends, creating low pressure.
2. **Altitude** : Atmospheric pressure decreases with increase in altitude because the air becomes less dense. Pressure is highest at sea level.
3. **Water Vapour** : Moist air is lighter than dry air. Therefore, an increase in water vapour content in the air leads to a decrease in atmospheric pressure.

Or

Analyze any three features of equatorial low-pressure belt.

Answer - Three Major features of equatorial low-pressure belt :



1. **Thermal Belt** : This belt extends up to about 5° latitudes on both sides of the Equator. Due to the direct rays of the Sun throughout the year, the temperature remains high, causing air to heat up, rise, and create low pressure.
2. **Calm Belt** : Winds do not blow horizontally here; instead, air rises vertically. Therefore, the region remains calm and is known as the "Doldrums."
3. **Convictional Rainfall** : This region experiences convictional rainfall almost daily in the afternoon, often accompanied by thunderclouds.

Q 44 - Explain any three significances of the monsoon in the Indian economy.

Answer - Importance of Monsoon in the Indian Economy:

1. **Impact on Agriculture** : Most farming in India depends on monsoon rainfall. Good rainfall increases crop production and raises farmers' income.
2. **Water Resources** : The monsoon fills rivers, ponds, and dams, which helps in providing drinking water and irrigation facilities.
3. **Industrial and Energy Sector** : Adequate rainfall increases hydroelectric power generation and makes water easily available for many industries.

Q 45 - "There is a great variation in the availability of water resources in India." Explain the statement with examples.

Answer - Variations in the Availability of Water Resources in India:

1. **Seasonal Dependence** : The availability of water in India depends on the season. During the rainy season, rivers and ponds get filled, but in the dry season, regions like Rajasthan face water scarcity.
2. **Geographical Factors** : In areas with flat land and porous soil, such as the Ganga plain, water easily seeps into the ground, resulting in greater water availability. In contrast, in sloping regions with hard soil like the Deccan Plateau, water flows away quickly.
3. **Human Activities** : In urban areas such as Delhi and Mumbai, the construction of concrete roads and buildings reduces water seepage into the ground. As a result, groundwater recharge decreases and water scarcity increases.

Or



“Water is an important constituent of the ecosystem.” Explain the statement with examples.

Answer - Water is an important constituent of the ecosystem :

- 1. Basis of life :** Water is essential for the existence of all living beings and for photosynthesis in plants. For example, crops grow well in fields only when sufficient water is available.
- 2. Natural habitat :** Water forms vast ecosystems like oceans and rivers, which provide a home for millions of organisms. For example, fish and coral reefs can survive only in water.
- 3. Climate regulation :** Water regulates the Earth’s temperature through its cycle. For example, sea winds keep the coastal climate cool.

Q 46 - Define the term ‘sex ratio’. Explain any four reasons for the declining sex ratio in India.

Answer - The number of females per 1000 males in a country or region is called the sex ratio.

Four reasons of decline in sex ratio in India :

- 1. Preference for sons :** In Indian society, sons are given more importance than daughters for carrying forward the family lineage and for support in old age.
- 2. Female foeticide :** Due to misuse of medical technology, girls are identified before birth and killed.
- 3. Dowry system :** Because of fear of dowry given in marriage, many families consider daughters as an economic burden.
- 4. Neglect of girl child’s health :** In families, more attention is given to the food and health of boys than girls, due to which the mortality rate of girls is higher.

Or

Explain any five characteristics of Human Development Report (2021–2022) of India.

Answer - Five major characteristics of the Human Development Report (2021–22) :

- 1. Global ranking :** In this report, India ranked 132nd among 191 countries. This shows a decline compared to previous years.
- 2. HDI value :** India’s Human Development Index (HDI) score was 0.633, which places India in the category of countries with medium human development.

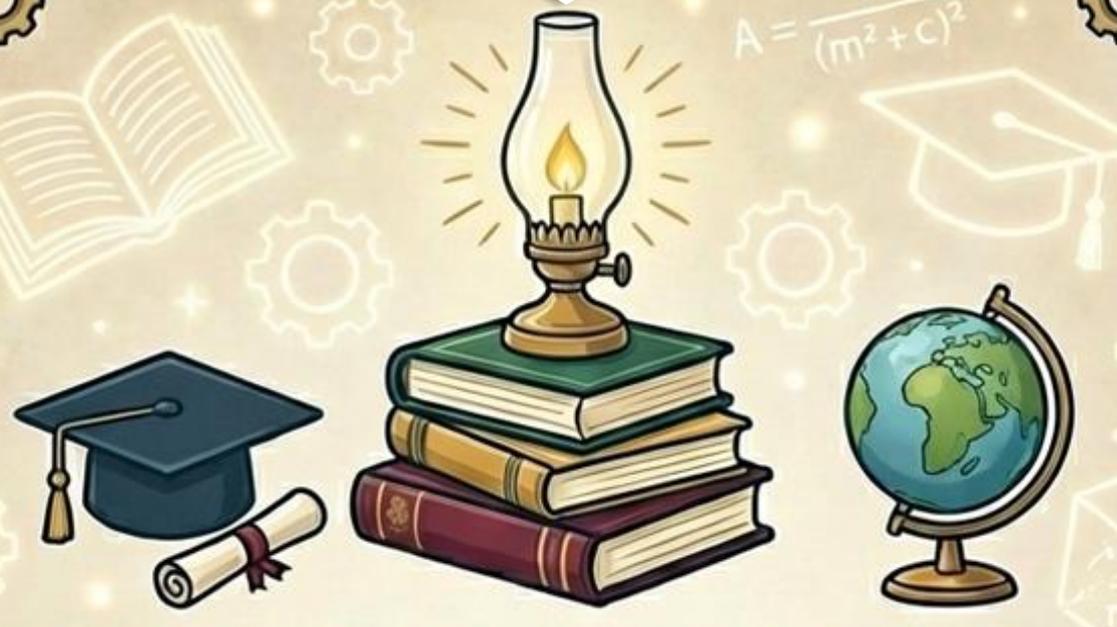


3. **Life expectancy** : Life expectancy at birth in India declined to 67.2 years, mainly due to the COVID-19 pandemic.
4. **School education** : The average years of schooling were estimated at 6.7 years, and the expected years of schooling were 11.9 years.
5. **Per capita income** : India's per capita Gross National Income (GNI) was measured at about \$6,590 (US dollars).





$$A = \frac{m}{(m^2 + c)^2}$$



NIOS PYQ's SOLUTIONS

$$fa = bc^2$$

$$\sqrt{h-x^2}$$

PREVIOUS YEARS' QUESTIONS & ANSWERS



OCTOBER-2024

Your Path to Success

(D) Cantaloupe, Watermelon

Answer - (C) Wheat, Gram

Q10. Match Column I with Column II and choose the correct option.

Column I

(Minerals)

- (i) Iron
- (ii) Manganese
- (iii) Bauxite
- (iv) Coal

Column II

(Major Mines)

- (a) Chhindwara
- (b) Singrauli
- (c) Ratnagiri
- (d) Amreli

Options:

- (A) (i)-(c), (ii)-(a), (iii)-(d), (iv)-(b)
- (B) (i)-(a), (ii)-(b), (iii)-(c), (iv)-(d)
- (C) (i)-(b), (ii)-(c), (iii)-(a), (iv)-(d)
- (D) (i)-(d), (ii)-(b), (iii)-(c), (iv)-(a)

Answer - (A) (i)-(c), (ii)-(a), (iii)-(d), (iv)-(b)

Q 11. Choose the correct option related to calculation of actual growth of population.

- (A) Birth rate - Death rate
- (B) Birth rate + Death rate
- (C) Birth rate - Death rate + in migration - out migration
- (D) Birth rate + Death rate - in migration - out migration

Answer - (C) Birth rate - Death rate + in migration - out migration



Q 12 - Which of the following is not a physical factor affecting population distribution?

- (A) Soil (B) Climate
(C) Topography (D) Availability of natural resources

Answer - (D) Availability of natural resources

Q 13 - According to 2021, which of the following states has the highest Human Development Index?

- (A) Kerala (B) Karnataka (C) Maharashtra (D) Gujarat

Answer - (A) Kerala

Q 14 - The main development goal of the Millennium Development Goals (MDGs) is :

- (A) Economic development only
(B) Environmental development only
(C) Economic and environmental development
(D) Economic and social development

Answer - (D) Economic and social development

Q 15 - Read the pillars of Sustainable Development Goals carefully and choose the correct option.

- (I) Human stability
(II) Economic stability
(III) Environmental stability
(IV) Cultural stability

Options:

- (A) Only (I), (II) and (III) are correct



(B) Only (II), (III) and (IV) are correct

(C) Only (I), (II) and (IV) are correct

(D) Only (I), (III) and (IV) are correct

Answer - (A) Only (I), (II) and (III) are correct.

Q 16 - Two statements are given below as Assertion (A) and Reason (R). Read both the statements carefully and choose the correct option.

Assertion (A) : Higher the concentration of water in air, lower will be the density of air.

Reason (R) : The molecular weight of water is less than the average molecular weight of dry air.

Options :

(A) Both (A) and (R) correct. (R) is the correct explanation of (A).

(B) Both (A) and (R) are correct. (R) is not the correct explanation of (A).

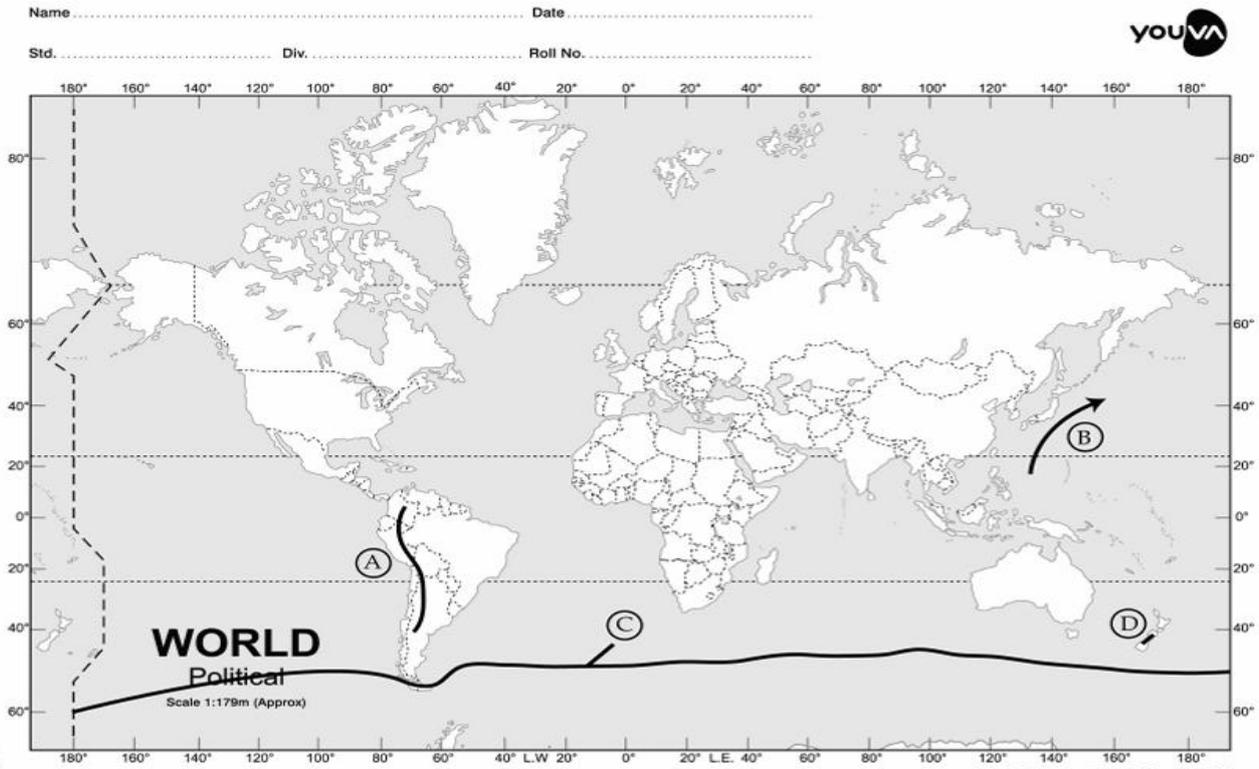
(C) (A) is correct and (R) is incorrect.

(D) (A) is incorrect and (R) is correct.

Answer - (A) Both (A) and (R) correct. (R) is the correct explanation of (A).

Note : Study the given map carefully and answer map based question numbers 17, 18, 19, 20.





1. The responsibility for the correctness of internal details rests with the publisher.
 2. The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.
 3. The external boundaries and coastlines of India agree with the Record/Master Copy certified by Survey of India.
 4. The spellings of names in this map, have been taken from various sources.

© Government of India, Copyright, 2013

Q 17. Identify the mountain marked 'A' on the map.

- (A) Andes
- (B) Rocky
- (C) Alps
- (D) Ural

Answer - (A) Andes

Q 18. Identify the current marked 'B' on the map.

- (A) Mozambique
- (B) Kuroshio
- (C) Norway
- (D) Gulf Stream

Answer - (B) Kuroshio

Q 19. Identify the temperature of the 'C' isotherm marked on the map.

- (A) 5° C
- (B) 10° C
- (C) 15° C
- (D) 20° C

Answer - (B) 10° C



Q 20. Identify the grassland biome 'D' on the map.

- (A) Velds (B) Pampas
(C) Downs (D) Canterbury

Answer - (D) Canterbury

Q 21. Answer the following questions in one or two words.

(a) Name the process of weakening and breaking of rocks.

Answer - Weathering

(b) Name the process of removing, lifting and blowing dry and loose particles of sand and dust by winds.

Answer - Deflation

Q 22. Fill in the blanks with appropriate words:

(a) _____ is the principal body of the Government of India coordinating the Sustainable Development Goals with the ministry associated with each goal.

Answer - NITI Aayog

(b) It is a set of agreements on 17 universal goals adopted by world leaders from 193 countries at the 70th session of _____ held in September 2015.

Answer - UN General Assembly

Q 23. Match Column I with Column II and choose the correct option.

Column I

- (a) Major port of Gujarat
(b) Eastern Terminal Station of East-West Corridor
(c) Major airport in Kerala
(d) North Terminal Station of North-South Corridor

Column II

- (i) Kochi
(ii) Palampur
(iii) Kandla
(iv) Guwahati
(v) Srinagar
(vi) Silchar



(vii) Tuticorin

Answer -

Column I	Column II
(a) Major port of Gujarat	(iii) Kandla
(b) Eastern Terminal Station of East-West Corridor	(vi) Silchar
(c) Major airport in Kerala	(i) Kochi
(d) North Terminal Station of North-South Corridor	(v) Srinagar

Q 24 - Read the given paragraph carefully and answer the following questions in one or two words.

An area which has homogenous climatic characteristics and has geographic continuity is known as climate regions. To create similar types of climate regions, various attempts have been made by the scholars but there is no single perfect classification available. It is believed that Greek philosopher, Aristotle, probably made the first attempt to classify Earth's climate on the basis of insolation. He divided the world into three thermal zones viz. torrid zone, temperate zone and frigid zone.

(a) What type of climate is there in the polar region?

Answer - Frigid zone

(b) What type of climate is there in the equatorial region?

Answer - Torrid zone

Q 25 - Answer the following questions in one or two words.

(a) Write the name of the father of Green Revolution.

Answer - M.S. Swaminathan

(b) Write the name of the father of White Revolution.

Answer - Dr. Verghese Kurien



Q 26 - Answer the following questions in one or two words.

(a) The amount of salt dissolved in sea water is called _____.

Answer - Salinity

(b) Which salt has the highest amount dissolved in sea water?

Answer - Sodium Chloride

Q 27 - Match Column I with Column II correctly.

Column I	Column II
(a) A factor affecting atmospheric pressure	(i) Bora
(b) Factor affecting the speed of wind	(ii) Pole
(c) A local hot dry strong wind	(iii) The Earth's internal temperature
(d) A local cold dry winter wind	(iv) Shell
	(v) Coriolis force
	(vi) Water Vapour
	(vii) Fohn

Answer - (a) A factor affecting atmospheric pressure - **(vi) Water Vapour**

(b) Factor affecting the speed of wind - **(v) Coriolis force**

(c) A local hot dry strong wind - **(vii) Fohn**

(d) A local cold dry winter wind - **(i) Bora**

Q 28 - Answer the following questions by filling in the blanks with appropriate words.

(a) _____ increases the volume of water at river ports so that large ships can sail safely.

Answer - Tides

(b) The pattern of ocean circulation matches the _____ pattern of the Earth.



Answer - Atmospheric

Q 29 - Answer the following questions in one or two words.

(a) Give an example of the depositional plain formed by the rivers in India.

Answer - Ganga-Brahmaputra Plain

(b) The Canadian Shield is an example of what type of plain?

Answer - Ancient Crystalline Plains

Q 30 - Read the given paragraph carefully and answer the following questions.

The climate of an area is influenced by the distance from the equator. The places located near the equator are warmer than the places located away from it. Equatorial areas receive more heat as intense vertical sun rays fall on a small area whereas Temperate and Polar Regions receive slant rays which are less intense. Maldives is located near the equator which experiences a hot climate whereas Switzerland is situated far away and has a cold climate.

(a) Why does the equatorial region receive more heat?

Answer - Equatorial regions receive more heat because intense vertical sun rays fall on a small area.

(b) Why is Switzerland colder than Maldives?

Answer - Switzerland is colder than Maldives because it is situated far away from the equator and receives less intense slanting rays.

Q 31 - The tourist places of India like Shimla, Nainital etc. are located in which range of the Himalayas? Name the northernmost and highest range of the Himalayas.

Answer - The tourist places of India like Shimla and Nainital are located in the Lesser Himalayas range. The northernmost and highest range of the Himalayas is known as the Great Himalayas.

Q 32 - Explain the importance of minerals in human life in two points.

Answer - The importance of minerals in human life is :

1. Industrial Development : Minerals provide basic raw materials for industries e.g., iron for machinery, bauxite for aluminium.



2. **Source of Energy** : Minerals like coal, petroleum, and natural gas are the primary sources of energy for transportation and electricity.

Q 33 - Explain the importance of foreign investment in Indian economy in two points.

Answer - The importance of foreign investment in the Indian economy is :

1. **Capital and Technology** : It brings in necessary financial capital and advanced technology which helps in modernizing industries.
2. **Employment Generation** : It establishes new industries which create job opportunities and improve the standard of living.

Q 34 - Explain any two achievements of Millennium Development Goals.

Answer - Two achievements of the Millennium Development Goals are :-

1. **Poverty Reduction** : There has been a significant decline in the number of people living in extreme poverty and hunger globally.
2. **Education** : Enrollment in primary education has increased, and gender disparity in schools has reduced significantly.

Q 35 - Explain two main objectives of the Earth Summit in 1992.

Answer - The two main objectives of the Earth Summit in 1992 were :

1. **Environmental Protection** : To address urgent global problems of environmental protection and socio-economic development.
2. **Sustainable Development** : To establish global cooperation for achieving sustainable development by adopting 'Agenda 21'.

Q 36 - In the given physical map of India, mark the following with appropriate symbols and write their names.

(a) The main river of Rajasthan which falls in the Rann of Kutch.

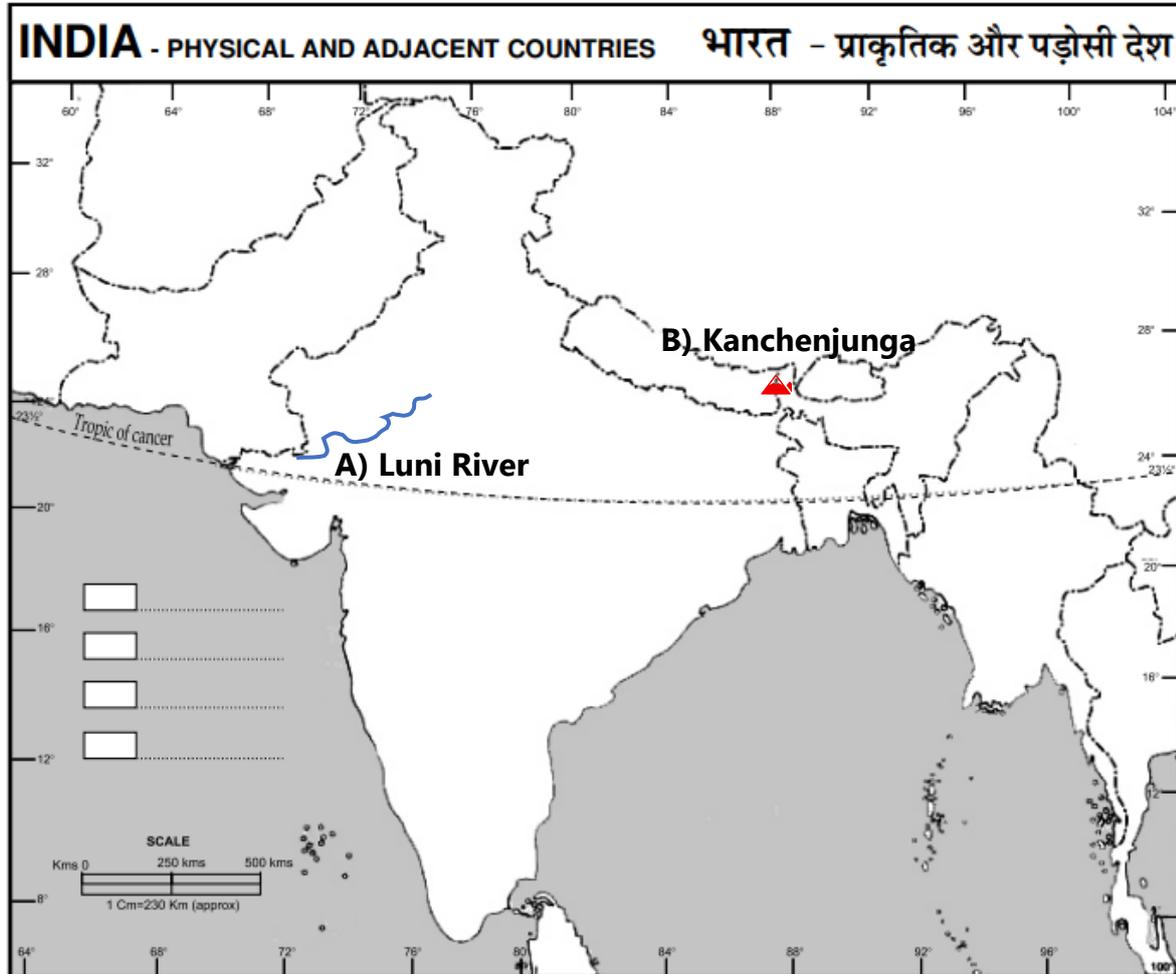
Answer - Luni River

(b) Highest peak of Himalaya in India.



Answer - Kanchenjunga

Q 37 - In the given physical map of India, mark the following with appropriate symbols and

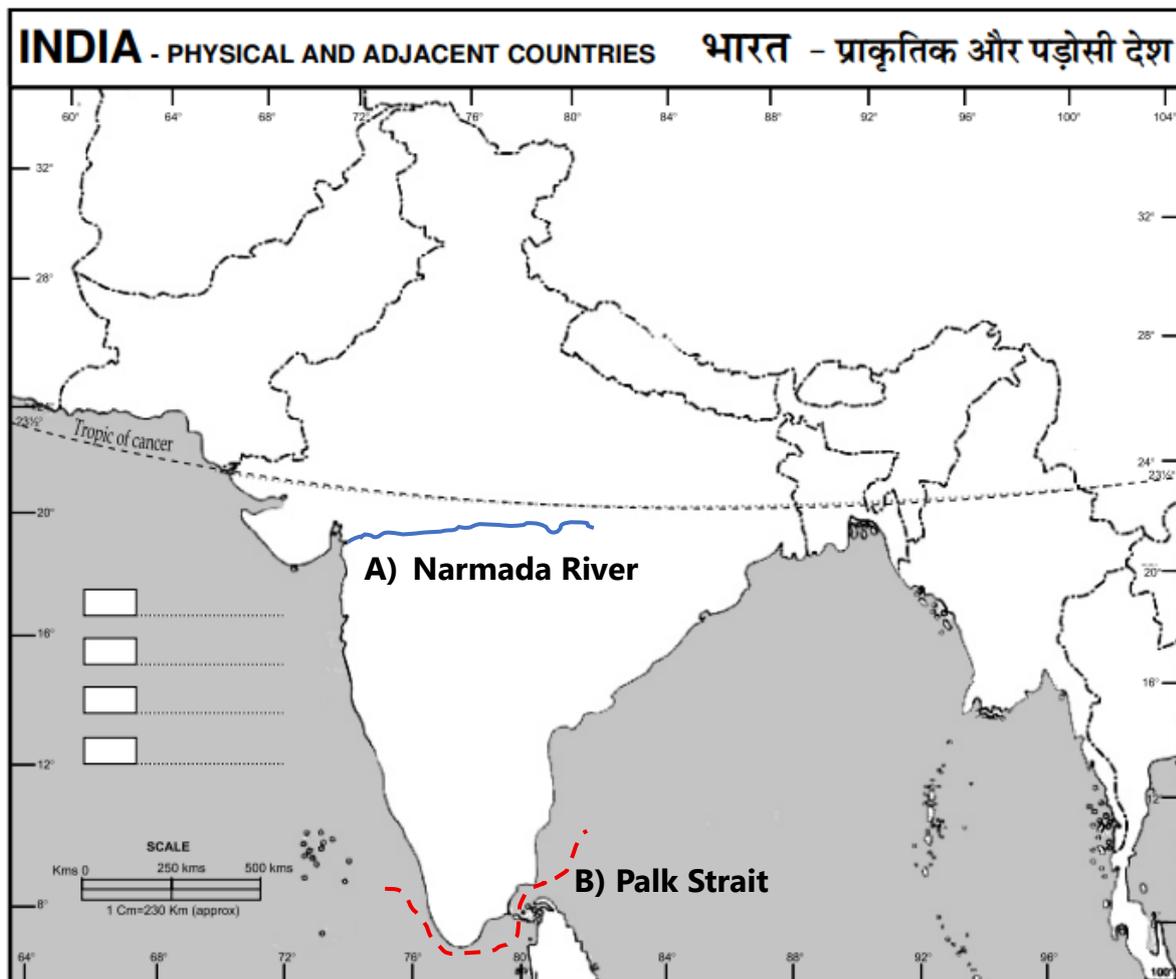


write their names.

(a) Narmada River

(b) A strait between India and Srilanka





Q 38 - Name two states which have achieved the highest score in the index due to tackling hunger and improving the quality of students.

Answer - The two states are **Kerala** and **Uttarakhand**, which achieved the highest score in the index due to tackling hunger and improving the quality of students.

Q 39 - Describe two important characteristics of dry deciduous forests in India.

Answer - Two important characteristics of dry deciduous forests in India are :-

1. **Rainfall :** These forests are found in areas receiving rainfall between 70 cm and 100 cm.
2. **Shedding of Leaves :** As the dry season begins, the trees shed their leaves completely to conserve moisture, making the forest appear like a vast grassland with naked trees.

Q 40 - Answer the following questions on the basis of the given map :

(a) Name the state having maximum number of wildlife sanctuaries.



Q 41 - Analyse the importance of mountains in three points.

Answer - The importance of mountains is :-

- 1. Climatic Barrier :** They act as a barrier against cold winds from Central Asia and trap monsoon winds to cause rainfall in India.
- 2. Source of Rivers :** Glaciers in the mountains are the source of perennial rivers (e.g., Ganga, Yamuna), providing water year-round.
- 3. Rich Resources :** They are rich in forest resources, minerals, and biodiversity, and serve as major tourist destinations.

Q 42 - Explain three important characteristics of evergreen rainforest biome.

Answer - Three characteristics of the evergreen rainforest biome are :

- 1. High Rainfall & Temperature :** These forests thrive in areas with annual rainfall above 200 cm and high temperatures throughout the year.
- 2. Evergreen Nature :** The trees do not shed their leaves at the same time, so the forest appears green all year round.
- 3. Dense Vegetation :** The vegetation is very dense with a multi-layered structure, ranging from shrubs to tall trees reaching up to 60 meters.

Q 43 - Describe three main characteristics of the monsoon winds.

Answer - Three main characteristics of monsoon winds are :

- 1. Seasonal Reversal :** These winds reverse their direction with the change of seasons, blowing from the sea to the land in summer and from the land to the sea in winter.
- 2. Uncertainty :** The arrival and withdrawal of the monsoon are often unpredictable and irregular.
- 3. Uneven Rainfall :** They cause uneven distribution of rainfall, leading to floods in some regions and droughts in others.

Q 44 - How do the Mountain ranges of the North affect the climate of India? Explain in three points?

Answer - The Northern Mountain ranges affect India's climate in three ways:



1. **Barrier to Cold Winds** : They prevent the freezing cold winds of Central Asia from entering India, keeping the subcontinent warmer.
2. **Rainfall** : They intercept the moisture-laden Southwest Monsoon winds, forcing them to shed moisture and cause heavy rainfall in North India.
3. **Temperature Moderation** : Due to high altitude, the mountainous regions have a cool and pleasant climate even during summer.

Or

How do monsoon winds affect the climate of India? Explain in three points.

Answer - Monsoon winds affect the climate of India in the following ways :-

1. **Seasonal Rhythm** : They establish a clear and regular cycle of seasons such as summer, rainy season, and winter in the Indian subcontinent.
2. **Source of Water** : Monsoon winds are the main source of fresh water for agriculture. They fill rivers and increase the groundwater level.
3. **Fall in Temperature** : With the arrival of monsoon winds, there is a sudden drop in temperature after severe summer heat.

Q 45 - Explain the importance of water resources for life in three points.

Answer - The importance of water resources for life is :-

1. **Domestic Use** : Water is vital for drinking, cooking, bathing, and maintaining hygiene in daily life.
2. **Agricultural Production** : In India, agriculture relies heavily on water for irrigation to ensure food security.
3. **Industrial Use** : Water is essential for manufacturing processes, cooling machinery, and generating hydroelectric power.

Or

The distribution of underground water is uneven in India. Explain three reasons for it being uneven.



Answer - The reasons for uneven underground water distribution are :

1. **Geological Structure** : Porous rocks in plains absorb more water, whereas hard rocks in plateaus hold less water.
2. **Rainfall Variation** : Areas with heavy rainfall have higher groundwater levels compared to arid regions with low rainfall.
3. **Slope of Land** : Flat lands allow water percolation easily, while steep slopes cause rapid runoff.

Q 46 - Describe the five major characteristics of age structure of population in India.

Answer - The five major characteristics of the age structure of India's population are:

1. **High Young Population** : India has a very large proportion of children (0-14 years) and youth, making it one of the youngest nations.
2. **Demographic Dividend** : The percentage of the working-age population (15-59 years) is increasing, which is beneficial for economic growth.
3. **Dependency Ratio** : Although declining, a significant portion of the population (children and elderly) is still dependent on the working group.
4. **Rising Elderly Population** : Due to improved healthcare facilities and life expectancy, the share of the population above 60 years is gradually increasing.
5. **Large Adolescent Group** : India possesses one of the largest adolescent populations (10-19 years) in the world, offering great potential for the future.

Or

Describe five important characteristics of the linguistic structure of the population in India.

Answer - Five Major Features of the Linguistic Structure of India :

1. **Linguistic Diversity** : India is a country of great linguistic diversity. Hundreds of languages and dialects are spoken here, which change every few kilometres.
2. **Language Families** : The languages spoken here mainly belong to four families, namely Indo-Aryan (73%), Dravidian (20%), Austric, and Sino-Tibetan.



3. **Major Groups** : The Indo-Aryan family is the largest group in North India, while the Dravidian family is dominant in South India (Tamil, Telugu, Kannada, Malayalam).
4. **Scheduled Languages** : The Eighth Schedule of the Indian Constitution recognizes 22 major languages.
5. **Official Language** : Hindi is the official language of the country and is the most widely spoken, while English functions as a link language.





Thank you!

★ We hope you found this material helpful. We wish you the very best for your examination. ✎

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