- 1) . Consider the following statements:

1. No two species have exactly the same niche.
2. Two species can share same habitat.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 19 s
- Explanation
- Status

- **Habitat:**
  • Habitat is a specific place or locality where a community resides.
  • A habitat has a number of niches.
  • Habitat supports a number of species.
  • A number of environmental variables occur in a habitat.
  • It answers "Where are you from and what is your address"
  • Example: Grass land – shared by Great Indian Bustard and Blackbuck
  Niche:
  • It is an ecological component of habitat which is delimited by functioning of an organism.
  • Niche supports a single species.
  • Niche has a specific set of environmental regimes
  • It answers "What is your role and do you eat meat"
  • Example: Niche of Pigmy Hog – Only pigmy hog can live there.
  • Example: Niche of Gangetic Dolphin.
  • Important for the conservation of an animal.
  •
- 2) . Consider the following statements:

1. Halophytes are salt-tolerant or salt-resistant plants
2. The world's first Genetic Garden of Halophytes was setup in Vedaranyam.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 8 s
- Explanation
- Status

- **First Genetic Garden of Halophytes**
  • The world's first Genetic Garden of Halophytes (naturally occurring salt-tolerant plants) was inaugurated at the coastal town of Vedaranyam in Tamil Nadu.
  • The first of its kind garden in the world was inaugurated by Mauritius President Ameenah Gurib Fakim.
  • Halophytes are salt-tolerant or salt-resistant plants. They can thrive and complete their life cycles in soils or waters containing high salt concentrations.
  Significance - cultivation of saline-tolerant crops in light danger of sea intrusion to mitigate impact of climate change as they can provide food for people, fodder for livestock, bio fuel and also can be used for ornamental purposes.

- 3) . Which of the following animal(s) has/have branched antlers?

1. Blackbuck
2. Sambar Deer
3. Chausingha
4. Sangai deer.

Select the correct answer using the code given below:
a . 1 only
b . 1, 2 and 3 only
c . 2, 3 and 4 only
d . 1, 2, 3 and 4 only

- 0 mins 13 s
- Explanation
- Status

- **Branched Antlers:**

1.	**Blackbuck**	• Found inPakistan,IndiaandNepal • The long, ringedhorns, are generally present only on males, though females may develop horns as well • Near Threatened. • it isextinctinBangladesh • The blackbuck inhabits grassy plains and thinly forested areas
2.	**Sambar Deer**	• Only the males have antlers • Vulnerable
3.	**Chausingha**	• This antelope has fourhorns • a smallantelopefound inIndiaandNepal • Vulnerable

4.	**Sangai Deer**	• The**sangai**is an endemic, rare and endangered subspecies ofbrow-antlered deerfound only in Manipur,India. • It is also state animal of Manipur • The dancing deer is found in its natural habitat only at Keibul Lamjao National Park over the floating biomass locally called "phumdi" in the south eastern part ofLoktak Lake. Endangered • Endangered

- 4) . In order for bio magnification to occur, the pollutant must be:

1. Long-lived
2. Static
3. Soluble in water
4. Biologically active

Select the correct answer using the code given below:
a . 1, 2 and 3 only
b . 1 and 4 only
c . 1, 2, 3 and 4
d . 3 and 4 only

- 0 mins 56 s
- Explanation
- Status

- **Biomagnification:**
  • The accumulation of more toxin in the bodies of organisms as move you from producers to primary consumers and then secondary consumers etc
  • Biomagnification is a cumulative increase in the concentrations of a persistent substance (e.g. pesticides, metals, etc.) as it moves up the food chain. This occurs when agricultural, industrial, or human waste pours into the ocean directly or via rivers, sewage, etc. Some of the most dangerous of these toxins settle in the sediment of the sea floor and are consumed by bottom feeders.
  • **The pollutant must be:**
  * Long lived – so that it would stay for long duration
  * Mobile – so that it would move from one organism to other
  * Soluble in fat – so that It would not be decamped/digested
  * Biologically active –
  • **Example:**
  * DDT, PCB
  * Heavy Metals: Copper, Mercury, Cadmium, Lead, Zinc

- 5) . Which of the following state is famously known as “Dev Bhoomi”?

a . Jharkhand
b . Karnataka
c . Himachal Pradesh
d . Jammu and Kashmir

- 0 mins 55 s
- Explanation
- Status

- **Dev Bhoomi**
  Himachal Pradeshi is referred to as "Dev Bhoomi" (literally meaning Abode of Gods) due to its mention in ancient holy texts and occurrence of large number of historical temples in the state. The state has many important pilgrimage centres with prominent Hindu temples like Naina Devi Temple, Vajreshwari Devi Temple, Jwala Ji Temple, Chintpurni, Chamunda Devi Temple, Baijnath Temple, Bhimakali Temple, Bijli Mahadev, Renuka Lake and Jakhoo Temple.

- 6) . World Heritage Sites are places of importance of cultural or natural heritage as described in the UNESCO World Heritage Convention, established in 1972. These Heritage sites from the State of Himachal Pradesh is/are

1. Great Himalayan National Park
2. Kalka - Shimla railway
3. Nanda Devi National Park
4. Valley of Flowers National Park

Select the correct answer using the code given below
a . 1 and 4 only
b . 1 and 2 only
c . 1 and 3 only
d . 1, 2 and 3

- 1 mins 59 s
- Explanation
- Status

- **UNESCO sites in Himachal Pradesh**
  • Great Himalayan National Park
  • Kalka – Simla Railway Network

• 7) . Which one among the followings has the highest “biotic potential”?
a . Bacteria
b . Human being
c . Elephant
d . Chimpanzee

- 1 mins 19 s
- Explanation
- Status

- **Biotic Potential:**
  • Biotic potential, the maximum reproductive capacity of an organism under optimum environmental conditions. It is often expressed as a proportional or percentage increase per year
  • In unlimited resources ideal environmental conditions, a species can produce offspring at the maximum rate. This is called biotic potential.
  Species like bacteria and mice which can produce a large number of offspring in a short time have high biotic potential while larger species like elephants and humans that produce only a few offspring have a low biotic potential.

-

• 8) . Which of the following animal is associated with MIKE programme?
a . Tiger
b . Kashmir Stag
c . Elephant
d . Leopard

- 0 mins 7 s
- Explanation
- Status

- **Monitoring the Illegal Killing of Elephants (MIKE)**
  • The overall goal of MIKE is to provide information needed for elephant range States to make appropriate management and enforcement decisions, and to build institutional capacity within the range States for the long-term management of their elephant populations.
  • More specific objectives within this goal are:
  a) To measure levels and trends in the illegal hunting of elephants;
  b) To determine changes in these trends over time; and
  c) To determine the factors causing or associated with such changes, and to try and assess in particular to what extent observed trends are a result of any decisions taken by the Conference of the Parties to CITES.
  • Project Elephant (PE) was launched by the Government of India in the year 1992 as a

Centrally Sponsored Scheme with following objectives :
▪ To protect elephants, their habitat & corridors
▪ To address issues of man-animal conflict
▪ Welfare of captive elephants

- 9) . Which of the following city declared Gangetic Dolphin as its city animal?

a . Lucknow
b . Patna
c . Guwahati
d . Kolkata

- 0 mins 21 s
- Explanation
- Status

- **Gangetic Dolphin:**
  • Assam's Guwahati became the first city in the country to have its own city animal after Kamrup metropolitan district administration declared Gangetic River dolphin as its official mascot. Gangetic River Dolphin locally in Guwahati is known as 'Sihu' and it is on the verge of extinction.
  • The Ganges river dolphin can only live in freshwater and is essentially blind. They hunt by emitting ultrasonic sounds, which bounces off of fish and other prey, enabling them to "see" an image in their mind.
  • Vikramshila Gangetic Dolphin Sanctuary is located in Bhagalpur District of Bihar, India. The sanctuary is a 50 km stretch of the Ganges River from Sultanganj to Kahalgaon. Designated in 1991, it is the only protected area for the endangered Gangetic dolphins in Asia.
  • The Gangetic dolphins have been declared as the National Aquatic Animal of India.
  • **Threats:**
  * Multiple dams and barriers disrupting free movement of the dolphins.
  * Pollution by fertilisers, pesticides and industrial and domestic effluents, which are responsible for the death of many fish and are likely to have a negative effect on dolphin population.
  * Killing of the animals for their meat or oil (used as catfish bait), and accidental entanglement in fishing nets.
  • For the first time, the government will carry out a comprehensive census of endangered Gangetic dolphins, ghariyals and turtles across the entire Ganges river system to get their official count.
  The study, to be carried out by NMCG under the Centre's ambitious Namami Gange programme, is crucial because populace of the freshwater animals reflect quality of the river water (more the populace, better the water quality).

• 10) . The Global Hunger Index (GHI) is a multidimensional statistical tool used to describe the state of countries' hunger situation. The GHI measures progress and failures in the global fight against hunger is updated once a year. Which one of the following is not the criteria for calculating this Index?
a . The proportion of the undernourished as a percentage of the population
b . The proportion of children under the age of five suffering from wasting
c . The proportion of children under the age of five suffering from stunting
d . The mortality rate of children under the age of Ten

- 0 mins 38 s
- Explanation
- Status

- **Global Hunger Index**
  • The Global Hunger Index (GHI) is a multidimensional statistical tool used to describe the state of countries' hunger situation. The GHI measures progress and failures in the global fight against hunger. The GHI is updated once a year.
  • The Index was adopted and further developed by the International Food Policy Research Institute (IFPRI), and was first published in 2006 with the Welthungerhilfe, a German non-profit organization (NPO). Since 2007, the Irish NGO Concern Worldwide joined the group as co-publisher.
  • The 2016 Global Hunger Index (GHI) report—the eleventh in an annual series—presents a multidimensional measure of national, regional, and global hunger.
  • The GHI combines 4 component indicators:
  1. The proportion of the undernourished as a percentage of the population;
  2. The proportion of children under the age of five suffering from wasting;
  3. The proportion of children under the age of five suffering from stunting;
  4. The mortality rate of children under the age of five.

• 11) . The Nilgiri Tahr, locally known as Nilgiri ibex, is found in which of the following states?
1. Karnataka
2. Tamilnadu
3. Kerala
Select the correct answer using the code given below:
a . 1 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 15 s
- Explanation
- Status

- **Nilgiri Tahr:**
  • Known locally as the **Nilgiri ibex** or simply **ibex**, is an ungulate that is **endemic** to the Nilgiri Hills and the southern portion of the Western Ghats in the states of Tamil Nadu and Kerala in southern India.
  • It is the state animal of Tamil Nadu
  • inhabits the open montane grassland habitat of the South Western Ghats montane rain forests eco region
  • Eravikulam National Park is home to the largest population.
  • Endangered
  Principal threats are habitat loss (mainly from domestic livestock and spread of invasive plants) and poaching.

-

• 12) . The Union Finance Ministry has set up a Public Debt Management Cell (PDMC). Which of the following is/are the major functions/objectives of this PDMC?
1. To Develop and deepening the Bond market in the country.
2. To advise the government of India on matters pertaining to investment, capital market operations, administration of interest rates on small saving.
3. To advice the Government to rationalize the subsidies and cut down wasteful expenditures.
Select the correct answer using the code given below
a . 1 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 11 s
- Explanation
- Status

- **Public Debt Management Cell -** Union Finance Ministry on Oct 4, constituted the Public Debt Management Cell. The cell has been created to streamline public borrowing and ensure better cash management with the objective of deepening bond markets. Currently, the overall in charge of the PDMC will be the Joint secretary (Budget) Department of Economic Affairs, Ministry of Finance.
  • In two years, the PDMC is scheduled to be upgraded to a statutory Public Debt Management Agency
  • The interim arrangement will permit separation of debt management functions from RBI to PDMA in a seamless and gradual manner without market disruptions
  • The PDMA will have only advisory functions to avoid conflict with RBI's statutory functions
  • It will also advise government of India on matters pertaining to investment, capital market operations, administration of interest rates on small savings among others
  • Middle office of the Budget Division will be subsumed into PDMC with immediate effect

• Transition from PDMC to PDMA will be implemented by JIC or Joint Implementation Committee chaired by the Joint Secretary Budget
• Other members of the JIC will be from the RBI and the government
• According to a circular issued by the ministry, the JIC would operate under the supervision of the Monitoring Group on Cash and Debt Management with Secretary Economic Affairs and D-G, RBI as co-chairpersons.
• PDMC will be staffed by debt managers from the RBI budget division, current Middle Office and other government units
• The PDMA seeks to bring India's external borrowings and domestic debt under one roof.

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• 13) . Which of the following is/are adaptive mechanism(s) of plants to avoid adverse conditions?
1. Die back
2. Viviparity mode of reproduction
3. Pneumatophores
4. Dormant
Select the correct answer using the code given below:
a . 1 and 4 only
b . 2 and 3 only
c . 1, 2 and 3 only
d . 1, 2, 3 and 4

- 0 mins 58 s
- Explanation
- Status

- **Adaptive Mechanism:**
  1. **Die back**
  a. A condition in trees or woody plants in which peripheral parts are killed, either by pathogens, parasites or due to **conditions like acid rain and drought.**
  b. Example – Sal Tree
  2. **Viviparity mode of reproduction**
  a. Plants on whose super terranean parts small green plantlets form, fall to the ground, and then develop into adult individuals (vivipary). In many mangrove forests large shoots develop in fruit still hanging on the trees. The germination of standing crops in cereal grains is superficially similar to this phenomenon; however, the ripe grains that begin to grow have already lost their physiological connection with the mother plant.
  b. Other viviparous plants form leafy shoots (saxifrage, stonecrop),bulblets (some meadow grasses), or tubercles (buckwheat) instead of flowers. These viviparous plants inhabit predominantly polar, highland, dry steppe and desert regions where the **vegetative period may be too short for seeds to mature**. In their mode of reproduction they are closely related to plants that propagate vegetatively by means of air nodules on

their bulbletsor by super terranean stolons (toothwort, lilies, and houseleek). A number of viviparous plants (Bryophyllum and some tropicalferns) have aggregates of meristem cells on the leaves, out of which green plantlets grow.

3. **Pneumatophores**

Pneumatophores are specialized root structures that grow out from the water surface and facilitate the aeration necessary for **root respiration** in hydrophytic trees such as many mangrove species (e.g., Avicennia germinans and Laguncularia raecemosa), bald cypresses, and cotton (tupelo) gum (Nyssa aquatica).

4. **Dormant**

Nearly all plants go dormant in winter—whether they're growing indoors or out in the garden. This period of rest is crucial to their survival in order to regrow each year. While plant dormancy during **cold conditions** is important, it may be equally important during times of stress. For instance, during **periods of extreme heat or drought**, many plants (especially trees) will go into a dormancy-like state, shedding their leaves early in order to conserve what little moisture may be available to ensure their survival.

-

• 14) . The process of covering soil surface with materials like plant residues is called mulching. What are the uses of mulching?
1. Reduces the evaporation
2. Reduces the soil erosion
3. Reduces the weed growth
4. Reduces the fertilizer consumption.
Select the correct answer using the code given below:
a . 1 and 3 only
b . 2, 3 and 4 only
c . 1, 2 and 3 only
d . 1, 2, 3 and 4

- 0 mins 55 s
- Explanation
- Status

- • **Mulching:** Any material used (spread) at surface or vertically in soil to assist soil and water conservation and soil productivity is called much.
  • When soil surface is covered with mulch helps to
  a. prevent weed growth,
  b. reduce evaporation and
  c. Increase infiltration of rain water during growing season.
  d. The water infiltrated in soil can be utilized by crops there by crop yields are increased.
  e. Mulches obstruct the solar radiation reaching to soil.
  f. Improving soil aggregation and suability.
  g. Mulch slows (reduce) velocity of runoff
  h. Reduce erosions by wind and water is an important reason for using mulches in dry

regions.
i. Increase water content and lower the evaporation.
j. Decrease soil temperature while clear plastic mulches increase soil temperature.
k. **Decompose the mulching material and make it as manure so reduces the amount of fertilizer required.**

- 15) . This hill station is located on the foothills of the Dhauladhar ranges of the Western Himalayas and is among the 160 locations in the world that bear topographical resemblance with Switzerland. Which of the following place has been described as Mini Switzerland of India?

a . Simla
b . Darjeeling
c . Mussoorie
d . Khajjiar

- 0 mins 14 s
- Explanation
- Status

- **Mini Switzerland**
  Khajjiar is among the 160 locations in the world that bear topographical resemblance with Switzerland.It is a hill station in Chamba district, Himachal Pradesh, India, located approximately 24 km from Dalhousie. Khajjiar sits on a small plateau with a small stream-fed lake in the middle that has been covered over with weeds. The hill station is surrounded by meadows and forests. It is about 6,500 feet (2,000 m) above sea level in the foothills of the Dhauladhar ranges of the Western Himalayas and peaks can be seen in the distance.

- 16) . Consider the following statements

1. Its south west point is known as NJ9842.
2. It is the longest Glacier in Karakoram Range.
3. It is the Second Largest in the World's Non-Polar Areas.

Which of the following glacier has the above mentioned features?

a . Gangotri
b . Pindari
c . Siachen
d . Zemu

- 0 mins 14 s
- Explanation
- Status

- **Siachen Glacier**
  The Siachen Glacier with all major passes, is currently under the administration of India since 1984 and forms part of the Leh district of the Ladakh division. It is located in the eastern Karakoram range in the Himalaya Mountains at about 35.421226°N 77.109540°E, just northeast of the point NJ9842 where the Line of Control between India and Pakistan ends. At 76 km (47 mi) long, it is the longest glacier in the Karakoram and second-longest in the world's non-polar areas. The entire Siachen Glacier, with all major passes, is currently under the administration of India since 1984, Pakistan controls the region west of Saltoro Ridge with Pakistani posts located 3,000 ft below 100 Indian posts on Saltoro Ridge. The Siachen Glacier lies immediately south of the great drainage divide that separates the Eurasian Plate from the Indian subcontinent in the extensively glaciated portion of the Karakoram sometimes called the "Third Pole".

-

• 17) . Nepenthes also known as tropical pitcher plants or monkey cups, a genus of carnivorous plants, is distributed in which of the following regions?
a . Windward side of Western Ghats
b . Western Himalayas – non permafrost region
c . Forests in central regions of the country
d . Hills of Meghalaya

- 0 mins 19 s
- Explanation
- Status

- Nepenthes khasiana is a tropical pitcher plant of the genus Nepenthes. It is the only Nepenthes species native to India. It is thought to attract prey by means of blue fluorescence. The species has a very localised distribution and is rare in the wild. Isolated populations are known to occur in the Jarain area of the Jaintia Hills and the Baghmara area of the Garo Hills, adjacent to the Khasi Hills region of Meghalaya.

-

• 18) . Consider the following statements
1. Only half of the energy is transferred from one trophic level to the next level.
2. The energy flow among trophic levels is always unidirectional.
Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 38 s

- Explanation
- Status

- Only 10% of the energy will be passed on in an ecosystem from one **trophic level** to the next.

- 19) . Consider the following statements

1. The evergreen coniferous trees like spruce, pine and firs dominates the vegetation.
2. It is also known as boreal forests.

The above mentioned statements are characteristics of which of the following biomes?

a . Tundra
b . Temperate deciduous forests
c . Taiga
d . Temperate grassland

- 0 mins 46 s
- Explanation
- Status

- They are the characteristic features of Coniferous biomes or Taiga.

- 20) . In October 2016, the UN agency International Civil Aviation Organization (ICAO) finalized an agreement among its 191 member nations to address the more than 458 Mt of carbon dioxide emitted annually by international passenger and cargo flights. In this context consider the following statements regarding this agreement

1. The agreement will use an offsetting scheme called CORSIA (the Carbon Offsetting and Reduction Scheme for International Aviation) under which forestry and other carbon-reducing activities are directly funded
2. The first phase of the airline agreement, which is voluntary, covers 2021 to 2027 and Participation becomes mandatory from 2028 through 2035.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 Nor 2

- 0 mins 9 s
- Explanation
- Status

- **Aircraft Emission Pact**
  • The United Nations' aviation arm overwhelmingly ratified an agreement to control global warming emissions from international airline flights, the first climate-change pact to set worldwide limits on a single industry. The agreement, adopted overwhelmingly by the 191-nation International Civil Aviation Organization at a meeting in Montreal, sets airlines' carbon emissions in the year 2020 as the upper limit of what carriers are allowed to discharge.
  • Airlines that exceed that limit in future years, as most are expected to do, will have to offset their emissions growth by buying credits from other industries and projects that limit greenhouse gas emissions. Countries must still act on their own to put the agreement's limits into effect.
  • The first phase of the airline agreement, which is voluntary, covers 2021 to 2027. Participation becomes mandatory from 2028 through 2035. Some countries were still trying to decide whether to participate in the voluntary phase.
  • So far, 65 countries, including the United States and China, have indicated they will participate. That includes the European Union's 44-nation aviation conference. However, Russia doesn't currently plan to participate in the voluntary phase, and India expressed reservations with portions of the pact.

- 21) . Consider the following statements

1. Mugger crocodile is the largest of the crocodile species found in India
2. Gharial is listed as critically endangered in IUCN Red List

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 10 s
- Explanation
- Status

- • The three primary species of crocodiles found in India are Mugger (or marsh) crocodile, the Saltwater (coast) crocodile and Gharial.
  • The Saltwater Crocodiles are the largest among the three.
  • Gharial is listed as critically endangered in IUCN Red List in 2007.

-

- 22) . The Global Gender Gap Index is an index designed to measure gender equality. The report's Gender Gap Index ranks countries according to calculated gender gaps. It is being released by which of the following agency?

a . United Nations Development Programme (UNDP)
b . World Bank
c . UN Women

d . World Economic Forum

- 0 mins 40 s
- Explanation
- Status

- **Global Gender Gap Report**
  The Global Gender Gap Report was first published in 2006 by the World Economic Forum. The Global Gender Gap Index is an index designed to measure gender equality. The report's Gender Gap Index ranks countries according to calculated gender gaps. The assumption is that women are strictly disadvantaged compared to men and as such, only measures where women are traditionally disadvantaged to men are used. Information about gender imbalances to the advantage of women is explicitly prevented from affecting the score so, for example, the indicator "number of years of a female head of state (last 50 years) over male value" would score 1 if the number of years was 25, but would still score 1 if the number of years was 50. Due to this methodology, gender gaps that favour women over men are reported as equality.

- 23) . Consider the following statements regarding biotic interactions

1. In commensalism, one species benefits and the other are unaffected.
2. In competition both the interacting species are harmed.
3. In amensalism, one species is harmed and the other is unaffected.
4. In mutualism both the species benefit.

Which of the statements given above is/are correct?
a . 1 and 3 only
b . 2 and 4 only
c . 1, 2 and 3 only
d . 1, 2, 3 and 4

- 1 mins 0 s
- Explanation
- Status

- • Commensalism e.g : Epiphytes and trees
  • Competition eg.: Cheetahs and Lions as they feed on similar prey
  • Amensalism e.g: Penicillium and Bacteria
  • Mutualism e.g.: Bee and Flowers

- 24) . "The Sholas" refer to which of the following type of forests?

a . Montane Evergreen Forests

b . Tropical Evergreen Forests
c . Tropical Deciduous Forests
d . Temperate Forests

- 0 mins 11 s
- Explanation
- Status

- • Sholas are a local name for patches of stunted tropical montane forest found in higher montane regions of South India especially Nilgiris.
  • The shola-forest and grassland complex has been described as a climatic climax vegetation with forest regeneration and expansion restricted by climatic conditions such as frost or soil characteristics.

-

• 25) . Consider the following statements
1. Trees have broad trunks and act as water storing devices
2. Masai tribesmen reside in the region.
3. The climax community is controlled by fire.
These are the characteristic features of which of the following climate zones?
a . Hot deserts
b . Tropical Grasslands
c . Temperate Grasslands
d . Mediterranean region.

- 0 mins 34 s
- Explanation
- Status

- These are the characteristic features of Savannahs.

-

• 26) . It is a high mountain pass and located on the Indian National Highway 1D and provides a vital link between Ladakh and Kashmir Valley. It is often closed during winter, though the Border Roads Organisation (BRO) is working to extend traffic to most parts of the year. The pass referred here is
a . Banihal
b . Zoji La
c . Karakorum
d . Fotu La

- 0 mins 33 s

- Explanation
- Status

- **Zoji La**
  Zoji La is a high mountain pass in Jammu and Kashmir, India, located on the Indian National Highway 1D between Srinagar and Leh in the western section of the Himalayan mountain range. Zoji La is 9 km (5.6 mi) from Sonamarg and provides a vital link between Ladakh and Kashmir Valley. It runs at an elevation of approximately 3,528 metres (11,575 ft), and is the second highest pass after Fotu La on the Srinagar-Leh National Highway. It is often closed during winter, though the Border Roads Organisation (BRO) is working to extend traffic to most parts of the year. During the Indo-Pakistani War of 1947, Zoji La was seized by Pakistani fighters in 1948 in their campaign to capture Ladakh. The pass was captured by Indian forces on 1 November in an assault codenamed Operation Bison, which achieved success primarily due to the surprise use of tanks, then the highest altitude at which tanks had operated in combat in the world.

- 27) . Which of the following place is known as "Jewel in the crown of Kashmir"?

a . Kashmir Valley
b . Mata Vasihnao Devi Temple
c . Dal Lake
d . Shalimar Bagh

- 0 mins 11 s
- Explanation
- Status

- **Dal Lake**
  • Dal is a lake in Srinagar (Dal Lake is a misnoym as Dal in Kashmiri means lake), the summer capital of Jammu and Kashmir. The urban lake, which is the second largest in the state, is integral to tourism and recreation in Kashmir and is named the "Jewel in the crown of Kashmir" or "Srinagar's Jewel". The lake is also an important source for commercial operations in fishing and water plant harvesting.
  • Multiple theories explaining the origin of this lake have been formulated. One version is that it is the remnants of a post-glacial lake, which has undergone drastic changes in size over the years and the other theory is that it is of fluvial origin from an old flood spill channel or ox-bows of the Jhelum River.
  • Shalimar Bagh is a Mughal garden in Srinagar, linked through a channel to the northeast of Dal Lake, on its right bank located on the outskirts of Srinagar city in Jammu and Kashmir. Its other names are Shalimar Garden, Shalimar Bagh, Farah Baksh and Faiz Baksh, and the other famous shore line garden in the vicinity is Nishat Bagh.

- 28) . Consider the following statements about “Southern Bird wing”

1. It is endemic to India.
2. It has been declared as state butterfly of Karnataka.
3. This status was offered to save the declining species.

Which of the statements given above is/are correct?

a . 1 only
b . 1 and 2 only
c . 1 and 3
d . 1, 2 and 3

- 0 mins 7 s
- Explanation
- Status

- Southern Birdwing has been declared as state butterfly of Karnataka because it resembles the flag of Karnataka which is a combination of red and yellow.

- 29) . Consider the following statements about living mulch crops

1. They regulate the soil temperature and reduce the weed.
2. They compete with the main crop for nutrients and water.
3. They control soil erosion.

Which of the statements given above is/are correct?

a . 1 and 3 only
b . 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 26 s
- Explanation
- Status

- • A living mulch/mulch crop is inter planted or under sown with a main crop, and intended to serve the purposes of a mulch such as weed suppression and regulation of soil temperature.
  • Other benefits of mulches are protecting soil from water and wind erosion.
  • Some living mulches were found to increase populations of the natural enemies of crop pests.
  • Legumes used as living mulches also provide nitrogen fixation, reducing the need for fertilizer.

- 30) . Consider the following statements regarding the International Criminal Court (ICC)

1. The ICC has the jurisdiction to prosecute individuals for the international crimes of genocide, crimes against humanity, and war crimes.
2. The ICC was established under the resolution of UN Security council (UNSC) and is the primary judicial branch of the United Nations (UN).

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 Nor 2

- 0 mins 42 s
- Explanation
- Status

- **International Criminal Court**

  • The International Criminal Court (ICC or ICCt) is an intergovernmental organization and international tribunal that sits in The Hague in the Netherlands. The ICC has the jurisdiction to prosecute individuals for the international crimes of genocide, crimes against humanity, and war crimes. The ICC is intended to complement existing national judicial systems and it may therefore only exercise its jurisdiction when certain conditions are met, such as when national courts are unwilling or unable to prosecute criminals or when the United Nations Security Council or individual states refer investigations to the Court. The ICC began functioning on 1 July 2002, the date that the Rome Statute entered into force. The Rome Statute is a multilateral treaty which serves as the ICC's foundational and governing document. States which become party to the Rome Statute, for example by ratifying it, become member states of the ICC. Currently, there are 124 states which are party to the Rome Statute and therefore members of the ICC.

  • The Office of the Prosecutor has opened ten official investigations and is also conducting an additional nine preliminary examinations. Thus far, 39 individuals (all Africans) have been indicted in the ICC, including Ugandan rebel leader Joseph Kony, Sudanese president Omar al-Bashir, Kenyan president Uhuru Kenyatta, Libyan leader Muammar Gaddafi, and Ivorian president Laurent Gbagbo.

  • On 7 October 2016, Burundi announced that it would leave the ICC, after the court began investigating political violence in that nation. In the subsequent two weeks, South Africa and Gambia also announced their intention to leave the court, with Kenya and Namibia reportedly also considering departure. All three nations cited the fact that all 39 people indicted by the court over its history have been African and that the court has made no effort to investigate war crimes tied to the 2003 invasion of Iraq.

- 31) . Recently the Petroleum Ministry has launched the National Seismic Programme in Odisha. In this context consider the following statements regarding this programme.

1. It aims to undertake a fresh appraisal in all sedimentary basins across India to have a better

understanding of the hydrocarbon potential of India.
2. Under this programme, Oil and Natural Gas Corporation (ONGC) and Oil India Limited (OIL) have been entrusted to conduct 2D seismic Acquisition, Processing and Interpretation (API) across India.
3. It also aims to establish the radar system across the country to provide the better predictions for Natural disasters such as Earthquake, Volcanic Eruption as well as Tsunami.
Which of the statements given above is/are correct?
a . 1 only
b . 1 and 2 only
c . 1 and 3 only
d . 1, 2 and 3

- 0 mins 7 s
- Explanation
- Status

- **National Seismic Programme**
  • The NSP aims to undertake a fresh appraisal in all sedimentary basins across India, especially where no/scanty data is available, to have a better understanding of the hydrocarbon potential of India, said a release.
  • Under this programme, Oil and Natural Gas Corporation (ONGC) and Oil India Limited (OIL) have been entrusted to conduct 2D seismic Acquisition, Processing and Interpretation (API) across India.
  • The ONGC has been assigned to carry out the survey of 40,835 Line Kilo Meter (LKM) in onland part of 26 sedimentary basins in 18 States and Union Territories including Odisha's Mahanadi basin, the release added.
  • The OIL has been assigned to carry out 2D seismic API of 7,408 LKM in Assam, Manipur, Arunachal Pradesh, Mizoram and Nagaland.
  • The survey project will be completed by March 2019.
-

• 32) . Consider the following conditions of water
1. Ample light
2. High turbidity
3. Warm temperature around 25°C
Which of the above conditions is/are generally necessary for the growth of Coral reefs?
a . 3 only
b . 1 and 2 only
c . 1 and 3
d . 1, 2 and 3

- 0 mins 15 s
- Explanation
- Status

- • Sunlight - Corals rarely develop in water deeper than 165 feet (50 meters). Corals depend on the zooxanthellae (algae) that grow and since these algae need sunlight to survive, corals also need sunlight to survive.
  • Clear water - Corals need clear water that lets sunlight through i.e less turbidity.
  • Warm water temperature - Corals generally live in water temperatures of 68–90° F or 20–32° C.
  • Clean water - Corals are sensitive to pollution and sediments.
  • Saltwater - Corals don't live in areas where rivers drain fresh water into the ocean. They need saltwater.

-

- 33) . Consider the following statements about Eutrophication in the aquatic ecosystem

1. Biological Oxygen Demand increases due to eutrophication.
2. A riparian buffer helps in reducing the eutrophication

Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 55 s
- Explanation
- Status

- • Biological oxygen demand (BOD) is the amount of oxygen required for the decomposition of organic compounds by microorganisms in a given amount of water.
  • A higher BOD indicates a lower level of dissolved oxygen.
  • An algae bloom occurs as a result of Eutrophication. When the algae begin to die oxygen-demanding bacteria take over the ecosystem, decomposing the algae and using up dissolved oxygen in the process.
  • As these bacteria increase in number they increase the BOD of the ecosystem.

-

- 34) . Consider the following statements regarding Jammu and Kashmir

1. It is the only state in India having two capitals such as Summer and Winter capitals.
2. In India the Indus River is flowing through Jammu and Kashmir only.

Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 Nor 2

- 0 mins 37 s

- Explanation
- Status

- **Jammu and Kashmir Capital**
  1) Jammu (October–March)
  2) Srinagar (March–October)
  Himachal Pradesh
  Dharamsala is the winter capital of the Indian province of Himachal Pradesh. Dharamshala has been selected as one of the hundred Indian cities to be developed as a smart city under PM Narendra Modi's flagship Smart Cities Mission. On 19 January 2017, Chief Minister Virbhadra Singh declared Dharamshala as the winter capital of Himachal Pradesh state Himachal Pradesh second state of India having two capitals after Jammu & Kashmir. The Dalai Lama's residence and the headquarters of Central Tibetan Administration (the Tibetan government in exile) are in Dharamshala. Summer capital is Shimla.
  Indus River
  The Indus River flows from Tibet, into Jammu and Kashmir (India) and the rest of Pakistan. Indus River - Gilgit-Baltistan, Jammu and Kashmir, Khyber Pakhtunkhwa, Punjab, Sindh, Tibet.

- 35) . Consider the following dams

1. Uri Dam
2. Baglihar Dam
3. Dul Hasti Dam

Which of the mentioned above dams is/are built on Chenab River?

a . 1 only
b . 2 and 3 only
c . 1 and 2 only
d . 1, 2 and 3

- 0 mins 6 s
- Explanation
- Status

- **Hydro Electric Projects in Kashmir**
  • Uri Dam is a 480 MW hydroelectric power station on the **Jhelum** River near Uri in Baramula district of the Jammu and Kashmir.
  • Baglihar Dam is a run-of-the-river power project on the **Chenab** River in the southern Doda district of the Indian state of Jammu and Kashmir.
  • Dul Hasti is a 390 MW hydroelectric power plant in Kishtwar district of Jammu and Kashmir, India built by NHPC. The power plant is a run-of-the-river type on the swift-flowing **Chenab** River in the Kishtwar region.

- 36) . Consider the following statements

1. Major estuaries in India occurs on the east coast.
2. Continental shelves along the east coast of India is wider than that of the west coast.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 14 s
- Explanation
- Status

- • As many rivers are east flowing and the coast is a emergence coast where delta forms easily, major estuaries in India occurs on the east coast.
  • As the west coast is a submergence coast due to faulting, the continental shelves along the west coast of India is wider that of the east coast.

- 37) . Consider the following statements

1. Adaptation to water logged soil
2. Pneumatophores for respiration
3. Oviparous reproduction
4. Leaves with salt secreting glands

Which of the above statements are characteristics of mangrove trees?

a . 1, 2 and 3 only
b . 1, 3 and 4 only
c . 1, 2 and 4 only
d . 1, 2, 3 and 4

- 1 mins 37 s
- Explanation
- Status

- Mangroves are viviparous i.e rather than producing dormant seeds that later develop into plants the embryos of Mangroves grows first to break through the seed coat then out of the fruit wall while still attached to the parent plant.

- 38) . Consider the following statements

1. High species evenness in the ecosystem means it is dominated by the top predator species.
2. Greater the biodiversity, more unstable will be the ecosystem.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 26 s
- Explanation
- Status

- • Evenness is a measure of the relative abundance of the different species of an area. High species evenness in the ecosystem means all species are more or less evenly distributed.
  • Biodiversity ensures the stability of the ecosystem.

-

- 39) . The economy of the state is getting impetus by fruit production alone and that's why the State is known as "Fruit Bowl of India". Which of the following state has such nickname?

a . Uttarakand
b . Maharastra
c . Jammu and Kashmir
d . Himachal Pradesh

- 0 mins 13 s
- Explanation
- Status

- **Fruit Bowl of India -** Due to production of so many varieties of fruits Himachal Pradesh is also called Fruit Bowl of India. Among all fruits Apple production adds maximum towards economy. Alone fruit production adds 3 billion annual turn over to the state's economy.

-

- 40) . Which of the following pair is not correctly matched?

Phylum Example

a . Mollusk - Snail
b . Crustaceans - Crabs
c . Chordata - Birds
d . Arthopods - Hydra

- 0 mins 19 s
- Explanation
- Status

- • Arthropods includes invertebrate animal having an exoskeleton a segmented body, and jointed legs like Butterfly and scorpion.
  • Hydra belongs to phylum Cnidaria.

• 41) . Consider the following statements about IUCN Red List
1. Pink pages in the publication are for Critically Endangered Species.
2. Green pages are for Endangered species.
Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 37 s
- Explanation
- Status

- Green pages are used for those species that were formerly endangered, but no longer threatened now.

-

• 42) . In all, 197 countries, including India, China and the United States, agreed to a timeline to reduce the use of HFCs by roughly 85 per cent of their baselines by 2045 at Kigali recently. The Kigali agreement is significant that it proposes to amend the
a . Kyoto Protocol
b . Montreal Protocol
c . Cartagena Protocol
d . Nagoya Protocol

- 0 mins 11 s
- Explanation
- Status

- **Kigali Agreement**
  • A historic global climate deal was reached in Kigali, Rwanda at the Twenty-Eighth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP28). The so called Kigali Amendment which amends the 1987 Montreal Protocol aims to phase out Hydro fluorocarbons (HFCs), a family of potent greenhouse

gases by the late 2040s. Under Kigali Amendment, in all 197 countries, including India have agreed to a timeline to reduce the use of HFCs by roughly 85% of their baselines by 2045.
• India has mandated five manufacturers — who fully control the domestic market — to capture and incinerate HFC-23 so that it is not released into the atmosphere. This action will eliminate release of HFC-23 equivalent to about 100 million tonne of Carbon dioxide emissions over the next 15 years.

•

• 43) . Consider the following statements regarding the Secretary-General of the United Nations
1. The Secretary-General is the head of the United Nations Secretariat and also acts as the de facto spokesperson and leader of the United Nations.
2. The Secretary-General is appointed by the General Assembly upon the recommendations of the Security Council.
3. The appointee may be a citizen of any country including the Security Council's five permanent members.
Which of the statements given above is/are correct?
a . 1 only
b . 1 and 2 only
c . 1 and 3 only
d . 1, 2 and 3

- 0 mins 21 s
- Explanation
- Status

- **UN SG**
  The Secretary-General of the United Nations (UNSG or just SG) is the head of the United Nations Secretariat, one of the principal organs of the United Nations. The Secretary-General also acts as the de facto spokesperson and leader of the United Nations. Article 97 of the United Nations Charter determines that the Secretary-General is "appointed by the General Assembly upon the recommendation of the Security Council." As the recommendation must come from the Security Council, any of the five permanent members of the Council can veto a nomination. The appointee may not be a citizen of any of the Security Council's five permanent members. The Secretary-General is customarily appointed for a five-year term, although the length of the term is discretionary. The current Secretary-General is António Guterres, appointed by the General Assembly on 13 October 2016.

•

• 44) . Consider the following statements about Vermins
1. They are wild animals which are harmful to crops, farm animals, or carrier of diseases.

2. They are included in Schedule V of the Wildlife Protection Act, 1972.
3. Nilgai was recently classified as vermin.
Which of the statements given above is/are correct?
a . 1 only
b . 1 and 2 only
c . 1 and 3 only
d . 1, 2 and 3

- 1 mins 19 s
- Explanation
- Status

- • Animals in Schedule I and part II of Schedule II are provided absolute protection.
  • The animals in Schedule III and Schedule IV are protected butpenaltiesare less.
  • Schedule V includes vermins that can be culled .e.g.: Common crow, Nilgai and Rats only.
  • Schedule VI contains the plants that are prohibited from cultivation.

-

• 45) . With reference to Environment Impact Assessment (EIA), Consider the following statements
1. Comprehensive EIA records environment impact data from all four seasons but Rapid EIA collects only one season data.
2. The public hearing will be conducted by State Pollution Control Board.
Which of the statements given above is/are correct?
a . I only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 31 s
- Explanation
- Status

- Rapid EIA is for speedier appraisal process. It is acceptable if it does not compromise on the quality of decision-making.

-

• 46) . Which of the following is/are unsustainable agricultural practises?
1. Mono-cropping
2. Dry land Farming
3. Jhum cultivation

4. Inter-cropping
Select the correct answer using the code given below.
a . 1 and 3 only
b . 3 only
c . 1, 2 and 3 only
d . 1, 2, 3 and 4

- 0 mins 32 s
- Explanation
- Status

- • Monocropping is the agricultural practice of growing a single crop year after year on the same land. It can damage the soil ecology, provide an unbuffered niche for parasitic species and increase crop vulnerability to opportunistic insects, plants, and microorganisms.
  • Jhum cultivation, also known as the slash and burn agriculture, is the process of growing crops by first clearing the land of trees and vegetation and burning them thereafter.

-

• 47) . Consider the following statements regarding Palamu Tiger Reserve
1. It is the only tiger reserve in the state of Jharkhand.
2. The tiger population is extremely scarce and counting the population is difficult due to naxal activities.
Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 Nor 2

- 0 mins 8 s
- Explanation
- Status

- **Palamau Tiger Reserve**
  The Palamau Tiger Reserve is among one of the nine original tiger reserves in India and the only one in the state of Jharkhand, India.

-

• 48) . The state of Jharkhand includes which of the following steel plants of India?
1. TISCO
2. Bhilai

3. Bokaro
Select the correct answer using the code given below
a . 1 only
b . 2 and 3 only
c . 1 and 3 only
d . 1, 2 and 3

- 0 mins 11 s
- Explanation
- Status

- **Steel plants**

Tata Iron and Steel Corporation (TISCO)	Jamshedpur, Jharkhand	Tata Steel
Visvesvaraya Iron and Steel Plant	Bhadravati, Karnataka	SAIL
Bhilai Steel Plant	Chattisgarh	SAIL
Durgapur Steel Plant	Durgapur, West Bengal	SAIL
Bokaro Steel Plant	Jharkhand	SAIL
Chandrapur Ferro Alloy Plant	Chandrapur, Maharashtra	SAIL
IISCO Steel Plant	Asansol, West Bengal	SAIL
Salem Steel Plant	Tamil Nadu	SAIL
Rourkela Steel Plant	Odisha	SAIL
Vijaynagar Steel Plant	Hospet, Bellary, Karnataka	Jindal Steel and Power
Visakhapatnam Steel Plant	Visakhapatnam, Andhra Pradesh	Rashtriya Ispat Nigam Limited

- 49) . “The variability among living organisms from all sources including terrestrial, marine and other ecosystems and the ecological complexes of which they are part which includes diversity within species, between species of ecosystems”.
Which of the following is correctly described by the above passage?
a . Zoological diversity
b . Biological diversity
c . Genetic diversity
d . Geographical diversity

- 0 mins 24 s
- Explanation
- Status

- Biodiversity, a contraction of "biological diversity," generally refers to the variety and variability of life on Earth. One of the most widely used definitions defines it in terms of the variability within species, between species and between ecosystems. It is a measure of the variety of organisms present in different ecosystems. This can refer to genetic variation, ecosystem variation, or species variation (number of species) within an area, biome, or planet. Terrestrial biodiversity tends to be greater near the equator, which seems to be the result of the warm climate and high primary productivity. Biodiversity is not distributed evenly on Earth. It is richest in the tropics. Marine biodiversity tends to be highest along coasts in the Western Pacific, where sea surface temperature is highest and in the mid-latitudinal band in all oceans. There are latitudinal gradients in species diversity.Biodiversity generally tends to cluster in hotspots, and has been increasing through time, but will be likely to slow in the future.

-

- 50) . The salt-water crocodile is found along the:

a . Eastern coast and the Andaman and Nicobar Islands
b . Western coast and Lakshadweep islands
c . Gulf of Kutch and Gulf of Khambat along with some areas near Gulf of Mannar
d . All the Above

- 0 mins 7 s
- Explanation
- Status

- • The saltwater crocodile is one of the three crocodilians found in India, the other two being the more regionally widespread, smaller mugger crocodile and the narrow-snouted, fish-eating gharial.
  • Apart from the eastern coast of India, the saltwater crocodile is extremely rare on the Indian subcontinent.
  • A large population is present within the Bhitarkanika Wildlife Sanctuary of Odisha and they are known to be present in smaller numbers throughout the Indian and Bangladeshi portions of the
  Sundarbans. The saltwater crocodile also persists in bordering Bangladesh as does the mugger and gharial.
  • Populations are also present within the mangrove forests and other coastal areas of the Andaman and Nicobar Islands in India.
  • A project for breeding crocodiles, started in 1974, has been instrumental in saving the crocodile from extinction.
  (Source: Shankar IAS Environment, MOEF)

- 51) . Consider the following statements

1. Epiphytes absorb nutrients from the host plants.
2. Water Hyacinth is a common invasive species.

3. Snow protects the seeds from excessive cold.
Which of the statements given above is/are correct?
a . 1 only
b . 2 and 3 only
c . 1 and 3 only
d . 1, 2 and 3

- 1 mins 17 s
- Explanation
- Status

- Epiphytes grow harmlessly upon another plant (such as a tree) and derives its moisture and nutrients from the air, rain, and sometimes from debris accumulating around it. They grow on other plants for physical support and do not necessarily negatively affect the host.

-

• 52) . With reference to the Padmaja Naidu Himalayan Zoological Park, consider the following statements:
1. It is the largest high altitude zoo in the country, located in Jammu and Kashmir.
2. It is recognized for its conservation programmes of Red Panda, Snow Leopards and Tibetan Wolf.
Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 6 s
- Explanation
- Status

- • Padmaja Naidu Himalayan Zoological Park was formerly known as Himalayan Zoological Park and was established in 1958 in **Darjeeling (West Bengal)** as a joint venture of Govt. of India (Department of Science and Technology) and Govt. of West Bengal (Department of Education).
  • This is the only specialized Zoo in the country and in internationally recognized for its conservation breeding programmes of Red Panda, Snow Leopards, Tibetan Wolf and other highly endangered animal species of Eastern Himalaya.
  • The Zoological Park falls under the category of **small zoos** as per Central Zoo Authority's classification but is the **largest high altitude zoo in the country.**
  (Source: MOEF)

- 53) . Consider the following statements regarding HRIDAY scheme

1. The major aim of this scheme is bringing together urban planning, economic growth and heritage conservation in an inclusive manner to preserve the heritage character of each Heritage City.
2. This is a scheme implemented by the Ministry of Culture.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 Nor 2

- 0 mins 18 s
- Explanation
- Status

- **HRIDAY**
  The Ministry of Urban Development, Government of India, launched the National Heritage City Development and Augmentation Yojana (HRIDAY) scheme on 21st January, 2015, with a focus on holistic development of heritage cities. The scheme aims to preserve and revitalise soul of the heritage city to reflect the city's unique character by encouraging aesthetically appealing, accessible, informative & secured environment. With a duration of 4 years (Completing in November, 2018) and a total outlay of INR 500 Crores, the Scheme is being implemented in 12 identified Cities namely, Ajmer, Amaravati, Amritsar, Badami, Dwarka, Gaya, Kanchipuram, Mathura, Puri, Varanasi, Velankanni and Warangal. The scheme is implemented in a mission mode. The Scheme supports development of core heritage infrastructure projects which shall include revitalization of urban infrastructure for areas around heritage assets identified / approved by the Ministry of Culture, Government of India and State Governments. These initiatives shall include development of water supply, sanitation, drainage, waste management, approach roads, footpaths, street lights, tourist conveniences, electricity wiring, landscaping and such citizen services.

- 54) . Recently there was news regarding UDAN scheme. The scheme is related with which of the following one?

a . Providing LPG subsidy to the rural people
b . Providing infrastructural developments in the Red Corridor areas
c . Promoting regional Connectivity scheme
d . Encouraging Entrepreneurships among the tribal women population

- 0 mins 33 s
- Explanation

- Status

- **UDAN scheme**
  • Ude Desh Ka Aam Naagrik
  • The Ministry of Civil Aviation took a major step today towards making flying a reality for the small town common man. It launched the Ministry's much awaited Regional Connectivity Scheme " UDAN" in New Delhi. UDAN is an innovative scheme to develop the regional aviation market. It is a market-based mechanism in which airlines bid for seat subsidies. This first-of-its-kind scheme globally will create affordable yet economically viable and profitable flights on regional routes so that flying becomes affordable to the common man even in small towns.

-

- 55) . Which of the following bird species are migratory in nature?

1. Pelican
2. Flamingo
3. Pintail Duck
4. Curlew

Select the correct answer using the code given below.
a . 1 and 3 only
b . 1 and 4 only
c . 2, 3, and 4 only
d . 1, 2, 3 and 4

- 0 mins 11 s
- Explanation
- Status

- Migratory Birds include Stork, Flamingo, Pintail Duck, Curlew and Pelican. They migrate in India in the winter season every year.
  (source: UGC-Textbook of Environmental Studies by Erach Bharucha)

-

- 56) . How is social forestry different from agro-forestry?

1. In agro-forestry, trees are grown instead of crops on farms and in social forestry, NGOs take responsibility for afforestation of arid and fallow lands.
2. While the community owns the resources in social forestry, agro forestry produce is privately owned.

Select the correct answer using the codes below:
a . 1 only
b . 2 only
c . Both 1 and 2

d . Neither 1 Nor 2

- 0 mins 33 s
- Explanation
- Status

- • Social forestry is defined as “Forestry outside the conventional forests which primarily aim at providing continuous flow of goods and services for the benefit of people. This definition implies that the production of forest goods for the needs of the **local people** is Social forestry. Thus, social forestry aims at growing forests of the choice of the local population.
  • On the other hand, agro-forestry includes a variety of land uses where woody species are **grown in combination with crops**. For instance crops can be grown in between rows of saal, teak etc.
  (Source: MoEF)

-

• 57) . Which of the following city has been popularly known as Steel City of India or Pittsburgh of India?
a . Dhanbad
b . Ranchi
c . Bokaro
d . Jamshedpur

- 0 mins 32 s
- Explanation
- Status

- **Steel City**
  • Jamshedpur is the most populous urban agglomeration in the Indian state of Jharkhand. It is also the first planned industrial city of India. It is located on the Chota Nagpur plateau and is surrounded by the picturesque Dalma Hills. The city is bordered by the rivers Subarnarekha and Kharkai on the north and west parts of the city. Jamshedpur is home to world's tenth largest steel manufacturing company, Tata Steel.
  • This city houses the largest iron and steel producer of the country - TATA STEEL erstwhile known as TISCO. Pittsburgh in America has lots of steel plants in it. And Jamshedpur, India was the first place a steel manufacturing unit was setup , it is still one of the largest private sector steel plants in Asia , so it is called Pittsburgh of India.

-

• 58) . Consider the following statements
1. Most of Jharkhand is located on the elevated Chotanagpur plateau which is the reason for

state's pleasant climate throughout the year.
2. Parasnath, a mountain peak in the Parasnath Range and located towards the eastern end of the Chota Nagpur Plateau, is the highest peak in Jharkhand
Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 Nor 2

- 0 mins 12 s
- Explanation
- Status

- **Jharkhand**
  The Chota Nagpur Plateau is a plateau in eastern India, which covers much of Jharkhand state as well as adjacent parts of Odisha, West Bengal, Bihar and Chhattisgarh.

-

- 59) . Main inputs of phosphorous as a nutrient in soil come from:

1. Rainfall
2. Phosphorous fixing bacteria
3. Weathering of soil
4. Atmospheric gas exchanges with soil

Select the correct answer using the codes below:
a . 1 and 2 only
b . 1 and 3 only
c . 2 and 4 only
d . 1, 2, 3 and 4

- 0 mins 43 s
- Explanation
- Status

- The phosphorus cycle is the biogeochemical cycle that describes the movement of phosphorus through the lithosphere, hydrosphere, and biosphere. Unlike many other biogeochemical cycles, the atmosphere does not play a significant role in the movement of phosphorus, because phosphorus and phosphorus-based compounds are usually solids at the typical ranges of temperature and pressure found on Earth. The production of phosphine gas occurs in only specialized, local conditions.

-

- 60) . Keystone species are important in an ecosystem because:

a . They determine the genetic diversity of an ecological community.
b . They are important in determining the ability of a large number of other species to persist in the community.
c . They are found at the edge of an ecosystem and signal the shift in ecosystems.
d . They are rare in the ecosystem and stand at the top of the food web.

- 0 mins 26 s
- Explanation
- Status

- A keystone species is a species that has a disproportionately large effect on its environment relative to its abundance. Such species are described as playing a critical role in maintaining the structure of an ecological community, affecting many other organisms in an ecosystem and helping to determine the types and numbers of various other species in the community.

- 61) . With reference to the term 'Land Farming', consider the following statements:

1. It uses microbes for getting back the fertility of soil
2. It uses the technique of aeration.
3. It is a method of farming which is commercially very viable.

Select the correct answer using the codes below:
a . 1 and 2 only
b . 2 and 3 only
c . 1 and 3 only
d . 1, 2 and 3

- 0 mins 14 s
- Explanation
- Status

- • Land farming is a full-scale bioremediation technology performed in the upper soil zone or in bio treatment cells. Contaminated soils, sediments, or sludges are incorporated into the soil surface and periodically turned over (tilled) to aerate the mixture.
  • Soil conditions are often controlled to optimize the rate of contaminant degradation
  • Conditions normally controlled include:
  ▪ Moisture content (usually by irrigation or spraying).
  ▪ Aeration (by tilling the soil with a predetermined frequency, the soil is mixed and aerated).
  ▪ pH (buffered near neutral pH by adding crushed limestone or agricultural lime).
  ▪ Other amendments (e.g., Soil bulking agents, nutrients, etc.).

-

• 62) . Recently the Ministry of AYUSH has celebrated National Ayurveda Day on 28th October, 2016. In this day the Ministry has launched a new mission called “Mission Madhumegha”. The main purpose of this mission was
a . Prevention and Control of Diabetes
b . Awareness about Blood Pressure
c . Eradicate dengue fever
d . Abolition of Liquor

- 0 mins 10 s
- Explanation
- Status

- **Mission Madhumeha through Ayurveda**
  • On the occasion of National Ayurveda Day, the Ministry of AYUSH was organizing a one day National Seminar on ‘’Prevention and Control of Diabetes through Ayurveda’’ on 28th October 2016 at New Delhi.
  • The Mission Madhumeha will be implemented throughout the country through a specially designed National Treatment Protocol for effective management of Diabetes through Ayurveda.
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• 63) . Consider the following statements about Bio –Indicators:
1. Lichens can be used as a reliable indicator to predict air quality.
2. Lichens are also indicators of radioactive materials.
Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 9 s
- Explanation
- Status

- • Since a plant species or plant community acts as a measure of environmental conditions, it is referred to as biological indicators, bio-indicators
  • Indicators of radioactive particles:
  ▪ Dead lichens are capable of absorbing F, heavy metals including SO2 and Pb. Lichens are also utilized for survey of long life nuclides (a distinct kind of atom or nucleus characterized by a specific number of protons and neutrons) like strontium (90Sr) and cesium (137Cs) released from nuclear explosions.
  • Sensitivity to air pollution:
  ▪ Lichens can thus be used as reliable biological indicators of pollution. Lecanora

conizaeoides is the most tolerant of all lichens to SO2, thus occurs in city also. Thus lichens are used as pollution monitors.

- 64) . An Oligotropic lake has which of the following properties?

a . High levels of nutrient in water
b . High aquatic productivity
c . Algal blooms
d . Low nutrients and low productivity

- 0 mins 20 s
- Explanation
- Status

- • Oligotrophic lakes are those that are unproductive: net primary production is only between 50 and 100 milligrams of carbon per square metre per day, nutrients are in poor supply, and secondary production is depressed.
  • In the early stages a lake contains little organic material and has a poorly developed littoral zone. Particularly in temperate zones, such conditions favour plentiful oxygen content, and the lake is said to be oligotrophic.
  (Source: Shankar IAS Environment-Glosssary)

- 65) . Study of Pug marks can provide the certain information such as:

1. Presence of different species in the area of study.
2. Population of large cats (tigers, lions etc.).
3. Sex ratio of large cats.
4. It helps in determination of age also.

Select the correct answer using the code given below:
a . 1 and 3 only
b . 2 and 3 only
c . 1 and 4 only
d . 1, 2, 3 and 4

- 0 mins 20 s
- Explanation
- Status

- **(Source:http://assets.wwfindia.org/downloads/reading_pugmarks.pdf)**

• 66) . Which of the following ‘endangered’ species is known as the “tiger of Indian rivers”?
a . Gangetic Dolphin
b . Catfish
c . Tuna
d . Golden Mahseer

- 0 mins 11 s
- Explanation
- Status

- • It has been declared as endangered by IUCN.
  • It is the longest-living freshwater sigh, and native to mountain and sub-mountain regions.
  • The Pong Dam reservoir, not very far from Shimla supports an ample population of the golden mahseer.
  • It migrates upstream for spawning during the southwest floods. After spawning, it returns to the original feeding grounds. It is purely carnivorous.
  • The range of these fish is from Malaysia, Indonesia, across southern Asia including the Indian Peninsula and Pakistan.
  • They are commercially important game fish, as well as highly esteemed food fish. Mahseer fetches a high market price.
  (**source: http://timesofindia.indiatimes.com/home/environment/flora-fauna/Himachal-Pradesh-propagating-mahseer-fish-for-conservation/articleshow/52348942.cms)**

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• 67) . ”It is the only ape to be found in India and is generally to be seen in the forests of the North- East India and neighbouring Bangladesh and Burma. They prefer to live in small groups and for water often live on the dew which forms on the leaves”.
Which of the following species correctly described by the above passage?
a . Chimpanzees
b . Gorillas
c . Orangutans
d . Hoolock Gibbons

- 0 mins 19 s
- Explanation
- Status

- • Unlike Africa, in India, we have only one species of Apes which even though is an ape yet is not one to be classified as one of the Great Apes (Chimpanzees & Gorillas). It does has distinctive build of an ape-arms are longer than the legs and the body is tailless.

• Hoolocks live in small groups in the hilly forests and feed on tender leaves, fruits, and insects including spiders.
• The forests of north-east India host both the western hoolock gibbon (Hoolock hoolock) and the eastern hoolock gibbon (Hoolock leuconedys).
• Often confused as one species, both the gibbons inhabit different ranges in India. The western hoolock gibbon has a much wider range, as it is found in all the states of the north-east, restricted between the south of the Brahmaputra river and east of the Dibang river.
(source: MOEF)

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• 68) . Bahubali a much revered figure among Jains was the son of Rishabhanatha, the first tirthankara of Jainism and younger brother of Bharata Chakravartin. He is being worshipped as Gommateshwara. In which of the following places we can find out this Gommateshwara Statute?
1. Shravana Belagola
2. Karkala
3. Dharmasthala
4. Venur
Select the correct answer using the codes given below
a . 1 only
b . 1 and 3 only
c . 1 and 4 only
d . 1, 2, 3 and 4

- 0 mins 16 s
- Explanation
- Status

- **Gommateshwara statue**
  Gommateshwara Statue is a 57-foot (17 m) high monolithic statue located at Shravanbelagola in the Indian state of Karnataka. The statue is dedicated to the Jain god Bahubali. It was built in around 983 A.D. and is one of the largest free standing statues in the world.
  There are 5 monolithic Gommateshwara statues in Karnataka measuring more than 6 m (20 feet) in height.
  • Bahubali Statue 57 Feet-Shravanabelagola
  • Bahubali Statue 42 Feet –Karkala
  • Bahubali Statue 39 Feet –Dharmasthala
  • Bahubali Statue 35 Feet –Venur
  • Bahubali Statue 20 Feet –Gommatagiri

-

- 69) . It is a traditional theatre form that combines dance, music, dialogue, costume, make-up, and stage techniques with a unique style. It is traditionally presented from dusk to dawn in Karnataka and mainly found in coastal districts of Karnataka. The folk dance mentioned here is

a . Kolattam
b . Garba
c . Yakshagana
d . Lavani

- 0 mins 22 s
- Explanation
- Status

- **Yakshagana**
  Yakshagana is a traditional theatre form that combines dance, music, dialogue, costume, make-up, and stage techniques with a unique style and form. This theatre style is mainly found in the coastal districts and the Malenadu region of Karnataka, India. Yakshagana is traditionally presented from dusk to dawn.

- 70) . Which of the following is not a feature of "sustainable agriculture"?

a . Working in harmony with natural processes to conserve resources.
b . Use of synthetically produced fertilizers to suppress biological activity in the soil.
c . Relying on crop rotations and mechanical cultivation to reduce land degradation.
d . Maintain biological diversity

- 0 mins 30 s
- Explanation
- Status

- **(Source: Shankar IAS Environment)**

- 71) . Consider the following statements about protected areas in India.

1. Great Nicobar Biosphere Reserve is included into the UNESCO World Biosphere Reserve Network.
2. Krishna Wildlife Sanctuary is known for hosting pristine mangrove forests.
3. Andaman and Nicobar Islands and Maharashtra have the maximum number of National Parks among all States/UTs in India.

Which of the statements given above is/are correct?

a . 1 and 2 only
b . 2 only
c . 1 and 3 only
d . 1, 2 and 3

- 2 mins 36 s
- Explanation
- Status

- • **Krishna is a wildlife sanctuary** and estuary located in Andhra Pradesh, India. It is one of the rarest eco-regions of the world owing to the fact that it harbors vast tracts of pristine mangrove forests. It is believed among conservationists as one of the last remaining tracts of thick primary mangrove forests of South India, which is rapidly disappearing due to absence of protective measures.
  • **Agasthyamala Biosphere Reserve** falls in the Malabar rainforests and is one of the noted hotspot areas because of its position in the Western Ghats.
  ▪ There are three wildlife sanctuaries within the reserve, Shendurney, Peppara, and Neyyar.
  ▪ The Kalakkad Mundanthurai Tiger Reserve was recently included as part of the biosphere reserve.
  ▪ Agasthyamala Biosphere Reserve is the tenth one to be included in the prestigious UNESCO World Biosphere Reserve Network.
  ▪ The others are Nilgiri, Gulf of Mannar, Sunderban, Nanda Devi, Nokrek, Pachmarh, Similipal, AchanakmarAmarkantak and Great Nicobar.
  • **Madhya Pradesh and Andaman and Nicobar Islands** have the maximum number of National Parks (9 each) while Andaman and Nicobar Islands has 96 and Maharashtra has 36 Wildlife Sanctuaries maximum in India).
  (Source: MOEF)
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• 72) . "It prefers areas with agricultural lands, short bushes, scattered trees in scrub forests and grassy plains. It hardly occurs in dense forests. Major populations occur in the Terai lowlands in the foothills of the Himalayas (northern India), Central and North-western India". Which of the following species is correctly described by the above passage?
a . Large Rock Rat
b . Giant squirrel
c . Nilgai
d . Lion Tailed Macaque

- 0 mins 40 s
- Explanation
- Status

- • **Large Rock Rat** is a critically endangered species and **Giant squirrel** is an endangered species. Both can't be declared vermins
  • The nilgai is indigenous to the Indian subcontinent and only one of the four Indian antilopes that is still abundant. It is a "least concern" category species as per IUCN.
  • Bihar was given permission by the Centre to kill Nilgais and wild pigs as they destroyed

standing crops.
• It has been declared as vermin in Bihar.

- 73) . Recently the Ministry of Earth Science has established a High Altitude Research Station in Himalaya called HIMANSH at Spiti in Himachal Pradesh for which of the following purpose?
a . To study the Black holes in the space
b . To study and quantify the Himalayan glacier responses towards the climate change
c . To observe high energy Gama ray
d . To study the sun's microscopic structure

- 0 mins 13 s
- Explanation
- Status

- **Himansh**
  As part of the Indian government's initiatives to better study and quantify the Himalayan glacier responses towards the climate change, National Centre for Antarctic and Ocean Research (NCAOR), Goa, under the Ministry of Earth Sciences has established a high altitude research station in Himalaya called HIMANSH (literally meaning, a slice of ice), situated above 13,500 ft (> 4000 m) at a remote region in Spiti, Himachal Pradesh.

- 74) . The CCAMLR has finally declared the Ross Sea as World's Largest Marine Reserve at its annual meeting in Hobart, Australia. The Ross Sea is located in which of the region?
a . Arctic
b . Australia
c . South America
d . Antarctic

- 0 mins 17 s
- Explanation
- Status

- **Ross Sea**
  The Ross Sea is a deep bay of the Southern Ocean in Antarctica, between Victoria Land and Marie Byrd Land. Beginning in 2005, the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) commissioned scientific analysis and planning for Marine Protected Areas (MPA) in the Antarctic. On 28 October 2016, at its annual meeting in Hobart, a Ross Sea marine park was finally declared by the CCAMLR,

under an agreement signed by 24 countries and the European Union. It protects over 1.5 million square kilometres of sea, and is the world's largest.

- 75) . The United Nations (UN) General Assembly has approved the adoption of 2017 as

a . The International Year of Sustainable Tourism for Development.
b . The International Year of Pulses
c . The International Year of Family Farming
d . The International Year of Soils

- 0 mins 22 s
- Explanation
- Status

- **UN Years**
  • 2014 - International Year of Family Farming
  • 2015 - International Year of Family Farming and International year of Light and Light based technologies
  • 2016 - International Year of Pulses
  • The United Nations (UN) General Assembly has approved the adoption of 2017 as the International Year of Sustainable Tourism for Development. The resolution, adopted on 4 December, recognizes "the importance of international tourism, and particularly of the designation of an international year of sustainable tourism for development, in fostering better understanding among peoples everywhere, in leading to a greater awareness of the rich heritage of various civilizations and in bringing about a better appreciation of the inherent values of different cultures, thereby contributing to the strengthening of peace in the world".

- 76) . Consider the following statements regarding the Ecological Succession

1. Primary Succession occurs when an ecological community first enters into a new form of habitat that it has not been present in before.
2. Secondary Succession occurs in already established habitat.
3. In Climax stage, an ecosystem becomes balanced and there is a little risk of an interfering event to influence the environment.

Which of the statements given above is/are correct?
a . 3 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 47 s
- Explanation

- Status

- Succession may be initiated either by formation of new habitat (landslide or lava flow) or disturbance of already existing habitat (fires, land clearance). There are three recognized stages to ecological succession. Each covers a gradual process of change and development. They do not have hard and defined boundaries, and it is possibly for an ecological system to be in both stages at once during the transition period from one to another. The 3 stages of ecological succession are:
  1. **Primary –** This is when an ecological community first enters into a new form of habitat that it has not been present in before. A good example of this would be the habitat created when granite is removed in a quarry. The rock face that is left behind is altered and becomes a new habitat. The environment that then grows within that habitat is considered to be in its primary stage.
  2. **Secondary –** The secondary succession stage occurs after a habitat has been established, but it is then disturbed or changed in some fashion and a new community moves in. To use the example from before – let us say that a primary stage develops on the face of a newly quarried granite cliff. That habitat grows undisturbed, until there is a forest fire that then burns and changes a portion of the habitat that has been growing on the rock face. That ecological habitat has now entered its secondary stage.
  3. **Climax –** the climax stage is the last stage of an ecosystem. It is when the ecosystem has become balanced and there is little risk of an interfering event or change to mutate the environment. Several rainforests and deserts qualify as being in the climax stage. What is tricky about a climax stage is that given human development, any ecosystem that is in the climax stage now holds the risk of being destroyed and going backward in the stages.

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- 77) . Consider the following statements

1. Hydroponics is a method of growing plants in water solvent along with aquatic animals.
2. Aquaponics is a method of growing plants, without soil, using mineral nutrient solutions in a water solvent.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 32 s
- Explanation
- Status

- • Hydroponics is a subset of hydro culture, the method of growing plants without soil, using mineral nutrient solutions in a water solvent. Terrestrial plants may be grown with only their roots exposed to the mineral solution, or the roots may be supported by an inert

medium, such as perlite or gravel. The nutrients in hydroponics can be from fish waste, duck manure, or normal nutrients.
• Aquaponics refers to any system that combines conventional aquaculture (raising aquatic animals such as snails, fish, crayfish or prawns in tanks) with hydroponics (cultivating plants in water) in a symbiotic environment. In normal aquaculture, excretions from the animals being raised can accumulate in the water, increasing toxicity. In an aquaponic system, water from an aquaculture system is fed to a hydroponic system where the by-products are broken down by nitrifying bacteria initially into nitrites and subsequently into nitrates, which are utilized by the plants as nutrients, and the water is then recirculated back to the aquaculture system.

- 78) . Consider the following statements regarding the Ecotype:

1. Ecotype of a species are always inter-fertile.
2. Ecotypes arise due to mutations, hybridization and isolation.
3. Ecotype is genetically distinct and adapted to specific environmental conditions.

Which of the statements given above is/are correct?
a . 1 and 3 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 24 s
- Explanation
- Status

- • In evolutionary ecology, an ecotype, sometimes called ecospecies, describes a genetically distinct geographic variety, population or race within a species, which is adapted to specific environmental conditions.
  • The characteristic features of ecotypes are mentioned below:
  1. Ecotypes of a species, though genotypically distinct, are always inter-fertile.
  2. They retain their original features when cultivated in a natural habitat.
  3. Ecotypes are genetically fixed.
  4. A species with wide ecological amplitude can be distinguished on the basis of morphological and physiological characters into different habitat forms or ecotypes.
  5. They occur in distinct habitats.
  6. Ecotypes are discrete entities with clear differences which separate one ecotype from another.
  7. The differences are not due to plastic response to change in environment but are actually due to natural selection of locally adapted populations.

• 79) . Jog Falls is the one of the highest waterfall in India. It is a segmented waterfall which, depending on rain and season, becomes a plunge waterfall. It is created by which of the following river?
a . Tungabhadra
b . Netravati
c . Mandovi
d . Sharavati

- 0 mins 7 s
- Explanation
- Status

- **Jog falls**
  • Jog Falls, Gerosoppa Falls or Joga Falls is the 3rd highest waterfall in India located near Sagara taluk, Shimoga district in the state of Karnataka.[1] It is a segmented waterfall which, depending on rain and season, becomes a plunge waterfall. The falls are a major tourist attraction and is ranked 13th in the world by the waterfall database. They are also known as the Gersoppa Falls or Jogada Gundi.
  • 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.

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• 80) . Biodiesel can be obtained from
1. Rubber seeds
2. Ratanjot (Jatropha)
3. Nagchampa
Select the correct answer using the code given below:
a . 2 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 20 s
- Explanation
- Status

- • Under Indian conditions such plants varieties, which are non-edible and which can be grown abundantly in large-scale on wastelands, can be considered for biodiesel production.
  • Some of the prominent non-edible oil seed producing plants include jatrophacurcas or ratanjyot, pongamiapinnata or karanj, calophylluminophyllum or nagchampa,

heveabrasiliensis of rubber seeds, calotropisgigantia or ark, euphorbiatirucalli or sher, boswelliaovalifololata, neem etc.

• 81) . Which of the following places of Karnataka has been listed as the UNESCO World Heritage Sites?
1. Hampi
2. Pattadakal
3. Aihole
4. Badami
Select the correct answer using the code given below
a . 1 and 2 only
b . 1, 2 and 3 only
c . 1, 2 and 4 only
d . 1, 2, 3 and 4

- 0 mins 33 s
- Explanation
- Status

- **World Heritage Sites in Karnataka**
  • Pattadakal, also spelled Paṭṭadakallu, is an UNESCO inscribed World Heritage site. It is a village and an important tourist centre in the state of Karnataka and is located on the left bank of the Malaprabha River in Bagalakote.
  • Aihoḷe temple complex is on the pending list of UNESCO World heritage sites.

-

• 82) . Consider the following statements regarding the Organic Farming:
1. Methane emissions emitted in Organic Farming are higher than those in conventional production system.
2. Biological pest control, mixed cropping and the fostering of insect predators are encouraged in the organic farming.
Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 25 s
- Explanation
- Status

- • Organic farming relies on fertilizers of organic origin such as compost, manure, green manure, and bone meal and places emphasis on techniques such as crop rotation and

companion planting.
• As global temperatures rise and weather patterns become more erratic, the intersection between climate change and agriculture is crucial to understanding the role agriculture plays in contributing to and mitigating global warming. Carbon sequestration, lower-input of fossil fuel dependant resources, and use of renewable energy all present opportunities for organic agriculture to lead the way in reducing energy consumption and mitigating the negative affects of energy emissions. Organic agriculture provides management practices that can help farmers adapt to climate change through strengthening agro-ecosystems, diversifying crop and livestock production, and building farmers' knowledge base to best prevent and confront changes in climate.
• FAO promotes organic agriculture as an alternative approach that maximizes the performance of renewable resources and optimizes nutrient and energy flows in agro ecosystems. Life cycle assessments show that emissions in conventional production systems are always higher than those of organic systems, based on production area. Soil emissions of nitrous oxides and methane from arable or pasture use of dried peat lands can be avoided by organic management practices. Many field trials worldwide show that organic fertilization compared to mineral fertilization is increasing soil organic carbon and thus, sequestering large amounts of CO2 from the atmosphere to the soil. Lower greenhouse gas emissions for crop production and enhanced carbon sequestration, coupled with additional benefits of biodiversity and other environmental services, makes organic agriculture a farming method with many advantages and considerable potential for mitigating and adopting to climate change.

- 83) . Consider the following statements

1. Population is defined as a group of freely interbreeding individuals of the different species present in a specific geographical area at a given time.
2. The density of a population basically depends on natality and mortality only.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 29 s
- Explanation
- Status

- • 'Population' is defined as a group of freely interbreeding individuals of the same species present in a specific geographical area at a given time. A population has traits of its own which are different from those of the individuals forming the population.
  • The movement of individuals of a population out of a region on a permanent basis is termed emigration. Immigration refers to the movement of individuals into a new area. Dispersal includes both emigration (going away permanently from an area) and

immigration (influx of new individuals into the area).The density of a population thus basically depends on four factors: (i) natality, (ii) mortality, (iii) immigration and (iv) emigration.

- 84) . Consider the following definitions:

1. Ecotone is a zone of transition between the two adjacent ecological communities.
2. Ecads is a population of species belong to the same genetic stock but different in size and shape.
3. Ecological niche is the role and position a species has in its environment.

Which of the definitions given above is/are correct?

a . 3 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 19 s
- Explanation
- Status

- **Ecotone:**
  An ecotone is a zone of junction or a transition area between two biomes [diverse ecosystems]. It is where two communities meet and integrate.
  For e.g. the mangrove forests represent an ecotone between marine and terrestrial ecosystem. Other examples are grassland (between forest and desert), estuary (between fresh water and salt water) and river bank or marsh land (between dry and wet).
  Ecad:
  These are also called epharmones or habitat forms which are environmentally induced variations. They belong to the same genetic stock or species and the variations in their morphology (in shape, size, number and reproductive capacity) are induced by the environmental influences. The variations are not fixed but are temporary, somatic and reversible. If one type of ecad is transplanted into environment of another type of ecad, the differences would disappear.
  Ecological Niche:
  Ecological Niche refers to the unique functional role and position of a species in its habitat or ecosystem.
  In nature, many species occupy the same habitat but they perform different functions. A niche is unique for a species while many species share the habitat. No two species in a habitat can have the same niche. This is because of the competition with one another until one is displaced.

• 85) . The Government of India and the World Bank signed a $650 million agreement towards the Eastern Dedicated Freight Corridor (a freight-only rail line) that will help faster and more efficient movement of raw materials and finished goods between the north and eastern parts of India. This Corridor is passing through which following states?
1. Bihar
2. Jharkhand
3. Uttar Pradesh
4. Haryana
5. Punjab
Select the correct answer using the code given below
a . 1, 2, 3 and 5 only
b . 1, 3 and 4 only
c . 1, 2, 3 and 4 only
d . 1, 2, 3, 4 and 5

- 0 mins 15 s
- Explanation
- Status

- **Eastern Dedicated Freight Corridor or Eastern DFC**
  It is an under construction freight corridor in India by Indian Railways. It is going to be a broad gauge corridor. This will have double line and will be electrified. Due to lack of space the section from Ludhiana in Punjab to Khurja in Uttar Pradesh will be single line electrified. This corridor will cover total distance of 1839 km. This corridor will also pass through Dadri (The origin point of Western Dedicated Freight Corridor) which will serve as a junction.

Eastern DFC	
State	**Distance Covered**
Punjab	88
Haryana	72
Uttar Pradesh	1049
Bihar	93
Jharkhand	50
West Bengal	488
Total	**1839**

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- 86) . Which of the following activities prevent land and soil degradation?

1. Addition of organic matter to the soil.
2. Polyvarietal cultivation.
3. Cultivation of High Yielding Plant Varieties.

Select the correct answer using the code given below:

a . 1 and 3 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 28 s
- Explanation
- Status

- • Poly varietal cultivation also helps in controlling soil erosion. In this method the field is planted with several varieties of the same crop. As the harvest time vary for different varieties of the crops they are selectively harvested at different time. As the entire field is not harvested at one time and so it is not bare or exposed all at once and the land remains protected from erosion.
  • Addition of organic matter to the soil is also an important method for reducing soil erosion. This is achieved by ploughing in crop residues or entire the crop grown specifically for being ploughed into the ground. Microbes in the soil decompose the organic matter and produce polysaccharides which are sticky and act in gluing in the soil particles together and thus help the soil to resist erosion.
  • High Yielding Varieties (HYV) have helped to increase food production but at the same time they have greatly impacted to the environment are manmade varieties of agricultural plants, fodder plants, forest trees, livestock and fishes. This means that the HYV have been raised and modified by us by means various breeding techniques in order to increase productivity. The HYVs require adequate irrigation and extensive use of fertilizers, pesticides to be successful.
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- 87) . Which of the following state in India has the highest tiger population?

a . Madya Pradesh
b . Maharastra
c . Karnataka
d . Uttarakhand

- 0 mins 9 s
- Explanation
- Status

- **Tiger Reserves**
  Karnataka has the highest number of tigers in the age group of 1.5 years with more 408 big cats. Other states with significant populations included Uttarakhand (340), Madhya Pradesh (308), Tamil Nadu (229), Maharashtra (190), Assam (167), Kerala (136) and Uttar Pradesh (117)

-

- 88) . Which of the following is/are endangered animals in India?

1. Bengal Tiger
2. Dugong
3. Olive ridley sea turtle

Select the correct answer using the code given below:
a . 1 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 7 s
- Explanation
- Status

- **Please visit:**
  https://www.wikiwand.com/en/List_of_endangered_animals_in_India#/Vulnerable

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- 89) . Recently the Government of India has reconstituted the Interstate council of India. In this context consider the following statements regarding this.

1. The President can establish it at any time if it appears to him that the public interests would be served by the establishment of such a council.
2. All the Chief Ministers and Union cabinet Ministers are members of this council.
3. The standing committee of this council will be headed by the minister of Home Affairs.

Which of the statements given above is/are correct?
a . 1 and 2 only
b . 2 and 3 only
c . 1 and 3 only
d . 1, 2 and 3

- 0 mins 27 s
- Explanation
- Status

- **Interstate council**
  • The Union Government has reconstituted the Inter State Council (ISC) and the Standing Committee of the ISC under Clause 2 of the Inter State Council order,1990. The Inter-State Council is a constitutional body to facilitate coordination between states and the centre. It will be headed by the Prime Minister Narendra Modi.
  • The Inter-State Council is a constitutional body to facilitate coordination between states and the centre. It is a recommendatory body to investigate and discuss subjects, in which some or all of the states or the Central government have a common interest. It is set up on the basis of provisions in Article 263 of the Constitution of India by a Presidential Order, 1990 based on the recommendation of Sarkaria Commission.
  • Composition of reconstituted Inter State Council (ISC) Members: Chief Ministers of all states and Union Territories (having legislative Assembly), Six Union Ministers. Besides, administrators of Union Territories which do not have legislative Assembly are also members of the Council. Six Union Ministers: Home Minister Rajnath Singh, Finance Minister Arun Jaitley, Defence Minister Manohar Parrikar, External Affairs Minister Sushma Swaraj, Minister for Information and Broadcasting M Venkiah Naidu and Road Transport Highways and Shipping Minister Nitin Gadkari. The Standing Committee of the Inter State Council will be headed by Union Minister of Home Affairs Rajnath Singh.
  • The Inter-state council is not a permanent constitutional body for coordination between the states and Central government. Rather, President can establish it at any time if it appears to him that the public interests would be served by the establishment of such a council.
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- 90) . Consider the following statements regarding the Ecological Pyramids:

1. Inverted pyramid of biomass is seen in aquatic ecosystems.
2. Ten percent law is applicable in Pyramid of numbers.

Which of the statements given above is/are correct?

a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 nor 2

- 0 mins 53 s
- Explanation
- Status

- • Ecological Pyramid of Biomass – Inverted
  • In many aquatic ecosystems, the pyramid of biomass may assume an inverted form. [Pyramid of numbers for aquatic ecosystem is upright].This is because the producers are tiny phytoplankton that grow and reproduce rapidly.Here, the pyramid of biomass has a small base, with the consumer biomass at any instant actually exceeding the producer biomass and the pyramid assumes inverted shape.

• The Ten percent law is the transfer of energy from one trophic level to the next. According to this law, during the transfer of energy from organic food from one trophic level to the next, only about ten percent of the energy from organic matter is stored as flesh. The remaining is lost during transfer, broken down in respiration, or lost to incomplete digestion by higher trophic level.
• Suppose an ecosystem receives 1000 calories of light energy in a given day. Most of the energy is not absorbed; some is reflected back to space; of the energy absorbed only a small portion is utilized by green plants, out of which the plant uses up some for respiration and of the 1000 calories, therefore only 100 calories are stored as energy rich materials.

• 91) . Consider the following statements regarding the methods of measuring Biodiversity:
1. Alpha diversity indicates the diversity between the communities.
2. Beta diversity indicates the diversity within the community.
3. Gamma diversity refers to the diversity of the habitats over the total land scape.
Which of the statements given above is/are correct?
a . 3 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 15 s
- Explanation
- Status

- **Methods of measuring Biodiversity:**
  There are three perspectives measuring of diversity at the level of community. These are (i) Alpha diversity, (ii) beta diversity and (iii) gamma diversity.
  Community diversity refers to the variations in the biological communities in which species live.
  (i) Alpha diversity indicates diversity within the community. It refers to the diversity of organisms sharing the same community or habitat. A combination of species richness and equitability / evenness is used to represent diversity within a community or habitat.
  (ii) Beta diversity indicates diversity between communities. Species frequently change when habitat or community changes. There are differences in species composition of communities along environmental gradients, e.g, altitudinal gradient, moisture gradient, etc. the higher heterogeneity in the habitats in a region or greater dissimilarity between communities exhibit higher beta diversity.
  (iii) Gamma diversity refers to the diversity of the habitats over the total land scope or geographical area. The sum of alpha and beta diversities of the ecosystems is an expression of the biodiversity of landscape, which is considered as Gamma Diversity.
  Higher diversity at community level provides stability and higher productivity. Intemperate grasslands, it has been observed that diverse communities are functionally

more productive and stable, even under environmental stresses such as prolonged dry conditions.

- 92) . The endangered Hangul is in the throes of extinction, largely because of human intrusions and domestic livestock grazing at its habitat. Recently it has been listed as Critically Endangered Species in the IUCN list. It is the State animal for which of the following one?
a . Uttarakand
b . Himachal Pradesh
c . Jammu and Kashmir
d . Sikkim

- 0 mins 35 s
- Explanation
- Status

- **The Kashmir stag**
  The Kashmir stag also called hangul, is a subspecies of elk native to India. It is found in dense riverine forests in the high valleys and mountains of the Kashmir Valley and northern Chamba district in Himachal Pradesh. In Kashmir, it's found in the Dachigam National Park where it receives protection but elsewhere it is more at risk. In the 1940s, the population was between 3000 and 5000 individuals, but since then habitat destruction, over-grazing by domestic livestock and poaching have greatly reduced that dramatically.

- 93) . Recently, a group of scientists have discovered a new species of Pika, a mammal belonging to the rabbit and hare family from which of the following state?
a . Andhra Pradesh
b . Sikkim
c . Arunachal Pradesh
d . Rajasthan

- 0 mins 33 s
- Explanation
- Status

- **Pika**
  Scientists claim to have discovered a new species of Pika, a mammal belonging to the rabbit and hare family (Lagomorpha), in the Himalayas in Sikkim. After six years of research, a team of international collaborators, led by scientists from Bengaluru’s National Centre for Biological Sciences (NCBS) announced the discovery.

- 94) . Which of the following is/are **not** Abiotic components?

1. Decomposers
2. Organic Compounds
3. Light

Select the correct answer using the code given below:
a . 1 only
b . 1 and 2 only
c . 2 and 3 only
d . 1, 2 and 3

- 0 mins 29 s
- Explanation
- Status

- • Abiotic components of an ecosystem include all chemical and physical elements i.e. non-living components. Abiotic components can vary from region to region, from one ecosystem to another. They mainly take up the role of life supporter. They determine and restrict the population growth, number, and diversity of biotic factors in an ecosystem. Hence they are called limiting factors.
  • A terrestrial ecosystem consists of abiotic factors like climate, type of soil or rock, altitude, temperature, nutrients, and minerals, whereas abiotic components in an aquatic ecosystem include dissolved gases, depth of water, salinity, pH of water, light intensity etc.
  • Biotic components can be classified into three categories:
  a) Producers: These include all the autotrophs. They use light energy and synthesize food on their own, e.g. plants, green algae, etc.
  b) Consumers: These include all the heterotrophs that directly or indirectly depend on producers for their food. Consumers are further categorized as herbivores, carnivores, omnivores and parasites.
  c) Decomposers: These include saprophytes which act on dead matter and decay them for their nutrition.

- 95) . Which of the following interactions is/are the positive biological interactions between two species?

1. Predation
2. Amensalism
3. Competition

Select the correct answer using the code given below:
a . 3 only
b . 1 and 2 only
c . 2 and 3 only

d . None of the above

- 0 mins 11 s
- Explanation
- Status

- The biological community in an area or ecosystem is a complex network of interactions. The interaction that occurs among different individuals of the same species is called intra specific interaction while the interaction among individuals of different species in a community is termed as inter specific interaction.
  Specific terms are applied to inter specific interactions depending upon whether the interaction is beneficial, harmful or neutral to individuals of the species.
  Negative interactions:
  a) Predation: Predator-prey relationship: one species (predator) benefits while the second species (prey) is harmed and inhibited.
  b) Amensalism: One species is inhibited while the other species is unaffected.
  c) Competition: Adversely affects both species
  d) Parisitism : Beneficial to one species (parasite) Health and harmful to the other species (host).
  Positive Interactions:
  a) Commensalism: One species (the commensal) benefits, while the other species has neutral Interactions.
  b) Neutralism: Neither species affects the other (the host) is neither harmed nor inhibited
  c) Mutualism: Interaction is favourable to both species

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• 96) . Consider the following statements regarding Himachal Pradesh
1. Himachal Pradesh is in the western Himalayas and most of the state lies on the foothills of the Dhauladhar Range.
2. The drainage system of Himachal is composed both of rivers and glaciers and provides water to both the Indus and Ganges basins.
Which of the statements given above is/are correct?
a . 1 only
b . 2 only
c . Both 1 and 2
d . Neither 1 Nor 2

- 0 mins 7 s
- Explanation
- Status

- **Himachal Pradesh**
  • Himachal is in the western Himalayas. Covering an area of 55,673 square kilometres

(21,495 sq mi), it is a mountainous state. Most of the state lies on the foothills of the Dhauladhar Range. At 6,816 m Reo Purgyil is the highest mountain peak in the state of Himachal Pradesh.
• The drainage system of Himachal is composed both of rivers and glaciers. Himalayan rivers criss-cross the entire mountain chain. Himachal Pradesh provides water to both the Indus and Ganges basins. The drainage systems of the region are the Chandra Bhaga or the Chenab, the Ravi, the Beas, the Sutlej, and the Yamuna. These rivers are perennial and are fed by snow and rainfall. They are protected by an extensive cover of natural vegetation.

•

• 97) . New Delhi declaration on education is associated with which of the following inter governmental organization?
a . SAARC
b . BIMSTEC
c . BRICS
d . SCO

- 0 mins 10 s
- Explanation
- Status

- • BRICS nations have adopted the 'New Delhi Declaration on Education resolving to ensure inclusive and equitable quality education and promote life-long learning opportunities for all. Education is the answer to all the major problems in the world. Realising the need to educate more and more people, BRICS nations have adopted the 'New Delhi Declaration on Education' resolving to ensure inclusive and equitable quality education and promote life-long learning opportunities for all.
  • Reiterate our commitment to SDG4 which aims to “Ensure inclusive and equitable quality education and promote life-long learning opportunities for all” and the ‘Education 2030 Framework for Action’, which serve as the overall guiding framework for the implementation of the Education 2030 agenda.

•

• 98) . Recently annual Green House Bulletin was released by an International Organization. According to this report globally average concentration of CO2 has reached to 400 ppm for first time in 2015. This is the highest record in the environmental history of the world. Which of the following International Organization has released this bulletin?
a . UNEP
b . IPCC
c . WMO
d . Global Environment Facility

- 0 mins 30 s
- Explanation
- Status

- The Atmospheric Environment and Research Division of WMO's Research Department publishes the WMO-GAW Annual Greenhouse Gas Bulletins. Each year, these bulletins will report the latest trends and atmospheric burdens of the most influential, long-lived greenhouse gases; carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), as well as a summary of the contributions of the lesser gases. The Bulletins represent the consensus of a consortium of networks operated since the mid 1980s. These three major gases alone contribute about 88% of the increase in radiative forcing of the atmosphere by changes in long-lived greenhouse gases occurring since the beginning of the industrial age (since 1750).

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• 99) . In India recently Botanical Survey of India has published a report titled endemic Vascular Plants of India. According to this report which of the following states has highest number of Endemic Vascular Plants?
a . Kerala
b . Maharashtra
c . Meghalaya
d . Tamil Nadu

- 0 mins 8 s
- Explanation
- Status

- • Almost one of every four species of flowering plants found in India is endemic to the country, a recent publication by the Botanical Survey of India (BSI) has revealed. Of these, Tamil Nadu accounts for the highest number of species with 410, followed by Kerala with 357 and Maharashtra with 278.
  • Scientists of the BSI have listed at least 37 species of Black plum Syzyguim (Jamun), 10 varieties of Musa (banana), along with 274 species of orchids, which are found only in the country. Four different varieties of roses, two herbs and two climbers and 12 species of jasmines are exclusively found in India.
  • Among the most widely exploited endemic plants in country is Pterocarpus santalinus, commonly known as red sandal wood, which is found only in the southern parts of the Eastern Ghats. This plant is classified as critically endangered under International Union for Conservation of Nature (IUCN) category because of its dwindling habitat due to economic over-exploitation. Some of the wild orchids, which are also endemic, are also exploited heavily.

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- 100) . The plankton which are major fish feed can grow using the manures provided by the livestock which are getting raised at the side of fish farms. Near the fish farms, silk worms can also be raised (i.e. sericulture)". Which of the following farming method correctly described by above passage?
a . Mixed farming
b . Integrated farming
c . Diversified farming
d . Specialized farming

- 1 mins 1 s
- Explanation
- Status

- • At present, the farmers concentrate mainly on crop production which is subjected to a high degree of uncertainty in income and employment to the farmers. In this contest, it is imperative to evolve suitable strategy for augmenting the income of a farm.
  • Integration of various agricultural enterprises viz., cropping, animal husbandry, fishery, forestry etc. have great potentialities in the agricultural economy. These enterprises not only supplement the income of the farmers but also help in increasing the family labour employment.