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A Shankar IAS Academy Initiative

CA Revision Module - Test 28 (February 2024)

1. Consider the following pairs:

Ramsar Wetlands		*States*
1. Magadi Kere Conservation Reserve	–	Karnataka
2. Ankasamudra Bird Conservation Reserve	–	Telangana
3. Karaivetti Bird Sanctuary	–	Kerala
4. Longwood Shola Reserve Forest	–	Tamil Nadu

How many of the pair(s) given above is/are correctly matched?

a. Only one
b. Only two
c. Only three
d. All four

Answer : b

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New Ramsar Wetlands

5 more Indian wetlands have been added to the global list of wetlands of international importance under the Ramsar Convention taking Indian Ramsar Sites to 80.

Karnataka	• Magadi Kere Conservation Reserve • Ankasamudra Bird Conservation Reserve • Aghanashini Estuary.
Tamil Nadu	• Karaivetti Bird Sanctuary • Longwood Shola Reserve Forest

- The total number of Ramsar sites in *Tamil Nadu* is 16, highest in India.
- The *United Kingdom* has most number of Ramsar sites in the world.
- The world's 1st Ramsar Site was the *Cobourg Peninsula* in Australia, designated in 1974.
- The largest site is *Rio Negro in Brazil* (120,000 square kilometres).
- World Wetland Day is celebrated every year on February 2.

2. Consider the following statements with respect to High Altitude Pseudo Satellite Vehicle (HAPS).

1. They are capable of achieving altitudes nearly twice as high as those typically reached by commercial airplanes.
2. HAPS possess the capability to travel at supersonic speeds.
3. Unlike conventional drones, it can sustain flight for extended periods, often months, due to their solar-powered systems.

How many of the statements given above are correct?

a. Only one

b. Only two

c. All three

d. None

Answer : b

High Altitude Pseudo Satellite Vehicle (HAPS)

Recently, the National Aerospace Laboratories (NAL) has successfully completed the 1st test of high altitude pseudo satellite vehicle.

- **HAPS** – It is a solar-powered pseudo satellite, a new age unmanned aerial vehicle (UAV) which is also called as stratospheric vehicle.
- **Features** – It can ***fly at altitudes of 18-20 km*** from the ground, almost double the heights attained by commercial airplanes.
- Unlike drones, they can ***remain in air for months*** for being solar powered and can cover larger area.
- They ***move slowly***, at just about 80-100 km per hour.
- Unlike satellites, it has *lower operating cost* as it does not require a rocket to get into space.
- Unlike geostationary satellites, can be *easily redeployed* over another location or re-equipped with different payload.
- **India's prototype** – A scaled-down version, one-third in size to the eventual aircraft had a wing-span of about 12 metres, remain in air for about 8 and a half hours, achieving an altitude of about 3 km.
- The full-scale machine that NAL is trying to build, by 2027, would be aiming to remain in the air for 90 days at a stretch.

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3. Consider the following pairs:

AI Models		*Developed by*
1. LaMDA	–	Google
2. Llama	–	OpenAI
3. Sora	–	Meta AI
4. Hanooman	–	Anthropic

How many of the pair(s) given above is/are correctly matched?

a. Only one

b. Only two

c. Only three

d. All four

Answer : a

AI models in news

AI model	Developed by	Purpose
LaMDA	***Google***	A collection of conversational LLMs that work together to complete different types of generative AI tasks that involve dialogue.
Llama	Meta AI	A LLM that can use text prompts to generate and discuss code.

Sora	***OpenAI***	AI model that can create near flawless 1 minute long videos based on text prompt.
Hanooman	Seetha Mahalaxmi Healthcare (SML) & IIT Bombay-led ***BharatGPT ecosystem.***	A series of Indic large language models trained Eighth Schedule languages for generating text-to-text, text-to-speech, text-to-video and vice versa content. **Other Indic AI models** – It includes Ola's Krutrim, SaravamAI's OpenHathi and IIT-Madras' Airavata model.
Claude	Anthropic, a San Francisco-based AI startup.	A group of LLMs that is capable of handling text, voice messages, and documents. It has some limitations compared to ChatGPT or Google Gemini, regarding access to Internet and extensions.
Inflection 2.5	Inflection AI	An LLM that powers Pi chatbot with world-class real-time web search capabilities to ensure that users get access to high-quality and up-to-date information in real-time.
Garbhini-GA2	Biotechnology Research and Innovation Council - Translational Health Science and Technology Institute & IIT Madras	India-specific model developed to *determine the age of a foetus* (Gestational Age) in a pregnant woman in the second and third trimesters precisely.
iOncology ai	AIIMS Delhi & Centre for Development of Advanced Computing	An Artificial Intelligence (AI) platform designed for the early detection of breast and ovarian cancer
ChatGPT	OpenAI	LLM based on GPT-3.5 (Generative Pretrained Transformer 3.5) model that can be used for natural language processing tasks such as text generation & language translation.

4. Greening India's Wastelands with Agroforestry (GROW) Report, sometimes seen in the news, is released by?

a. Ministry of Environment, Forest and Climate Change
b. Ministry of Agriculture & Farmers' Welfare
c. Centre for Environment Education
d. NITI Aayog

Answer : d

Greening India's Wastelands with Agroforestry (GROW) Report

- GROW Report provides state-wise and district-wise analysis, supporting government departments and industries for greening and restoration projects.
- It is released by ***Niti Aayog.***
- NITI Aayog utilized remote sensing and GIS to assess agroforestry suitability across all

districts in India.
- Using thematic datasets, an *Agroforestry Suitability Index (ASI)* was developed for national-level prioritization.
- The GROW initiative aligns with national commitments, aiming to restore 26 million hectares of degraded land by 2030 and create an additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent.
- Agroforestry integrates trees, crops, and livestock, addressing food, nutrition, energy, employment and environmental challenges.

5. Consider the following statements with respect to Nilgiri Marten.

1. It is endemic to the Western Ghats.
2. They are burrowing animals and spend most of their time on ground.
3. It is classified under Schedule II of the Wildlife Protection Act, 1972.

How many of the statements given above are **not** correct?

a. Only one

b. Only two

c. All three

d. None

Answer : a

Nilgiri Marten

Tamil Nadu Government has planned to conserve the lesser-known species such as Nilgiri Marten under its new "TN Endangered Species Conservation Fund".

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- It is a rare species of marten, a small carnivores belonging to the weasel and badger families.
- **Scientific name** – Martes gwatkinsii
- **Native** – ***Endemic to the Western Ghats***.
- **Distribution** – It spans across the states of Karnataka, Kerala and Tamil Nadu.
- **Habitat** – 5 clusters in the Western Ghats namely Brahmagiri, Nilgiris, Anamalai, Cardamom Hills and Agasthyamalai.
- They are seen in Shola ecosystems, typically semi-evergreen forests, evergreen forests and forest patches interspersed with grasslands and also in tea, acacia, coffee, cardamom, and wattle plantations.
- **Features** – It is a small mustelid with a chocolate coloured fur and a canary yellow throat.
- It looks like a civet or a mongoose and it most prefers higher altitudes (300 to 1200 m).
- **Life style** – They are omnivorous, diurnal, and ***mainly arboreal but descend to the ground occasionally***. They are social and spend their time and even hunt in groups.
- **Threats** – Habitat loss & fragmentation and poaching.
- **Protection status**
    - **IUCN Status** – Vulnerable
    - **Wildlife Protection Act, 1972** – ***Schedule II***

6. Consider the following statements with respect to Multiple Independently targetable Re-Entry Vehicle (MIRV).

1. It possess the capability to overwhelm anti-ballistic-missile defence systems by deploying multiple warheads simultaneously.
2. Russia was the first country to develop MIRV technology.
3. In India, Agni-P is equipped with MIRV feature.

How many of the statements given above are correct?

a. Only one
b. Only two
c. All three
d. None

Answer : b

Multiple Independently targetable Re-Entry Vehicle (MIRV)

The Agni VI missile will have the feature of MIRV.

- MIRV is a ballistic missile payload that contains multiple warheads, each capable of being aimed at a different target.
- They can ***confuse anti-ballistic-missile protection systems*** by releasing multiple warheads, some of which may be dummies, with different targets.
- The ***United States*** was the 1st country to develop MIRV technology, deploying a MIRVed Intercontinental Ballistic Missile (ICBM) in 1970 and a MIRVed Submarine-Launched Ballistic Missile (SLBM) in 1971.
- The *United States, the United Kingdom, and France* use MIRV technology on SLBMs.
- In India, ***Agni-P is equipped with MIRV***

7. Consider the following statements with respect to Viroids.

1. Viroids infect both plants and animals.
2. They have either DNA or RNA as their genetic material.
3. Unlike viruses, viroids lack a lipid layer or a protein coat.

How many of the statements given above are correct?

a. Only one
b. Only two
c. All three
d. None

Answer : a

Virus vs Viroid

Virus	**Viroid**

• **Discovered –** 1898 • **Composed of** – Nucleic acid (DNA or RNA) core that serves as the genetic material. • **Surrounded by** – A protein coat, and, in some cases, a lipid (fat) layer outside that coat. • **Size –** Larger in than viroids • **Host –** It infects both plants and animals. • **Example –** Tobacco mosaic virus, Hepatitis- C.	• **Discovered -** 1971 • **Composed of** - Viroids circular ***single stranded RNA.*** • **Surrounded by** – ***Did not contain the lipid layer or protein coat.*** • **Size –** Smaller than viruses. • **Host – *Only plants*** are known to be infected by viroids. • **Example –** Potato spindle tuber viroid.

8. Consider the following statements with respect to Virtual Private Network (VPN).

1. VPNs operate without the involvement of any physical cables.
2. VPNs ensure that the user's data or browsing activity remains inaccessible to unauthorized parties.

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Which of the statement(s) given above is/are **incorrect**?

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

Answer : d

Virtual Private Network (VPN)

Mumbai cops arrested a 21 year old student who allegedly sent threatening emails by masking his IP address using a Virtual Private Network service.

- **Virtual** – ***No physical cables*** are involved.
- **Private** – ***No one else can see your data*** or browsing activity.
- **Networked** – Multiple devices work together to maintain an established link.
- **Working** – It establishes a *digital connection* between your computer and a *remote server owned by a VPN provider*, creating a *point-to-point tunnel* that encrypts your personal data, masks your IP address.
- **Secures the data** – VPN *scrambles personal data into code* and renders it unreadable to anyone without an encryption key.
- **Bypass censorship and surveillance** – *Location spoofing* allow users the ability to circumvent firewalls and view blocked websites.
- **Prevent tracking** – It *masks your IP address*, prevents Internet service providers (ISP's) tracking, and keeps your personal data private.

Name	Connection Method	Use Case
Client-to-Site VPN (Remote Access VPN)	Connect to a private network or 3rd party server	For remote workers to access company files over a private connection (or) for users who wish to browse the public Internet securely.
Site-to-Site VPN	Network connects to another network via LAN, WAN	For organizations to link their internal networks across multiple sites in different locations securely.
VPN Applications	Connect to a private network from smartphone	For mobile users while on the go, or while experiencing an unstable Internet connection.



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Morodharo, sometimes seen in the news recently, is a?

a. Sangam Port
b. Harappan Site
c. World Heritage Site
d. Buddhist Monastery

Answer : b

Morodharo

Morodharo is the recently discovered Harappa site near Dholavira that provides insight into the expansion and influence of the ancient civilization.

- Morodharo is a ***Harappa site*** dated back to around 4,500 years ago, flourished during 2,600-1,900 BCE to late 1,900-1,300 BCE period.
- It is located near the village of Lodrani near the *World Heritage Site of Dholavira.*
- It is situated close to the *Rann desert* and it is interpreted that the region, which eventually turned into a desert, was likely navigable during the Harappan era.
- The settlement features a large fortification, platform, well and burial cairns.
- The discovery included a substantial quantity of Harappan pottery reminiscent of artefacts found in Dholavira.
- Artefacts found at Morodharo are similar to those found at Dholavira, indicating cultural connections.

10. Consider the following countries:

1. Denmark

2. Norway
3. Finland
4. Sweden
5. Latvia

Which of the above countries are members of Nordic-Baltic Eight (NB8)?

a. All except 2
b. All except 3
c. All except 5
d. All of the above

Answer : d

Nordic-Baltic Eight (NB8)

The India-Nordic-Baltic Eight (NB8) meeting was held recently on the sidelines of the Raisina Dialogue, 2024 in New Delhi.

- **NB8** - A regional framework consisting of 8 countries from the Northern Europe.
- **Members**
  - **5 Nordic Countries** – ***Denmark, Finland, Iceland, Norway, and Sweden***.
  - **3 Baltic countries** – ***Estonia, Latvia, and Lithuania***.
- **Established in** – 1992
- **Aim** – To discuss important regional and international issues in an informal atmosphere.
- **Chair** – In 2024, NB8 is chaired by ***Sweden*** which was taken over from ***Latvia***.
- **NB8 Wise Men Report** – Also known as Birkavs-Gade Report, it provides concrete guidelines for promoting cooperation between the 8 countries.
- **e-PINE –** Enhanced Partnership in Northern Europe (e-PINE) was launched by the United States in 2003.

11. Consider the following statements with respect to Snow Leopard Population Assessment in India (SPAI) Program.

1. It is the first ever population estimation of Snow Leopard in India.
2. The Wildlife Institute of India (WII) serves as the national coordinator for this program.
3. Jammu and Kashmir possesses the highest estimated snow leopard population, followed by Uttarakhand and Himachal Pradesh.

How many of the statements given above are **incorrect**?

a. Only one
b. Only two
c. All three
d. None

Answer : a

Snow Leopard Population Assessment in India (SPAI) Program

Recently, Indian government released the report, 'Status of Snow Leopards in India' under Snow Leopard Population Assessment in India.

- It is the ***1st ever population estimation of Snow Leopard***.
- **Study period** – From 2019 to 2023.
- **Study area** – It systematically covered over 70% of the potential snow leopard range in the country, approximately 120,000 sq km of snow leopard habitat across the trans-Himalayan region.
- **National Coordinator** – ***Wildlife Institute of India (WII)***, supported by all range states and *2 conservation partners*, Nature Conservation Foundation of Mysuru and WWF-India.
- **Techniques** – Methods as outlined under the Global Snow Leopard and Ecosystem Protection Program's (***GSLEP***) Population Assessment of the World's Snow leopards (***PAWS***) initiative.
- **Findings** – There are around 718 snow leopards in India. Only 34% of the habitat in India legally protected.
- ***Ladakh*** has the highest estimated population (477) followed by Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Sikkim, and Jammu and Kashmir.

Snow leopard
• **Habitat** – High rocky areas, alpine meadows, alpine steppe shrub, and high altitude forests, generally live above the tree line at elevations of 2,700-5,000 m. • **Range** – 12 countries - Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, Russia, Tajikistan & Uzbekistan. • **Global population** – Estimated at 3020 to 5390. • **IUCN Status** – **Vulnerable** • **Threats** – Overgrazing, human wildlife conflict, poaching, free-ranging dogs, habitat degradation, and climate change impacts. • **Importance** – Being an apex predator of Himalayan ecosystem, snow leopard exerts top down regulation of prey populations and thus influence in ecological equilibrium of its habitat.

12. World Restoration Flagships, sometimes seen in the news recently, is an initiative of?

a. World Economic Forum

b. United Nations Environment Programme

c. Organisation for Economic Co-operation and Development

d. United Nations Educational, Scientific and Cultural Organization

Answer : b

World Restoration Flagships

UN has announced 7 World Restoration Flagships which will be awarded during the 6th UN Environment Assembly.

- World Restoration Flagships is an initiative under the *UN Decade on Ecosystem Restoration,* a global movement coordinated by ***UN Environment Programme (UNEP)*** and ***UN Food and Agriculture Organization (FAO).***
- The winning initiatives were announced ahead of the 6th session of the UN Environment Assembly, which is the world's highest-level decision-making body for matters related to the environment.
- The award conferred by the UNEP and FAO of the UN makes the initiatives eligible for technical and financial support from the organisation
- The awards serve as a part of the UN Decade on Ecosystem Restoration, led by the two agencies.
- The campaign aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean.
- The projects/ initiatives of the World Restoration Flagships that are honoured are:

13. Which of the following statement is **not correct** regarding parthenogenesis?

a. It is a form of asexual reproduction in which a female produces an embryo without fertilization.
b. An egg produced parthenogenetically may be either haploid (n) or diploid (2n).
c. Parthenogenesis may occur in both vertebrates and invertebrates.
d. Parthenogenesis has more genetic variation than sexual reproduction.

Answer : d

Parthenogenesis

Charlotte, a female round stingray has become the topic of international attention after getting pregnant despite not having a male ray companion for at least 8 years.

- **Parthenogenesis** – In Greek, it means '*virgin creation*'.
- It is a rare form of ***asexual reproduction in which a female produces an embryo without fertilization*** by a male's sperm.
- An egg produced parthenogenetically may be ***either haploid (n) or diploid (2n).***
- Parthenogenesis occurs in many types of ***invertebrates*** including scorpions, nematodes, mites, water fleas, wasps, some bees, etc.
- It may also occur in some ***vertebrate*** animals as well, such as amphibians, some fish, reptiles, and in few bird species.
- Parthenogenesis has ***less genetic variation*** than sexual reproduction.
- Parthenogenic species may be
  - **Obligate** – They are incapable of sexual reproduction.
  - **Facultative** – They are capable of *switching between parthenogenesis and sexual reproduction* depending upon environmental conditions.
- **Apomixis** – A process where the egg is fertilised with cells from the mother rather than by a male.
- **Automixis** - The process by which a mammal can undergo virgin birth. Here, egg would need to double its genetic content, divide, and then re-combine.
- The egg would end up with the normal number of chromosomes without the need for any additional genetic material.
- A smaller cell known as a *"polar body,"* which forms at the same time as the egg and contains DNA similar to the mother's, merges with the fertile egg.
- The offspring's are *similar to the mother but not exact clones*.
- It is more *common in low-density populations*, such as those on the verge of extinction.

14. Consider the following passage:
It is an early visual art form closely linked to the Manipur Meitei community's cultural history. The paintings are based on stories and events from the Hindu epic and Puranas.
The above passage best describes which of the following paintings?

a. Thangka paintings
b. Basohli painting
c. Subika painting
d. Pichwai painting

Answer : c

Subika Painting

- Subika paintings are from ***Manipur***, which are *based on stories and events from the Hindu epic and Puranas*.
- The style is intricately linked to the Meitei community's cultural history through its 6 surviving manuscripts that include:
    1. Subika
    2. Subika Achouba
    3. Subika Laishaba
    4. Subika Choudit
    5. Subika Cheithil
    6. Thengrakhel Subika
- **Basohli painting** – Is a traditional art form that originated in the Basohli town of *Jammu and Kashmir*, known for its rich cultural heritage.
- It is a distinct style of *miniature painting* that has a unique *blend of Hindu mythology, folk art and Persian influences*.
- **Pichwai paintings –** Are a traditional Indian art form that originated in the town of Nathdwara in *Rajasthan*, India over 400 years ago.
- **Thangka paintings** – Of *Arunachal Pradesh* are famous in the Tawang, West Kameng and Upper Siang districts.
- The process involves a picture panel of paint which is put on a silk border or cover.

15. Consider the following statements with respect to the C-CARES.

1. It is a web portal for Citizen Assistance and Relief in Emergency Situations.
2. It is designed by the Centre for Development of Advanced Computing (C-DAC).

How many of the above statement(s) is/are **incorrect?**

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

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Answer : a

C-CARES

- It is the web portal for ***Coal Mines Provident Fund Organization (CMPFO),*** working under aegis of Ministry of Coal.
- The portal is developed by the ***Centre for Development of Advanced Computing (C-DAC)***, an R&D organization under the Ministry of Electronics and Information Technology.
- The portal marks a significant leap in the digitization journey of CMPFO aiming to address the long-standing issue of digitizing its records and work processes.
- **Coal Mines Provident Fund Organization (CMPFO)** – An autonomous organization under the aegis of Ministry of Coal.
- It was established in 1948 for administering provident fund and pension schemes for providing social security to the coal sector workers.

16. Consider the following statements with respect to the Payment Banks.

1. The minimum paid-up capital for payments bank is Rs 100 crore.
2. These banks are not allowed to lending loans and issue credit cards.
3. These banks were originated on the basis of the Nachiket Mor Committee.

How many of the statement(s) given above is/are correct?

a. Only one
b. Only two

c. All three

d. None

Answer : c

Payment Banks

- Payments banks are a new model of banks, conceptualised by the *Reserve Bank of India*.
- These banks can *accept a restricted deposit*, which is currently limited to rupees 2,00,000 per customer and may be increased further.
- These banks ***cannot issue loans and credit cards***.
- The minimum paid-up capital requirement for payments bank is ***Rs 100 crore***.
- For the first 5 years, the stake of the promoter should remain at least 40%.
- The foreign shareholding will be allowed in these banks as per the rules for FDI in private banks in India.
- These banks were created on the basis of the ***Nachiket Mor Committee***.

17. Ilsenhohle Cave Site, sometimes seen in the news recently, is located in?

a. England

b. Germany

c. Greece

d. Italy

Answer : b

Ilsenhohle Cave Site

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- The researchers re-excavated the Ilsenhohle cave site in ***Ranis, Germany.***
- The site provides evidence for the first dispersal of Homo sapiens across the higher latitudes of Europe.
- The stone artefacts that were thought to be produced by Neanderthals were in fact part of the early H. sapiens tool kit.
- During the re-excavation a 1.7-metre-thick rock and human fossils were also found.
- The site now has the oldest H. sapiens fossils.
- Bones and stone artefacts from the cave showed that these people hunted large mammals including reindeer, horses, bison and woolly rhinoceroses.
- The new study’s revelations mean that Homo-sapiens reached Northern Europe before Neanderthals went extinct.

18. Jigarthanda, sometimes seen in the news recently, refers to?

a. A GI tagged food product from the state of Tamil Nadu

b. India’s first hypervelocity expansion tunnel test facility

c. A new fish species that was recently discovered near Lakshadweep

d. An indigenous technology developed for early detection of cancer

Answer : b

Jigarthanda

India's First High Hypersonic Test Facility, nick named ‘Jigarthanda’ was recently unveiled at IIT Kanpur.

- The S2 is the ***India's First High Hypersonic Test Facility*** that was nicknamed as ***Jigarthanda***.
- It is a 24-meter-long facility located at *IIT Kanpur's* Hypersonic Experimental Aerodynamics Laboratory (HEAL).
- It is *capable of generating flight speeds between* 3-10 km/s, simulating the hypersonic conditions encountered during atmospheric entry of vehicles, asteroid entry, scramjet flights and ballistic missiles.
- This makes it a valuable test facility for ongoing missions of ISRO and DRDO including Gaganyaan, RLV, and hypersonic cruise missiles.

19. Consider the following pairs.

Organisms		***Relationship***
1. Barnacles and Swimming Crabs	–	Parasitism
2. Clownfish and Sea Anemones	–	Commensalism
3. Barnacles and Humpback Whales	–	Mutualism
4. Corals and Sponges	–	Competition

How many of the pair(s) given above is/are correctly matched?

a. Only one

b. Only two

c. Only three

d. All four

Answer : b

Symbiotic Relationship

Scientists have recently found a mushroom growing out of a frog, indicating a symbiotic relationship between a frog and the mushroom.

- Symbiosis is a term describing any relationship or interaction between two dissimilar organisms.
- The specific kind of symbiosis depends on whether either or both organisms benefit from the relationship.
- Symbiotic relationships can be useful measures of an ecosystem's health.
- There are 4 main symbiotic relationships:

1. Mutualism
2. Commensalism
3. Parasitism
4. Competition

Parasitism

- In ***parasitism***, one species (the parasite) lives with, on, or in a host species, at the expense of the host species.
- Examples of common parasites includes nematodes, leeches and barnacles.
- **Example - Barnacles & Swimming Crabs**

Mutualism

- In a mutualistic relationship, both species benefit.
- Examples - **Clownfish & Sea Anemones**

Commensalism

- Commensalism happens when one species lives with in another species, known as the host.
- The host species neither benefits nor is harmed from the relationship.
- **Examples - Barnacles & Humpback Whales**
- The huge whales transport the tiny barnacles to plankton-rich waters, where both species feast upon the abundant microorganisms that live there.

Competition

- It happens between the members of the same species (intraspecific competition) and between different species (interspecific competition).
- **Example - Corals & Sponges**
- Sponges are very abundant in coral reefs. If they become too successful they take the needed food and other resources from the corals that make up the reef.



20. Which among the following are known as Super Pollutants?

1. Methane
2. Black Carbon
3. Nitrogen dioxide
4. Ground-level ozone

Select the correct answer using the codes given below:

a. All except 1

b. All except 2

c. All except 3

d. All except 4

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Answer : c

Super Pollutants

The Climate and Clean Air Conference 2024 in Nairobi, Kenya began with a call for international collaboration to phase-out short-lived climate pollutants.

- Super pollutants, also sometimes referred to as *short-lived climate pollutants (SCLPs)*, derive their name from their relatively short life in the atmosphere as compared to carbon dioxide.
- **Common super pollutants** - ***Black Carbon, Methane. Hydrofluorocarbons, and Ground-level ozone***.
- Nitrogen dioxide (NO2) is ***not*** a super pollutant.

