

10 PM Current Affairs Quiz Compilation

16th May to 21st May, 2022

GEOGRAPHY

Q.1) With reference to twin cyclones, Consider the following statements:

1. Twin cyclones are basically caused by equatorial Rossby waves.
2. Both Cyclones will always form in the Northern hemisphere.
3. Among them, one will have the positive spin and the other will have the negative spin.

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

Answer: B

- **Statement 1 is correct:** Twin cyclones are basically caused by equatorial Rossby waves. They are huge waves in the ocean with wavelengths of around 4,000–5,000 kilometres. This system has a vortex in the northern hemisphere and another in the southern hemisphere, and each of these is a mirror image of the other.
- **Statement 2 is incorrect:** Recently a pair of tropical cyclones, Asani & Karim (one in the northern hemisphere and one in the southern hemisphere) one on each side of the equator, have been formed.
- **Statement 3 is correct:** The vortex in the north spins counterclockwise and has a positive spin, while the one in the southern hemisphere spins in the clockwise direction and therefore has a negative spin.

Source: [The Hindu](#)

Q.2) Amalthea, which was seen in news recently, is related to which of the following?

- a) One of Jupiter's 53 named satellites
- b) New potentially dangerous near-Earth Asteroid
- c) New black hole identified in our galaxy
- d) Newly found object in space that can reveal details about Super Novas.

Answer: A

The moon Amalthea is one of Jupiter's 53 named satellites; it was the first to be discovered after the four Galilean moons, and it is the fifth-largest overall.

According to recent findings, Amalthea appears to radiate out more heat than it receives from the sun, which NASA suggests may be due to Jupiter's magnetic field or from tidal stresses.

Amalthea also contributes to one of the Gossamer Rings of Jupiter — the Amalthea Gossamer Ring — which is the faint innermost Gossamer ring of the planet. The Gossamer Rings are outside the main Jovian ring.

Only two missions have visited Amalthea: Voyager and Galileo. Both the Voyager 1 and Voyager 2 spacecraft photographed the Jovian moon during their flybys in 1979.

Source: [Space.com](#)

GEOGRAPHY

Q.3) With reference to the Southwest Monsoon, consider the following statements;

1. The onset of southwest monsoon is announced by Kerala Government.
2. Southwest monsoon season brings more than 70 per cent of the country's annual rainfall.

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

Answer: b

Statement 1 is incorrect: The onset of southwest monsoon is announced by IMD, after the following parameters are met,

Rainfall: At least 60% of 14 designated meteorological stations in Kerala and Lakshadweep record at least 2.5 mm of rain for two consecutive days at any time after May 10.

Wind field: The depth of westerlies should be upto 600 hectopascal (1 hPa is equal to 1 millibar of pressure) in the area bound by the equator to 10°N latitude, and from longitude 55°E to 80°E.

Heat: Outgoing Longwave Radiation (OLR) value (a measure of the energy emitted to space by the Earth's surface, oceans, and atmosphere) should be below 200 watt per sq m (wm²) in the box confined by 5-10°N latitude and 70-75°E latitude.

Statement 2 is correct: Southwest monsoon season over India, which brings more than 70 per cent of the country's annual rainfall.

Source: [Indian Express](#)

Q.4) Which of the following is/are the advantages of mRNA Vaccines?

1. Non-infectious, non-integrating in nature
2. Highly efficacious compare to other vaccines
3. Do not require a host for growth

Select the correct answer from the codes given below;

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

Answer: D

The major advantages of mRNA vaccines are,

1. They are non-infectious, non-integrating in nature, and degraded by standard cellular mechanisms.
2. Highly efficacious because of their inherent capability of being translatable into the protein structure inside the cell cytoplasm.
3. mRNA vaccines are fully synthetic and do not require a host for growth, e.g., eggs or bacteria. Therefore, they can be quickly manufactured inexpensively to ensure their "availability" and "accessibility" for mass vaccination on a sustainable basis.

Source: [The Hindu](#)

ECONOMY

Q.5) With reference to Fertilizer subsidy, consider the following statements;

1. The MRPs of urea and non-urea fertilisers are decontrolled or fixed by the companies.
2. All Non-Urea based fertilisers are regulated under Nutrient Based Subsidy Scheme.

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

Answer: b

- **Statement 1 is incorrect:** The MRPs of non-urea fertilisers are decontrolled or fixed by the companies. But, for urea the manufacturers are required to sell the fertiliser at the government-set Maximum Retail Price (MRP).
- **Statement 2 is correct:** All Non-Urea based fertilisers are regulated under Nutrient Based Subsidy Scheme.

Note: The Centre pays subsidy on urea to fertiliser manufacturers on the basis of cost of production at each plant.

Source: [Indian Express](#)

Q.6) With reference to the Devasahayam Pillai, consider the following statements:

1. He is considered as the first Indian to be converted to Christianity.
2. He served in the court of Travancore's Maharaja Marthanda Verma.

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

Answer: B

Statement 1 is incorrect: Devasahayam Pillai, an 18th-century Hindu convert to Christianity would be made a saint by the Roman Catholic Church in the Vatican. He became the first Indian layman to be declared a saint by the Vatican.

Statement 2 is correct: He grew up in an upper caste family of temple priests and was known as Nilakanda Pillai.

He went on to serve in the court of Travancore's Maharaja Marthanda Verma. It was here that he met a Dutch naval commander, who taught him about the Catholic faith.

He then converted to Christianity in 1745. He took the Christian name Lazarus, but later came to be known as Devasahayam (God's help).

Source: [Indian Express](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.7) With reference to Space debris, consider the following statements:

1. Space debris includes only man-made debris in space.
2. Kessler Syndrome is related to space debris.

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

Answer: A

Statement 1 is correct: Space debris can include natural space debris such as meteoroids, or man-made ones. Man made debris include defunct spacecrafts and satellites, stages of rockets which have launched payloads, dead satellites, satellite explosions and collisions.

Statement 2 is incorrect: Free floating space debris is a potential hazard for operational satellites and colliding with them can leave the satellites dysfunctional.

This is referred to as Kessler Syndrome, named after National Aeronautics and Space Administration (NASA) scientist Donald Kessler in 1978.

Source: [Indian Express](#)

Q.8) With reference to Fire Safety, consider the following statements;

1. The Fire Services is a concurrent subject.
2. National Building Code of India (NBC) published by Bureau of Indian Standards, mentions about fire safety requirements in buildings.

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

Answer: b

Statement 1 is incorrect: The Fire Services is a State subject and has been included as a Municipal function in the 12th Schedule of the Constitution of India under Article 243 (W).

Statement 2 is correct: National Building Code of India (NBC) published by Bureau of Indian Standards is the comprehensive building Code. It is a national instrument which provides guidelines for regulating the building construction activities across the country.

The Code mainly contains administrative regulations, development control rules and general building requirements; fire safety requirements; stipulations regarding materials, etc.

Source: [The Hindu](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.9) With reference to Pravaig Field Pack, consider the following statements:

1. It is a portable contains various spare parts.
2. It can be used to energize military personnel equipment and to deploy remote sensors.

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

Answer: B

Statement 1 is incorrect: It is a portable heavy-duty power bank battery.

Statement 2 is correct: It can be used to energize military personnel equipment and to deploy remote sensors.

Source: [The Hindu](#)

Q.10) Which of the following is/are the benefits of battery swapping?

1. Reduction in cost of operating EVs.
2. Reduce charging time of battery vehicles.
3. Requires limited parking in charging stations.

Select the correct answer from the codes given below;

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

Answer: D

The benefits of Battery Swapping are,

Cost Benefits: While battery swapping involves a greater number of batteries than conventional batteries, each swappable battery can be smaller in capacity (kWh) which reduces the cost.

Reduces Charging Time: With existing technologies for e-2Ws and e-3Ws, regular charging takes at least 3 to 4 hours, adding to inconvenience and creating range anxiety. Whereas, battery swapping is done in minutes, as the batteries are pre-charged in swapping stations.

Less Space: Charging stations require more space, since vehicles need to be parked next to the chargers during the charging process. Battery swapping is a relatively quicker exercise and swapping stations will require limited parking. This would address space constraints in urban areas.

Source: [ForumIAS Blog](#)

9 PM Compilation for the Month of May, (Third Week) 2022

ENVIRONMENT

Q.1) Ramgarh Vishdhari Wildlife Sanctuary is located in which of the following states?

- Haryana
- Gujarat
- Rajasthan
- Uttar Pradesh

Answer: C

- Ramgarh Vishdhari Wildlife Sanctuary has been notified as a tiger reserve on May 16, 2022, after a nod by the Union Ministry of Environment, Forest and Climate Change (MoEF&CC) in July 2021.
- It is now India's 52nd tiger reserve and Rajasthan's fourth, after Ranthambore, Sariska and Mukundra.

Source: [Article](#)

Q.2) With reference to Kanheri caves in India, consider the following statements:

- The excavations at these caves were primarily undertaken during Hinayana phase of Buddhism.
- The name of these caves is derived from 'Kanhagiri' in Prakrit.
- The earliest reference of Kanheri is ascribed to Hiuen Tsang.

Which of the statements given above is/are correct?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Answer: A

- Statement 1 is correct:** The Kanheri caves comprise more than 110 different rock-cut monolithic excavations and is one of the largest single excavations in the country. These excavations were primarily undertaken during the Hinayana phase of Buddhism but also has several examples of the Mahayana stylistic architecture as well as few printings of the Vajrayana order.
- Statement 2 is correct:** The name Kanheri is derived from 'Kanhagiri' in Prakrit and occurs in the Nasik inscription of the Satavahana ruler Vasisthiputra Pulumavi.
- Statement 3 is incorrect:** Kanheri was mentioned in the travelogues of foreign travelers. The earliest reference of Kanheri is ascribed to Fa-Hein who visited India during 399-411 CE and later by several other travelers.

Source: [Article](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.3) With reference to Repo Rate, consider the following statements:

1. The Bank rate is always kept higher than the Repo Rate.
2. The government securities kept under Statutory Liquidity Ratio cannot be pledged against the money taken under Repo Rate facility.

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

Answer: C

Both statements are correct.

- As no collateral (or security) is pledged by the bank when borrowing from RBI under bank rate so **bank rate is always kept higher than Repo Rate**. This way banks are encouraged to borrow under Repo rate
- Under SLR a bank has to keep a certain percentage of its deposits in the form of g-sec also? This g-sec **cannot be pledged against the money taken under Repo Rate**.

Source: [Article](#)

Q.4) Which of the following diseases is characterized by the presence of excess iron in the human body?

1. Tuberculosis
2. Malaria
3. Sickle-cell anaemia

Select the correct answer from the codes given below:

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

Answer: B

- Thalassemia, sickle cell anemia and Malaria are conditions when there is an excess iron in the body
- TB patients are unable to absorb iron in their body

Source: [Article](#)

Q.5) “Lima Declaration” is related to which of the following organizations?

- a) United Nations Industrial Development Organization
- b) World Economic Forum
- c) BRICS
- d) United Nations Conference on Trade and Development

Answer: A

UNIDO is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability.

9 PM Compilation for the Month of May, (Third Week) 2022

- As of 1 April 2019, 170 States are Members of UNIDO. They regularly discuss and decide UNIDO's guiding principles and policies in the sessions of the Policymaking Organs.
- The mission of the United Nations Industrial Development Organization (UNIDO), as described in the Lima Declaration adopted at the fifteenth session of the UNIDO General Conference in 2013, is to promote and accelerate inclusive and sustainable industrial development (ISID) in Member States.

Q.6) With reference to Remittances, consider the following statements:

1. Remittances comprise only the income of workers who work in another country.
2. India is the world's biggest recipient of remittances.

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

Answer: B

Statement 1 is incorrect: Remittances comprise two major parts,

Personal Transfers: This can be in cash or in kind between resident and non-resident households

Compensation of Employees: This refers to the income of workers who work in another country for a limited period of time.

Statement 2 is correct: According to the World Bank's latest Migration and Development Brief, the top five recipient countries for remittances in 2021 were India, Mexico (replacing China), China, the Philippines, and Egypt.

Source: [All India Radio](#)

Q.7) With reference to North Atlantic Treaty Organization (NATO), consider the following statements:

1. It is a military alliance established by Washington Treaty.
2. NATO has never invoked collective defence clause.

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

Answer: A

Statement 1 is correct: It is a military alliance established by the North Atlantic Treaty (also called the Washington Treaty) of April, 1949.

Statement 2 is incorrect: NATO is committed to the peaceful resolution of disputes. If diplomatic efforts fail, it has the military power to undertake crisis-management operations. These are carried out under the collective defence clause of NATO's founding treaty (Article 5 of the Washington Treaty or under a United Nations mandate).

9 PM Compilation for the Month of May, (Third Week) 2022

NATO has only once invoked Article 5, on 12th September 2001 following the 9/11 attacks on the World Trade Center in the US.

Source: [Indian Express](#)

Q.8) With reference to Dollarisation, consider the following statements:

1. It is a form of currency substitution, where dollars are used in addition to or instead of the local currency of a country.
2. Dollarisation increases the stability of the country's financial system.
3. Dollarisation may result in lesser resources for banks to lend.

Which of the statements given above is/are correct?

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

Answer: A

Statement 1 is correct: Dollarisation is a form of currency substitution, where dollars are used in addition to or instead of the local currency of a country

Statement 2 is incorrect: Dollarisation challenges the Stability of the Financial System. For instance, Central banks of economies with high dollarisation, become bodies with no power.

Statement 3 is incorrect: Dollarisation negatively impact the Banking System. For instance, people may invest their hard-earned savings in dollars which may result in banks having lesser resources to lend.

Source: [ET](#)

Q.9) With reference to the representation of Anglo-Indian, consider the following statements:

1. The term Anglo Indian is not defined anywhere in the constitution.
2. Any Anglo-Indian member can take the membership of any party within 6 months of the nomination.

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

Answer: B

Statement 1 is incorrect: The term Anglo Indian is defined as per the article 366 (2) of the Indian constitution; "a person whose father or any of whose other male progenitors in the male line is or was of European descent but who is a native of India."

Statement 2 is correct: According to the 10th schedule of the Constitution, any Anglo-Indian member can take the membership of any party within 6 months of the nomination. After the membership; they are bound to the party whip and they have to work in the house according to the party's agenda.

Source: [Indian Express](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.10) Aureobasidium pullulan, was recently seen in news, is related to which of the following?

- a) A butterfly species which is identified in Western Ghats
- b) A bacterial species which resist viral attacks on them
- c) A fungus which is used to produce biomaterials
- d) New bird species which does not lay eggs

Answer: C

Scientists have developed a biomaterial derived from the polymer pullulan which is secreted by the fungus Aureobasidium pullulans.

Aureobasidium pullulan is an exopolysaccharide which means that this polymer is secreted by the fungus itself into the medium on which it is growing.

This biomaterial can be used to disinfect wounds and hastens the process of healing.

Source: [The Hindu](#)

PRELIMS

Q.1) With respect to Endosulfan, consider the following statements:

1. It is also known by its trade name Thiodan.
2. It is listed under both Rotterdam Convention on the Prior Informed Consent and the Stockholm Convention on Persistent Organic Pollutants.

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

Answer: C

Both statements are correct.

- Endosulfan is an organochlorine insecticide which was first introduced in the 1950s and is commonly known by its trade name Thiodan.
- It is listed under both Rotterdam Convention on the Prior Informed Consent and the Stockholm Convention on Persistent Organic Pollutants.

Source: [Article](#)

Q.2) With reference to Base Erosion and Profit Shifting (BEPS), consider the following statements:

1. It involves tax avoidance by exploiting loopholes in taxation system of the countries
2. BEPS has been deemed illegal globally.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: A

- **Statement 1 is correct:** BEPS refers to “tax planning strategies that exploit gaps and mismatches in tax rules to make profits ‘disappear’ for tax purposes or to shift profits to locations where there is little or no real activity but the taxes are low resulting in little or no overall corporate tax being paid
- **Statement 2 is incorrect:** As per OECD, in most cases BEPS strategies are not illegal. Largely they just take advantage of current rules that are still grounded in a bricks and mortar economic environment rather than today’s environment of global players which is characterized by the increasing importance of intangibles and risk management. That said, some of the schemes used are illegal and tax administrations are fighting them.

9 PM Compilation for the Month of May, (Third Week) 2022

Q.3) Consider the following statements:

1. Equality can be achieved through equity.
2. In an equitable approach, people will be treated fairly but differently
3. Arranging extra classes only for academically weak students is an example of equality

Which of the above statements is/are correct?

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

Answer: A

- **Statement 1 is correct:** Equity means treating people based on their respective circumstances. So, every individual shall be helped as per their need and brought to the same level of development resulting in equality.
- **Statement 2 is correct:** Under principles of equity, only those individuals are helped who require that help. This means people are treated fairly as per their conditions, but differently.
- **Statement 3 is incorrect:** Everyone in the class will not be in need of extra classes. So, only those students who are weak shall be given help. This ensures that only those students are given assistance who actually need it. Hence, this is a case of equity, not equality. Under equality, all students would be given extra classes.

Q.4) Consider the following statements regarding the Currency Chests:

1. These are branches of selected banks authorised by the RBI to stock rupee notes and coins.
2. The money present in the currency chest belongs to the respective banks.

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

Answer: A

- **Statement 1 is correct:** Currency chests are branches of selected banks authorised by the RBI to stock rupee notes and coins. The responsibility for managing the currency in circulation is vested in the RBI. The central bank advises the Centre on the number of notes to be printed, the currency denominations, security features and so on.
- **Statement 2 is incorrect:** These chests are usually situated on the premises of different banks but administered by the RBI. Representatives of the RBI inspect currency chests time-to-time, and update their senior officers about it. The money present in the currency chest belongs to the RBI and the money kept in the strong room outside the currency chest belongs to the bank.

9 PM Compilation for the Month of May, (Third Week) 2022

Q.5) Bucher files sometimes seen in news is associated with?

- Period of National Emergency in India
- Accession of Jammu & Kashmir to India
- Partition of India
- Sikh Riots of 1984

Answer: B

- These papers reportedly deal with the accession of Jammu & Kashmir to India.

Q.6) With reference to the Lab Grown Diamonds, consider the following statements:

- These are diamonds which are grown inside a lab using cutting-edge technology.
- These diamonds are chemically, physically, and optically different from natural diamond.
- These diamonds are used in computer chips and satellites.

Which of the statements given above is/are correct?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 2 and 3 only

Answer: A

Statement 1 is correct: Lab-grown diamonds are diamonds which are grown inside a lab using cutting-edge technology that replicates the natural diamond growing process.

Statement 2 is incorrect: Man-made diamond is chemically, physically, and optically same as those grown beneath the Earth's surface.

Lab-grown diamonds can be created by two processes - High Pressure High Temperature (HPHT) which is used in China and Chemical Vapor Deposition (CVD) which is used in USA and India.

Statement 3 is correct: Lab-grown diamonds are also used in computer chips, satellites, 5G networks as they can be used in extreme environments as it has potential to operate at higher speeds while using less power than the silicon-based chips.

Source: [PIB](#)

Q.7) With reference to Thomas Cup, consider the following statements:

- Thomas Cup is a 16-nation team event which signifies the world supremacy in the sport of badminton.
- Including India, only five nations have won the Thomas Cup.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

Answer: A

Statement 1 is correct: Thomas Cup is a 16-nation team event which signifies the world supremacy in the sport of badminton. The cup was donated in 1939 by Sir George Thomas for a

9 PM Compilation for the Month of May, (Third Week) 2022

series of men's international team competitions to be managed by the International Badminton Federation (IBF), of which Thomas was then president.

Statement 2 is incorrect: In the tournament's seven-decade-long history, the championship title has changed hands only among five nations - China, Malaysia, Indonesia, Japan and Denmark. With its win, India became only the sixth country ever to break into this elite club.

Source: [The Hindu](#)

Q.8) With reference to Assistive Technology (AT), consider the following statements:

1. AT is any item, software program or product system that is used to increase, maintain or improve the functional capabilities of Computers.
2. Some examples of ATs include wireless extenders, Solid state drives, Routers etc.

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

Answer: D

Statement 1 is incorrect: AT is any item, piece of equipment, software program or product system that is used to increase, maintain or improve the functional capabilities of persons with disabilities.

Statement 2 is incorrect: Technologies and devices such as prosthetics, braces, walkers, special switches, special-purpose computers, screen readers and specialised curricular software.

Source: [The Hindu](#)

Q.9) Consider the following statements;

1. He was conferred the title of 'Mahamana' by Mahatma Gandhi.
2. He started the 'Abhyudaya' as a Hindi weekly and 'Maryada' as a Hindi monthly.
3. During his school days he started writing poems under the pen name 'Makarand'.

Which of the following personalities is described in the statements above?

- a) Jawaharlal Nehru
- b) Lala Lajpat Rai
- c) Madan Mohan Malaviya
- d) Chittaranjan Das

Answer: C

Source: [PIB](#)

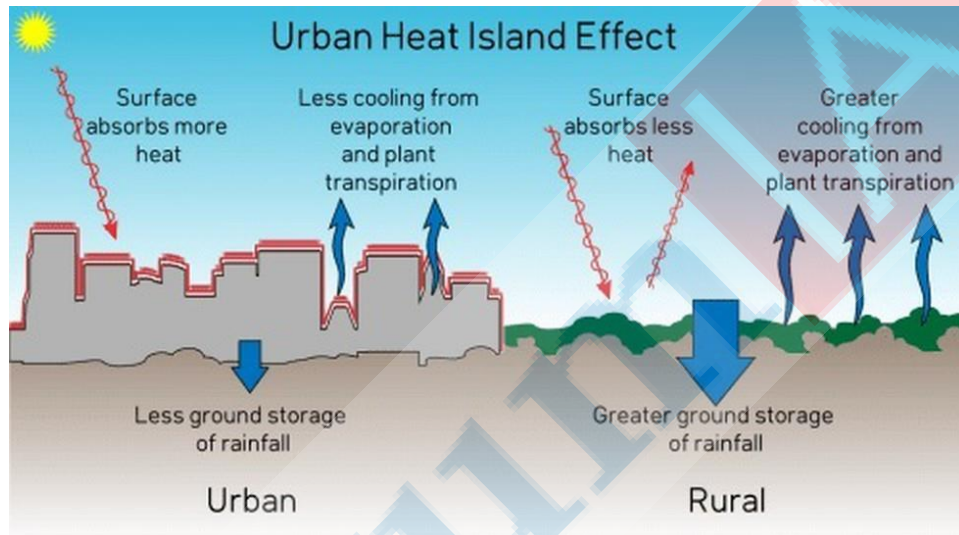
Q.10) Which of the following is/are the impacts of Urban heat island?

1. Less ground storage for rain water
2. More absorption of heat from concrete surface
3. Less cooling from evaporation and plant transpiration

Select the correct answer from the codes given below.

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

Answer: D



Source: [Indian Express](https://www.indianexpress.com)

PRELIMS

Q.1) With reference to Biofuels, consider the following statements:

1. Biofuels can be solid, liquid or gaseous in nature.
2. The first-generation biofuels are made from non-food crops or portions of food crops that are not edible and considered as wastes.

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

Answer: A

Statement 1 is correct: Biofuels may be solid, liquid or gaseous in nature.

- **Solid:** Wood, dried plant material, and manure
- **Liquid:** Bioethanol and Biodiesel
- **Gaseous:** Biogas

Statement 2 is incorrect: First-generation Biofuels are made from food sources such as sugar, starch, vegetable oil, or animal fats using conventional technology.

- Second-generation Biofuels are produced from non-food crops or portions of food crops that are not edible and considered as wastes. For example: stems, husks, wood chips, and fruit skins and peeling.

Source: [Article](#)

Q.2) Which among the following is/are some potential effects of Urbanisation?

1. Increase in individualism
2. Reduction in interpersonal communication
3. Agricultural productivity may reduce

Select the correct answer from the codes given below:

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

Answer: D

- Urban areas have a lifestyle that is centred around individualism. As a result there is no communal bonding between people as it is present in the villages.
- The use of gadgets is more widespread in urban areas and the resulting 'gadgetisation' reduces the interpersonal communication in the family.
- Increase in urbanization can reduce the amount of land available for cultivation and may hamper agricultural productivity.

Source: [Article](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.3) With reference to Ballistic and Cruise missiles, consider the following statements:

1. Cruise missiles are launched directly into the upper layers of the earth's atmosphere.
2. Ballistic missiles are self-propelled for the most part of their flights.

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

Answer: D

Both statements are incorrect.

- **Statement 1 is incorrect:** Ballistic missiles are launched directly into the upper layers of the earth's atmosphere.
- **Statement 2 is incorrect:** Cruise missiles are self-propelled for the most part of their flight, flying in a relatively straight line and at lower altitudes due to rocket propellant.

Source: [Article](#)

Q.4) MARPOL Convention was sometimes seen in the news. Which of the following correctly describes the convention?

- a) It is a convention that aims to provide adequate powers to marine police to curb crime on high seas and EEZ.
- b) It is a convention that aims to enhance global cooperation on coastal area protection.
- c) It is a convention that aims to prevent pollution of the marine environment by ships from operational or accidental causes.
- d) It is a convention that aims to address the issues faced by marginalised sections of people.

Answer: C

- International Convention for the Prevention of Pollution from Ships (MARPOL) is one of the main international conventions. It aims at the prevention of pollution of the marine environment by ships from operational or accidental causes.
- Adopted in: The Convention was adopted by the International Maritime Organisation (IMO) on 2nd November 1973.
- India is a signatory to the MARPOL Convention.

Q.5) Consider the following statements regarding the Wholesale Price Index (WPI):

1. It is a monthly price index released by the National Statistical Office.
2. Services sector is not covered under the WPI.
3. Manufactured Products has highest weightage in the WPI.

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

Answer: B

9 PM Compilation for the Month of May, (Third Week) 2022

- **Statement 1 is incorrect:** Wholesale Price Index (WPI) measures the average change in the prices of commodities for bulk sale at the level of early stage of transactions. It is released by Office of the Economic Adviser on 14th of every month (or next working day) with a time lag of two weeks of the reference month and compiled with data received from institutional sources and selected manufacturing units across the country.
- **Statement 2 is correct:** The Wholesale Price Index (WPI) is an index covering prices of products/commodities only pertaining to four sectors comprising agriculture, mining, manufacturing and electricity. The other sectors of GDP, in particular, services sector are not covered under WPI.
- **Statement 3 is correct:** The weight of manufactured products is highest in WPI (2004-05) at 64.2%. The weight of the Primary Article is 22.6% and the weight of Fuel & Power is 13.2%.

Q.6) Which of the following is/are the benefits of Ethanol blending?

1. Better use of damaged food grains.
 2. Increase farmers' income.
 3. Increase energy security.
- Select the correct answer from the codes given below.
- a) 1 and 3 only
 - b) 2 and 3 only
 - c) 1 and 2 only
 - d) 1, 2 and 3 only

Answer: D

There are immense benefits that will accrue to the country by ethanol blending. Such as saving foreign exchange per year, increased energy security, lowered carbon emissions, better air quality, self-reliance, better use of damaged foodgrains, increased farmers' incomes and investment opportunities.

Source: [The Hindu](#)

Q.7) With reference to Radio Frequency Identification (RFID), consider the following statements:

1. The tags can carry encrypted information, serial numbers and short descriptions..
2. Passive RFIDs use their own power source, mostly batteries for their application.

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

Answer: A

Radio Frequency Identification (RFID) is a wireless tracking system that consists of tags and readers.

Radio waves are used to communicate information/identity of objects or people to nearby readers – devices that can be hand-held or built into fixed positions like poles or buildings.

9 PM Compilation for the Month of May, (Third Week) 2022

Statement 1 is correct: The tags can carry encrypted information, serial numbers and short descriptions. There are also high-memory tags like the ones designed for use in the aviation industry.

Statement 2 is incorrect: Active RFIDs use their own power source, mostly batteries. Passive RFIDs, on the other hand, are activated through the reader using the electromagnetic energy it transmits.

Active tags have a longer read range, around 300 ft, compared to passive tags.

Source: [Indian Express](#)

Q.8) With reference to the 5Gi Technology, consider the following statements:

1. 5Gi offers more range at a higher frequency.
2. This technology is indigenously developed.
3. 5Gi technology is primarily meant to enhance rural coverage.

Which of the statements given above is/are correct?

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

Answer: C

Statement 1 is incorrect: 5Gi offers more range at a lower frequency, which is the opposite of 5G. The latter works between the 700 MHz to 52,000 MHz bands and sacrifices on range.

Statement 2 is correct: The 5G Radio Interface Technology, called 5Gi is a locally designed telecommunication network that has been designed by IIT Hyderabad, IIT Madras and the Centre of Excellence in Wireless Technology.

Statement 3 is correct: 5Gi technology is primarily meant to enhance rural coverage. It facilitates much larger reach of the 5G towers and radio networks. Hence, it is a major breakthrough for bridging the rural-urban digital divide in 5G deployment.

Source: [The Hindu](#)

Q.9) Seoul Declaration which was seen in the news, is related to which of the following?

- a) Declaration of peace between North Korea and South Korea.
- b) Regarding the protection of cyber security.
- c) To make green, healthy and resilient future with forests.
- d) To provide human rights in war torn regions.

Answer: C

The Seoul Declaration was adopted at the XV World Forestry Congress. World Forestry Congress is a forum for the exchange of views and experiences on all aspects of forests and forestry. This may lead to the formulation of broad recommendations applicable at national, regional and global levels.

It identifies priority areas with potential to lead to a green, healthy and resilient future.

Source: [DTE](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.10) With reference to the pardoning power of Governor, consider the following statements;

1. Governor's non-exercise of power under Article 161 of the Constitution was immune from judicial review.
2. Governor does not have the power to grant pardon in a case under Section 302 (murder) of the Indian Penal Code.

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

Answer: d

Statement 1 is incorrect: Governor's non-exercise of power under Article 161 of the Constitution was not immune from judicial review. For instance, Governor's delay to decide Perarivalan's pardon for more than two years has compelled the apex court to employ its constitutional powers under Article 142 to do justice to Perarivalan.

Statement 2 is incorrect: In Perarivalan case, Centre's argued that the President exclusively and not the Governor had the power to grant pardon in a case under Section 302 (murder) of the Indian Penal Code. But the court said that such a contention would render Article 161 a "dead-letter".

This would rather create an extraordinary situation whereby pardons granted by Governors in murder cases for the past 70 years would be rendered invalid.

Source: [The Hindu](#)

PRELIMS

Q.1) With reference to P waves and S waves generated during an earthquake, consider the following statements:

1. P waves and S waves can travel through all three mediums- solid, liquid, and gas.
2. The shadow zone of S-wave is larger than that of the P-waves.

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

Answer: B

Statement 1 is incorrect: S waves can travel only through solid medium.

Statement 2 is correct: The shadow zone results from P waves being refracted by the liquid core and S waves being stopped completely by the liquid core.

- The shadow zone of S-wave is larger than that of the P-waves.

Source: [Article](#)

Q.2) Which of the following is a criterion for designation of a Biosphere Reserve?

1. A site must contain a protected and minimally disturbed core area of value of nature conservation.
2. Core area must be a bio-geographical unit and should be large enough to sustain a viable populations representing all trophic levels.
3. The involvement of local communities and use of their knowledge in biodiversity preservation.

Select the correct answer from the codes given below:

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

Answer: d

Following are the criteria for designating an area as a Biosphere Reserve:

- A site must contain a protected and minimally disturbed core area of value of nature conservation.
- Core area must be a bio-geographical unit and should be large enough to sustain a viable populations representing all trophic levels.
- The involvement of local communities and use of their knowledge in biodiversity preservation.
- Areas potential for preservation of traditional tribal or rural modes of living for harmonious use of the environment.

Source: [Article](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.3) With reference to Cage aquaculture, consider the following statements:

1. Only fishes are grown in this process.
2. This type of aqua culture reduces water pollution as well as 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

Answer: A

- **Statement 1 is correct:** Cage aquaculture involves the growing of fishes in existing water resources while being enclosed in a net cage which allows free flow of water.
- **Statement 2 is incorrect:** In cage aquaculture, accumulation of unused feed and excreta will lead to water pollution as well as eutrophication

Q.4) With reference to the phenomenon of photosynthesis, consider the following statements:

1. Water molecules are produced and released into the soil.
2. Carbon dioxide is converted into organic molecules which are stored in the producer.
3. Oxygen is produced and released into the atmosphere.

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

Answer: C

Water molecules are used, not produced, during photosynthesis. Oxygen is released as a waste product during photosynthesis. Carbon dioxide is used during photosynthesis to produce glucose, which is stored for use by the producer.

Q.5) Consider the following statements:

1. Decline in food and fuel prices will lead to more changes in the headline inflation than core inflation.
2. Headline inflation is more relevant for developing economies than developed economies.

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

Answer: c

- Core inflation is the change in the costs of goods and services but does not include those from the food and energy sectors. Since the prices of fuel and food items tend to fluctuate and create 'noise' in inflation computation, core inflation is less volatile than headline inflation.

9 PM Compilation for the Month of May, (Third Week) 2022

- Headline inflation refers to the change in value of all goods in the basket because in a developed economy, food & fuel account for 10-15% of the household consumption basket and in developing economies it forms 30-40% of the basket.

Q.6) With reference to the National Green Tribunal, consider the following statements:

1. The Tribunal is guided by principles of natural justice.
2. With the establishment of NGT, India became the first country in the world to set up a specialized environmental tribunal.

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

Answer: A

Statement 1 is correct: The Tribunal is not bound by the procedure laid down under the Code of Civil Procedure 1908, but shall be guided by principles of 'natural justice'.

Statement 2 is incorrect: With the establishment of the NGT, India became the third country in the world to set up a specialised environmental tribunal, only after Australia and New Zealand, and the first developing country to do so.

Source: [The Hindu](#)

Q.7) With reference to Sudden Infant Death Syndrome (SIDS), consider the following statements:

1. It only occurs in malnourished babies during sleep.
2. Newborn babies delivered prematurely or with low weight at birth are believed to be at a greater risk of SIDS.

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

Answer: B

Statement 1 is incorrect: SIDS is the unexpected death of an apparently healthy infant. It usually occurs while the baby is asleep, although in rare cases, it can also occur while the child is awake. Hence it is also called as "Cot Death".

Statement 2 is correct: Newborn babies delivered prematurely or with low weight at birth are believed to be at a greater risk of SIDS.

Source: [The Hindu](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.8) Sela Tunnel project, which was seen in news, is located in which of the following state/UTs?

- a) Jammu and Kashmir
- b) Assam
- c) Arunachal Pradesh
- d) Punjab

Answer: C

The strategically-significant Sela Tunnel project in Arunachal Pradesh is nearing completion. The project is located in West Kameng district of Arunachal Pradesh.

Source: [Indian Express](#)

Q.9) With reference to the National Startup Advisory Council (NSAC), consider the following statements;

- 1. It advises the government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country.
- 2. It was constituted by the Ministry of Micro, Small and Medium Enterprises.

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

Answer: A

Statement 1 is correct: It advises the government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country.

Statement 2 is incorrect: It was constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

Source: [PIB](#)

Q.10) Which of the following is/are the environmental cost of promoting Ethanol Blending?

- 1. No reduction in Nitrous Oxide.
- 2. Increase in land use.
- 3. Increased water use.

Select the correct answer from the codes given below.

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

Answer: C

No reduction in Nitrous Oxide: Because ethanol burns more completely than petrol, it avoids emissions such as carbon monoxide. However, tests conducted in India have shown that there is no reduction in nitrous oxides, one of the major environmental pollutants.

9 PM Compilation for the Month of May, (Third Week) 2022

More usage of Land: A report by the Institute for Energy Economics and Financial Analysis (IEEFA) says that for India to meet its target of 20% ethanol blended in petrol by the year 2025, it will need to bring in 30,000 additional sq km of land to come under maize cultivation. However, the report says that half of that land can be used more efficiently to produce clean electricity from solar energy.

High Usage of Water: For India, sugarcane is the cheapest source of ethanol. On average, a ton of sugarcane can produce 100 kg of sugar and 70 litres of ethanol, but that would mean 1,600 to 2,000 litres of water to produce 1 kg of sugar implying that a litre of ethanol from sugar requires about 2,860 litres of water.

Source: [The Hindu](#)

SCIENCE AND TECHNOLOGY

Q.1) With reference to Gene editing, consider the following statements:

1. It can be used to make plants exhibit properties not native to them.
2. Gene editing involves insertion of foreign genetic material.

Which of the statements given above is/are correct?

- 1) 1 only
- 2) 2 only
- 3) Both 1 and 2
- 4) Neither 1 nor 2

Answer: A

- **Statement 1 is correct:** Gene editing can be used to make plants exhibit properties not native to them.
- **Statement 2 is incorrect:** Gene editing enables modification of plants' owned genes, without insertion of external genes (foreign genetic material).

Source: [Article](#)

Q.2) Nazul land sometimes seen in news is a?

- a) Non-agricultural state land owned by Marathas and then the British.
- b) Naturally degraded agricultural land used for commercial purposes.
- c) Land used for non-commercial agricultural purposes by the state.
- d) Non-agricultural community owned land used for public purposes.

Answer: A

- Nazul land is a non-agricultural state land owned by the Marathas, and then the British.

Source: [Article](#)

Q.3) With reference to the internal structure of the Earth, consider the following statements:

1. Moho discontinuity forms the boundary between the crust and the asthenosphere.
2. Earth's inner core rotates slightly faster relative to the rotation of the surface.

Which of the statements given above is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: D

Both statements are correct.

- Mohorovicic (Moho) discontinuity forms the boundary between the crust and the asthenosphere (upper reaches of the mantle) where there is a discontinuity in the seismic velocity.
- Earth's inner core rotates slightly faster relative to the rotation of the surface.

Source: [Article](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.4) With reference to Bamboo cultivation in India, consider the following statements:

1. Growing or cutting bamboo outside the forests is prohibited in India.
2. India is the world's second largest cultivator of bamboo after China.

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

Answer: B

- **Statement 1 is incorrect:** Following the amendment in the Indian Forest Act, 1927, bamboo was removed from the category of tree in 2017. Now there is no prohibition on growing or cutting bamboo trees even outside the forests.
- **Statement 2 is correct:** Around 80 per cent of bamboo forests lie in Asia with India, China and Myanmar having 19.8 million hectares of bamboo. India is the world's second largest cultivator of bamboo after China, with 136 species and 23 genera spread over 13.96 million hectares.

Source: [Article](#)

Q.5) Arrange the following events in chronological order:

1. Bay of Pigs invasion
2. Korean War
3. Persian Gulf War

Select the correct answer using the code given below:

- a) 1-2-3
- b) 2-1-3
- c) 1-3-2
- d) 3-1-2

Answer: b

- **1950–1953: Korean War** a proxy conflict in the Cold War between United States (as part of the United Nations) and South Korea vs. North Korea and Communist China.
- **1961: Bay of Pigs invasion:** an unsuccessful attempt to invade Cuba by Cuban exiles, organised and financed by Washington.
- **1990–91: The Gulf War** was a war waged by coalition forces from 35 nations led by the United States against Iraq in response to Iraq's invasion and annexation of Kuwait arising from oil pricing and production disputes

9 PM Compilation for the Month of May, (Third Week) 2022

Q.6) With reference to Regional Anti-Terrorist Structure-SCO, consider the following statements:

1. It is a permanent body of the Sanghai Cooperation Organization (SCO).
2. The main functions of SCO-RATS are information sharing..

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

Answer: C

Both the statements are correct.

SCO-RATS is a permanent body of the Sanghai Cooperation Organization (SCO).

It is promoting coordination and interaction between the SCO member states as per as fight against terrorism, extremism and separatism are concern.

The main functions of SCO-RATS are information sharing. Being a member, India has actively participated in the activities of SCO-RATS.

Source: [Indian Express](#)

Q.7) Which of the following is/are the benefits associated with carbon farming?

1. Make agriculture climate friendly.
2. Incentivise farmers to introduce regenerative practices.
3. Enhance the food security.

Select the correct answer from the codes given below.

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

Answer: D

Carbon farming (also known as carbon sequestration) is a system of agricultural management that helps the land store more carbon and reduce the amount of Greenhouse Gases (GHGs) that it releases into the atmosphere.

Carbon farming promises a bold new agricultural business model — one that fights climate change, creates jobs, and saves farms that might otherwise be unprofitable.

The Carbon farming will increase income generation opportunity and ensure food security net for the population.

Carbon farming can incentivise farmers to introduce regenerative practices in their agricultural processes. Thus help them shift their focus from improving yields to functioning ecosystems and sequestering carbon that can be sold or traded in carbon markets.

Source: [Business Line](#)

9 PM Compilation for the Month of May, (Third Week) 2022

Q.8) Consider the following statements;

1. He was influenced by Nakshabandi sufi order.
2. Shaista Khan and Jai Singh were his abled gernerals.
3. He ruled most of the Indian subcontinent for half a century.

Which of the following personality is described in the lines above?

- a) Akbar
- b) Shah Jahan
- c) Aurangzeb
- d) Humayun

Answer: C

Recently, the Archaeological Survey of India (ASI) has barred visit to Mughal emperor Aurangzeb's tomb for five days after a threat.

Source: [The Hindu](#)

Q.9) Project WARDEC was sometime seen in news is related to which of the following?

- a) To enhance the war time coordination among UN Peacekeeping forces.
- b) To use artificial intelligence(AI) to design virtual reality wargames.
- c) To improve the mathematical understanding of Decimals.
- d) To make all the government buildings and wards accessible to divyangs.

Answer: B

WARDEC will be a first-of-its-kind simulation-based training center in India that will use artificial intelligence(AI) to design virtual reality wargames.

Purpose: The centre will be used by the Army to train its soldiers and test their strategies through metaverse-enabled gameplay.

Source: [Indian Express](#)

Q.10) Consider the following statements regarding the Respiratory Syncytial Virus;

1. Unlike Covid-19, RSV is not contagious in nature.
2. Children six months and younger are most vulnerable to this virus.
3. RSV killed 97 percent of children under the age of five in low- and middle-income nations.

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

Answer: B

- **Statement 1 is incorrect:** Respiratory Syncytial Virus is characterized by its highly contagious nature i.e., it has a high potential to infect people. It exacerbated the seasonal lung infection.
- **Statement 2 is correct:** Children six months and younger are most vulnerable to this virus.

9 PM Compilation for the Month of May, (Third Week) 2022

- **Statement 3 is correct:** RSV killed 97 percent of children under the age of five in low- and middle-income nations.

Source: [Indian Express](#)

