

## *10 PM Current Affairs Quiz Compilation*

**11<sup>th</sup> to 16<sup>th</sup> July 2022**

**PRELIMS**

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**Q.1) Which of the following is/are part of Geoengineering techniques?**

1. Solar Radiation Modification (SRM)
2. Cloud engineering
3. Carbon Dioxide Removal (CDR) technologies

**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

**Answer: D**

All are part of geoengineering techniques designed to deliberately alter the climate system to reduce the impacts of global warming. They are broadly fall under two categories: Solar Radiation Modification (SRM) technologies and Carbon Dioxide Removal (CDR) technologies.

SRM technologies include techniques such as Cloud engineering, Stratospheric Aerosol Injection (SAI), etc.

**Q.2) Which of the following will increase the liability of the government?**

- Capital expenditure
- Salaries of employees
- Borrowings by PSUs

**Select the correct answer from the codes given below:**

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

**Answer: c**

- Borrowings by PSUs would increase the liabilities of the government.
- Capital expenditure creates assets for the government and causes reduction in liabilities for the government.
- Unlike capital expenditure, revenue expenditure is one that neither creates assets nor reduces any liability of the government.
- Salaries of employees, interest payment on past debt, subsidies, pension, etc, fall under the category of revenue expenditure.

**Q.3) Which of the following impacts of predatory pricing are not correct?**

1. Low prices for the product in the long run
2. Creation of monopoly
3. Increase in choice for customers

**Select the correct answer using the codes given below**

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

**Ans) c**

In a predatory pricing scheme, prices are set low to attempt to drive out competitors and create a monopoly.

Consumers may benefit from lower prices in the short term, but they suffer if the scheme succeeds in eliminating competition, as this would trigger a rise in prices and a decline in choice.

**Q.4) Which of the following factor/s is/are responsible for higher debt-GSDP ratio in States?**

1. Declining Tax Revenue
2. High Revenue Expenditure
3. Significant Committed Expenditure

**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

**Answer: D**

According to a Reserve Bank of India(RBI) study, five states namely, Bihar, Kerala, Punjab, Rajasthan, and West Bengal figure among the most stressed states fiscally.

**Exceeded Debt and Fiscal Targets:** Among the ten states, Andhra Pradesh, Bihar, Rajasthan and Punjab exceeded both debt and fiscal deficit targets for 2020-21 set by the 15th Finance Commission (FC-XV).

**Declining Tax Revenue:** The own tax revenue of some of these states, viz Madhya Pradesh, Punjab and Kerala has been declining over time making them fiscally more vulnerable.

**High Revenue Expenditure:** The share of revenue expenditure in total expenditure of these states varies in the range of 80-90%. This results in poor expenditure quality, as reflected in their high revenue spending to capital outlay ratios.

**Significant Committed Expenditure:** Committed expenditure which inter alia includes interest payments, pensions and administrative expenses accounts for a significant portion (over 35 per cent) of the total revenue expenditure in some of these states.

**High Discoms Losses:** The combined losses of DISCOMs in the five most indebted states, viz Bihar, Kerala, Punjab, Rajasthan and West Bengal, constituted 24.7% of the total DISCOMs losses in 2019-20 while their combined long-term debt was 22.9% of the total DISCOM debt in 2019-20.

**Q.5) Which of the following statements correctly defines the term 'Off-Budget Debt'?**

- a) These are borrowings taken by the Centre to pay off the liabilities or NPAs of Important financial institutions or banks.
- b) These are borrowings taken not by the Centre directly, but by another public institution on the direction of government.
- c) These are borrowings taken by the government, to spend on the activities of central intelligence to maintain secrecy.
- d) These are the borrowings taken by the center, for payment of salaries of constitutional bodies.

**Ans) b**

**Explanations**

Off-budget borrowings are loans that are taken not by the Centre directly, but by another public institution which borrows on the directions of the central government. Such borrowings are used to fulfil the government's expenditure needs.

Source: [Indian Express](#)

**Q.6) With reference to derecho, consider the following statements;**

- 1. These are thunderstorms that have a higher level of rotation than the TORNADOS.
- 2. They mostly occur across central and eastern parts of the United States.

**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:** A derecho is a widespread, long-lived, straight-line windstorm that is associated with a band of rapidly moving showers or thunderstorms.

Straight-line storms are those in which thunderstorm winds have no rotation, unlike a tornado. These storms travel hundreds of miles and cover a vast area.

**Statement 2 is correct:** They mostly occur across central and eastern parts of the United States. However, Derechos have also been documented elsewhere across the world such as in Germany, and Russia.

Source: [Economic Times](#)

**Q.7) ARYABHAT-1, was seen in news recently, is related to which of the following?**

- a) It is an Indian satellite that aims to study the solar system.
- b) It is a new supercomputer that has the capacity of 50 petaflops.
- c) It is a chipset that will allow Artificial Intelligence and Machine Learning apps to perform much better and faster.
- d) It is a new aerosol that aims to reduce the population of mosquitoes in specific areas.

**Answer: C**

ARYABHAT-1 stands for Analog Reconfigurable Technology and Bias-scalable Hardware for AI Tasks.

**Purpose:** It is an analog chipset that will allow Artificial Intelligence and Machine Learning apps to perform much better and faster.

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**Uses:** This chipset is especially helpful for AI-based applications which deal with object or speech recognition systems, like Alexa or Siri. They are also very useful in operations that require massive parallel computing at high speeds.

Source: [Firstpost](#)

**Q.8) With reference to INS Vikrant, consider the following statements;**

1. The aircraft is a type of short take-off but arrested landing
2. Currently, the Indian Navy does not operate any aircraft carrier.

**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 ship can operate a mix of aircrafts like Russian MiG-29K/KUB fighters, Kamov-31 helicopters and a new fleet of Sikorsky MH-60R Seahawk multi-role helicopters.

**Type of Aircraft Carrier:** STOBAR (short take-off but arrested landing)

**Statement 2 is incorrect:** Currently, the Indian Navy operates a single aircraft carrier, INS Vikramaditya, which was bought from Russia. After Induction of INS Vikrant, the Indian Navy is planning a second indigenous aircraft carrier (IAC-2). It is believed that the IAC-2 will be named INS Vishal.

Source: [Business Standard](#)

**Q.9) Which of the following factor/s is/are responsible for cloud bursts?**

1. High temperature
2. Slow winds in the region
3. High cloud cover

**Select the correct answer using the codes given below;**

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

**Answer: B**

A cloudburst refers to an extreme amount of rain that happens in a short period, sometimes accompanied by hail and thunder.

**Conditions during Cloudburst:** The relative humidity and cloud cover are at the maximum level with low temperature and slow winds because of which a high amount of clouds may get condensed at a very rapid rate and result in a cloudburst.

Source: [Indian Express](#)

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**Q.10) With reference to Mission Vatsalya, consider the following statements;**

1. The Mission will execute a 24×7 helpline service for children as defined under Juvenile Justice Act, 2015.
2. The Mission will promote in-country adoption and regulating inter-country adoption.

**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 Mission in partnership with states and districts will execute a 24×7 helpline service for children as defined under Juvenile Justice Act, 2015.

**Statement 2 is incorrect:** It will support State Adoption Resource Agencies (SARA), which will further support the Central Adoption Resource Authority (CARA) in promoting in-country adoption and regulating inter-country adoption.

Source: [PIB](#)

**PRELIMS**

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**Q.1) With reference to Marburg virus disease, consider the following statements:**

1. Marburg and Ebola virus diseases are clinically similar to each other.
2. It is a zoonotic disease.

**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.

- Marburg and Ebola viruses are both members of the Filoviridae family (filovirus). Though caused by different viruses, the two diseases are clinically similar. Both diseases are rare and have the capacity to cause outbreaks with high fatality rates.
- MVD is caused by the Marburg virus, a genetically unique zoonotic (or, animal-borne) RNA virus of the filovirus family.

**Source:** [Article](#)

**Q.2) With reference to Consumer Protection framework in India, consider the following statements:**

1. Hotels and restaurants can restrict entry or services to consumers based on the collection of service charges.
2. Central Consumer Protection Authority (CCPA) is empowered to recall unsafe goods and services.

**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:** As per the new guidelines, hotels or restaurants are prohibited from levying extra charges automatically or by default in the bill or by any other name. Also, they are not allowed to force service charges, and must clearly inform the consumers that service charges are voluntary, optional, and at their discretion. Most importantly, hotels and restaurants are no longer allowed to restrict entry or services based on the collection of service charges. Furthermore, hotels cannot add service charges to their bills and charge GST on the total.
- **Statement 2 is correct:** CCPA is empowered to order the recall of unsafe goods and services, discontinuation of unfair trade practices and misleading advertisements.

**Source:** [Article](#)



**Q.3) With reference to Natural Gas, consider the following statements:**

1. The largest component of natural gas is methane.
2. The volume of natural gas in its liquid state is smaller than its volume in its gaseous state.

**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.**

- **Statement 1 is correct:** Natural gas is a fossil energy source that formed deep beneath the earth's surface. Natural gas contains different compounds. The largest component of natural gas is **methane**, a compound with one carbon atom and four hydrogen atoms (CH<sub>4</sub>)
- **Statement 2 is correct:** The volume of natural gas in its liquid state is about 600 times smaller than its volume in its gaseous state. This process makes it possible to transport natural gas to places where pipelines do not reach.

**Q.4) 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 up to 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 (wm<sup>2</sup>) 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.



**Q.5) The LUX-ZEPLIN experiment sometimes seen in news is associated with which of the following?**

- a) Dark matter
- b) Near Earth Objects
- c) Quasars
- d) Black Holes

**Answer: a**

- Many physicists strongly believe that the entire visible part of the universe forms only 5% of all matter in it. They believe the rest is made up of dark matter and dark energy. Once this was convincingly demonstrated through various indirect observations and calculations, experiments started being set up to hunt for these elusive particles.
- The latest to hit the news in the field of dark matter is a dark matter detector experiment named LUX-ZEPLIN (LZ) in South Dakota in the U.S. As of today, this is the most sensitive dark matter detector in the world. To give an idea of the degree of difficulty in measuring evidence of a dark particle, it is said that the chamber of this LZ detector, can contain only one gram of dust if it is to detect a dark matter particle.

Source: [Article](#)

**Q.6) World Population Prospects (WPP) Report was released by which of the following organization?**

- a) Asian Forum of Parliamentarians on Population and Development
- b) Partners in Population and Development
- c) United Nations Population Division
- d) Demographic responsible

**Answer: C**

The United Nations Population Division (UNPD) has released the World Population Prospects(WPP) Report 2022. These projections show that India will become the most populous country in 2023, earlier than the year 2027, as expected.

Source: [Indian Express](#)

**Q.7) Which of the following statement is not correct about National Emblem?**

- a) The National Emblem is an adaptation from the Sarnath Lion Capital of Ashoka which is preserved in the Sarnath Museum.
- b) The emblem of India was adopted on January 26, 1950 - the same day when the constitution of India came into force.
- c) The frieze of the abacus has sculptures of Tiger, Cow, horse and elephant.
- d) The words 'Satyameva Jayate' from Mundaka Upanishad are inscribed below the abacus in the Devanagari script.

**Answer: C**

The Lion Capital has four lions mounted back-to-back on a circular abacus. The frieze of the abacus is adorned with sculptures in high relief of an elephant, a galloping horse, a bull and a lion separated by intervening Dharma Chakras.

Source: [The Hindu](#)

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**Q.8) With reference to Epstein Barr Virus (EBV), consider the following statements;**

1. The EBV virus has been found to be widely present in the human population.
2. The EBV might cause various complications like Burkitt's lymphoma, stomach cancer, multiple sclerosis and so on.

**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**

**Statement 1 is correct:** It is an "informal mechanism" to support Pacific islands and to boost diplomatic, and economic ties in the pacific region.

**Statement 2 is incorrect:** This may further lead to various complications like a type of blood cancer called Burkitt's lymphoma, stomach cancer, multiple sclerosis and so on.

Source: [Indian Express](#)

**Q.9) With reference to Dark matter, consider the following statements;**

1. Dark matter is made up of particles that have a positive charge in them.
2. The visible part of the universe is much less compared to the presence of dark matter and dark energy.

**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:** Dark matter is made up of particles that do not have a charge — which means they do not interact through electromagnetic interactions.

**Statement 2 is correct:** Many physicists strongly believe that the entire visible part of the universe forms only 5% of all matter in it. They believe the rest is made up of dark matter and dark energy.

Source: [The Hindu](#)

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**Q.10) With reference to service charge, consider the following statements;**

1. It is a fee collected to pay for services associated with the purchase of a primary product or service.
2. It is collected by hospitality sectors alone.

**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 fee collected to pay for services associated with the purchase of a primary product or service.

**Statement 2 is incorrect:** It is collected by hospitality sectors and food and beverage industries as a fee for serving customers.

Source: [The Hindu](#)

**PRELIMS**

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**Q.1) Services Trade Restrictiveness Index is released by which of the following organizations?**

- a) IMF
- b) OECD
- c) IBRD
- d) WEF

**Answer: b**

- STRI is released by the Organization for Economic Co-operation and Development (OECD).

**Source:** [Article](#)

**Q.2) 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?**

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) 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).

**Q.3) Singalila National Park is located in which of the following states?**

- a) Andhra Pradesh
- b) West Bengal
- c) Telangana
- d) Gujarat

**Answer: b**

- Singalila National Park is the highest protected area in West Bengal.

**Source:** [Article](#)

**Q.4) With reference to Azores High, consider the following statements:**

1. It is a high-pressure system that extends over the eastern subtropical North Atlantic and western Europe during winter.
2. It is associated with cyclonic winds.

**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 subtropical high-pressure system that extends over the eastern subtropical North Atlantic and western Europe during winter,
- **Statement 2 is incorrect:** It is associated with anticyclonic winds in the subtropical North Atlantic. It is formed by dry air aloft descending the subtropics and coincides with the downward branch of the Hadley Circulation.

**Source:** [Article](#)

**Q.5) With reference to the Lab Grown Diamonds, consider the following statements:**

1. They are chemically, physically, and optically different from natural diamonds.
2. These diamonds are used in computer chips and satellites.

**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:** 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 2 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

**Q.6) Consider the following statements**

1. He discovered several ground-breaking chemical compounds including mercurous nitrite.
2. One of his famous books is Life and Experience of a Bengali Chemist.
3. He is the founder of Bengal Chemical & Pharmaceutical Works.

**Which of the following personality is described in the statements above?**

- a) Satyendra Nath Bose
- b) Meghnad Saha
- c) Acharya Prafulla Chandra Ray
- d) Har Gobind Khorana

**Answer: C**

Source: [PIB](#)

**Q.7) With reference to Multiple sclerosis, consider the following statements;**

1. It occurs when the immune system attacks the nerve fibres and myelin sheathing in the brain and spinal cord.
2. The vulnerable group of multiple sclerosis are elderly people, especially the persons aged above 70 years.

**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 occurs when the immune system attacks the nerve fibres and myelin sheathing (a fatty substance which surrounds/insulates healthy nerve fibres) in the brain and spinal cord.

**Statement 2 is incorrect:** It affects young individuals between the ages of 20 to 40 years but may also occur in children and adolescents. Females are affected more by this disease than males.

Source: [Indian Express](#)

**Q.8) With reference to Red Panda, consider the following statements;**

1. Red Pandas are arboreal animals and considered an indicator species for ecological change.
2. Red Pandas are listed as Vulnerable in IUCN Red List.
3. Red Pandas are found in the forests of India, Nepal, Bhutan, Myanmar and southern China.

**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

**Answer: C**

**Statement 1 is correct:** Red Pandas are shy, solitary and arboreal animals and considered an indicator species for ecological change.

**Statement 2 is incorrect:** Red Pandas are listed as Endangered in IUCN Red List. Giant Pandas are listed as Endangered in IUCN Red List.

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**Statement 3 is correct:** Red Pandas are found in the forests of India, Nepal, Bhutan and the northern mountains of Myanmar and southern China.

Source: [The Hindu](#)

**Q.9) With reference to bail in India, consider the following statements;**

1. The term bail is clearly defined in the Code of Criminal Procedure (CrPC).
2. The CrPC empowers magistrates to grant bail for bailable offences as a matter of right.

**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 Code of Criminal Procedure (CrPC) does not define the word bail but only categories offences under the Indian Penal Code as 'bailable' and 'non-bailable'.

**Statement 2 is correct:** The CrPC empowers magistrates to grant bail for bailable offences as a matter of right. This would involve release on furnishing a bail bond, without or without security. For non-bailable offences which enable the police officer to arrest without a warrant, a magistrate would determine if the accused is fit to be released on bail.

Source: [Indian Express](#)

**Q.10) Which of the following Ministry/organisation has released Youth in India report?**

- a) Ministry of Health and Family Welfare
- b) Population Foundation of India
- c) Ministry of Statistics and Programme Implementation
- d) United Nations Population Fund

**Answer: C**

'Youth in India 2022' report was released by the Ministry of Statistics and Programme Implementation. According to the report, the youth population is expected to increase initially but will start to decline in the latter half of the 2011-2036 period. The total youth population increased from 222.7 million in 1991 to 333.4 million in 2011 and is projected to reach 371.4 million by 2021 (27.2% of the population) and, thereafter, decrease to 345.5 million by 2036 (22.7%).

Source: [Indian Express](#)



**PRELIMS**

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**Q.1) Global Gender Gap Index is released by which of the following organizations?**

- a) IMF
- b) WEF
- c) WB
- d) ILO

**Answer: b**

- The Global Gender Gap Index for 2022 was released by the World Economic Forum (WEF) Wednesday, and it ranks India at 135 out of 146 countries. In 2021, India was ranked 140 out of 156 countries.

**Source:** [Article](#)

**Q.2) Stephan's Quintet sometimes seen in news is associated with?**

- a) Galaxies
- b) Higg
- c) Black Holes
- d) Gravitational waves

**Answer: a**

- They are five close-range galaxies approximately 290 light years away.

**Source:** [Article](#)

**Q.3) With reference to National Clean Air Programme (NCAP), consider the following statements:**

1. Non-attainment cities, under NCAP, are those that have fallen short of the National Ambient Air Quality Standards (NAAQS) for over five years.
2. The NCAP targets are non-binding.

**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**

- **The plan includes 102 non-attainment cities**, across 23 states and Union territories, which were identified by the Central Pollution Control Board (CPCB) on the basis of their ambient air quality data between 2011 and 2015.
  - **Non-attainment cities:** These are those that have fallen short of the National Ambient Air Quality Standards (NAAQS) for over five years.
- Targets under the NCAP are legally non-binding.

**Q.4) With reference to the legal framework related to juvenile justice in India, consider the following statements:**

1. A preliminary assessment, to assess mental and physical capacity of a juvenile, under the Juvenile Justice Act, is not necessary if they are involved in a serious crime.
2. A juvenile who is treated as an adult, if found guilty, can get life imprisonment.

**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:** Section 15 of the Juvenile Justice (Care and Protection of Children) Act of 2015 requires a “preliminary assessment” to be done of the mental and physical capacity of juveniles, aged between 16 and 18, who are involved in serious crimes. The assessment is meant to gauge a child’s ability to understand the consequences of the offence and the circumstances in which he or she allegedly committed the offence.
- **Statement 2 is correct:** If the Juvenile Justice Board is of the opinion that the juvenile should not be treated as an adult, it would not pass on the case to the children’s court and hear the case itself. In that case, if the child is found guilty, he would be sent to juvenile care for three years. On the other hand, if the Board decides to refer the case to the children’s court for trial as an adult, the juvenile, if guilty, would even face life imprisonment.

**Source:** [Article](#)

**Q.5) With reference to Human Rights Council (HRC), consider the following statements:**

1. If one third of the Member States requests so, the Council can hold a special session to address human rights violations and emergencies.
2. It was created via a UN Security Council resolution.

**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:** If one third of the Member States request so, the Council can hold a special session to address human rights violations and emergencies.
- **Statement 2 is incorrect:** The Council was created by the United Nations General Assembly in 2006 by a resolution.

**Q.6) With reference to James Webb Space Telescope (JWST), consider the following statements;**

1. It is a space telescope jointly developed by NASA, the European Space Agency (ESA) and the Canadian Space Agency (CSA).
2. It is currently at a point in space known as the Lagrange point L4.

**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 space telescope jointly developed by NASA, the European Space Agency (ESA) and the Canadian Space Agency (CSA).

**Statement 2 is incorrect:** It was launched on December 25, 2021, and is currently at a point in space known as the Sun-Earth L2 Lagrange point, approximately 1.5 million km beyond Earth's orbit around the Sun.

Source: [The Hindu](#)

**Q.7) Which of the following is/are the reason/s for the occurrence of multi-drug resistance in microbial pathogens?**

1. Using antibiotics in livestock farming
2. Multiple chronic diseases in some people
3. Taking incorrect doses of antibiotics to cure diseases

**Select the correct answer using the codes given below;**

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

**Answer: D**

Source: [WHO](#)

**Q.8) Taranga Hill-Ambaji-Abu Road new rail line is going to be constructed between which of the following states?**

- a) Maharashtra and Karnataka
- b) Rajasthan and Punjab
- c) Rajasthan and Gujarat
- d) Gujarat and Madya Pradesh

**Answer: C**

Cabinet Committee on Economic Affairs has approved the construction of Taranga Hill-Ambaji-Abu Road new rail line to be constructed by the Ministry of Railways.

This rail line will traverse through the Sirohi district of Rajasthan and Banaskantha and Mahesana districts of Gujarat.

Source: [PIB](#)

**Q.9) With reference to Peptides, consider the following statements;**

1. Synthetic peptides are chemically synthesized small polymers of amino acids.
2. Peptides are bigger and has well-defined in structure than proteins.

**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:** Synthetic peptides are chemically synthesized small polymers of amino acids. One can think of synthetic peptides as being to proteins what oligos are to DNA.

**Statement 2 is incorrect:** The basic distinguishing factors are size and structure. Peptides are smaller than proteins. Traditionally, peptides are defined as molecules that consist of between 2 and 50 amino acids, whereas proteins are made up of 50 or more amino acids.

In addition, peptides tend to be less well-defined in structure than proteins which can adopt complex conformations known as secondary, tertiary and quaternary structures.

Source: [PIB](#)

**Q.10) With reference to Cervical Cancer, consider the following statements;**

1. Human Papilloma Virus (HPV), a sexually transmitted infection, play a role in causing most cervical cancer.
2. It is the most common cause of cancer death in women of reproductive age.

**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 an “informal mechanism” to support Pacific islands and to boost diplomatic, and economic ties in the pacific region.

**Statement 2 is incorrect:** Worldwide, cervical cancer is the second most common cancer type and the second most common cause of cancer death in women of reproductive age (15–44). India accounts for about a fifth of the global burden of Cervical Cancer. It kills one woman every eight minutes in the country.

Source: [Indian Express](#)

**PRELIMS**

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**Q.1) The Right to Repair has been recognized in which of the following?**

1. USA
2. France
3. EU

**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 right to repair has been recognized in many countries across the globe, including the U.S.A, U.K and European Union.

**Source:** [PIB](#)

**Q.2) With reference to Anti-Microbial Resistance (AMR), consider the following statements:**

1. India's medical societies adopted the Chennai Declaration, a set of national recommendations to promote antibiotic stewardship.
2. NDM-1 is an enzyme that makes bacteria resistant to a wide range of powerful antibiotics.

**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.

- In 2012, India's medical societies adopted the Chennai Declaration, a set of national recommendations to promote antibiotic stewardship.
- NDM-1 (New Delhi Metallo-beta-lactamase-1) is an enzyme that makes bacteria resistant to a wide range of powerful antibiotics.

**Source:** [Article](#)

**Q.3) With reference to Mission Lucy, consider the following statements:**

1. It is NASA's first mission to explore the Jupiter Trojan asteroids.
2. It is a solar-powered mission.

**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.**

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- Mission Lucy is NASA's first mission to explore the Jupiter Trojan asteroids.
  - **Named After:** The mission is named after 'Lucy', a 3.2 million-year-old ancestor who belonged to a species of hominins (which include humans and their ancestors).
- It is a solar-powered mission. It is estimated to be over 12 years long, during the course of which the spacecraft will visit eight asteroids covering a distance of about 6.3 billion km to deepen the understanding of the "young solar system".

**Q.4) SP Mukherjee committee sometimes in news is related to which of the following?**

- a) Minimum Wages
- b) Labour codes
- c) Occupational safety
- d) FDI in defence

**Answer: a**

- The committee is related to minimum wages and national floor wages.

**Source:** [Article](#)

**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.

**Q.6) With reference to Unparliamentary Words, consider the following statements;**

1. There are phrases and words both in English and in Indian languages, that are considered "unparliamentary".
2. In 2022, India have listed these words for the first time since independence.

**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**



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**Statement 1 is correct:** There are phrases and words, literally in thousands, both in English and in Indian languages, that are considered “unparliamentary”.

**Statement 2 is incorrect:** The Presiding Officers — Speaker of Lok Sabha and Chairperson of Rajya Sabha — have the job of keeping such words out of Parliament’s records.

For their reference, the Lok Sabha Secretariat has brought out a bulky tome titled ‘Unparliamentary Expressions’. The last such book was published in 2009.

Source: [Indian Express](#)

**Q.7) With reference to the Forest Advisory Committee (FAC), consider the following statements;**

1. The FAC gives approval for diverting any forest land for non-forestry usage.
2. This committee will examine whether the user agent has a plan in place to ensure that the following environmental damage will be minimal.

**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:** For forest land beyond five hectares, approval for diverting land must be given by the Central government. This is done through a specially constituted committee, called the Forest Advisory Committee (FAC).

**Statement 2 is correct:** This committee examines whether the user agency, or those who have requested forest land a) Have made a convincing case for the upheaval of that specific parcel of land, b) Whether they have a plan in place to ensure that the succeeding damage will be minimal and c) The said piece of land doesn’t cause damage to wildlife habitat.

Source: [The Hindu](#)

**Q.8) Which of the following is/are the Application/s of Genomics?**

1. Controlling Infectious Disease
2. Preventing and Managing Genetic Conditions
3. Cataloguing of genetic diversity

**Select the correct answer using the codes given below;**

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

**Answer: D**

Genomics is the study of all of a person's genes, including interactions of those genes with each other and with the person's environment.

Applications of Genomics

**Control Infectious Disease:** Genomics can map the evolution of infectious agents, assign phenotypic, such as infectivity and pathogenicity, to specific genes and evaluate an infectious agent’s sensitivity or resistance to drugs.

**Prevent and Manage Genetic Conditions:** These include evaluating carrier status for a genetic disorder and screening for and diagnosis of single gene disorders.



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**Agriculture:** These include cataloguing of genetic diversity in the wild and in founder stocks and assessing genetic profiles for health and commercial traits.

Source: [DTE](#)

**Q.9) With reference to Balance of Payments, which of the following constitutes/constitute the Current Account?**

1. Balance of invisibles
2. Special Drawing Rights
3. Balance of trade

**Select the correct answer using the codes given below;**

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

**Answer: C**

Loans and borrowing by private or public sectors, investments, and changes in the forex reserves are some of the examples of the components of the Capital Account. So, Special Drawing Rights are part of capital account.

Current Account shows export and import of visibles (also called merchandise or goods - represent trade balance) and invisibles (also called non-merchandise). Invisibles include services, transfers and income.

Source: [The Hindu](#)

**Q.10) With reference to Mediation, consider the following statements;**

1. It is a voluntary, binding process in which an impartial and neutral mediator facilitates disputing parties in reaching a settlement.
2. In mediation, the mediator has the power to impose a solution upon parties.

**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 voluntary, binding process in which an impartial and neutral mediator facilitates disputing parties in reaching a settlement.

**Statement 2 is incorrect:** A mediator does not impose a solution but creates a conducive environment in which disputing parties can resolve all their disputes.

Source: [The Hindu](#)

**PRELIMS**

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

1. It is naturally produced in the stratosphere.
2. Ground level Ozone leads to reduced agricultural crops and commercial forest yields.

**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.

- The stratosphere or “good” ozone layer extends upward from about 6 to 30 miles and protects life on Earth from the sun’s harmful ultraviolet (UV) rays.
- Ground level Ozone leads to reduced agricultural crop and commercial forest yields, reduced growth and survivability of tree seedlings, and increased susceptibility to diseases, pests and other stresses such as harsh weather.

**Source:** [Article](#)

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

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

**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: 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.

**Q.3) Kudremukh National Park is located in which of the following states?**

- a) Tamil Nadu
- b) Karnataka
- c) Andhra Pradesh
- d) Telangana

**Answer: b**

- The Kudremukh National Park is located in Karnataka.

**Source:** [Article](#)

**Q.4) Which of the following materials is a semiconductor?**

1. Silicon
2. Gallium arsenide
3. Germanium

**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**

- All materials are semiconductors.

**Q.5) Which of the following countries are the part of the Shanghai Five?**

1. Uzbekistan
2. Iran
3. Kyrgyzstan

**Select the correct answer from the codes given below:**

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

**Answer: c**

- Prior to the creation of SCO in 2001 - Kazakhstan, China, **Kyrgyzstan**, Russia and Tajikistan were members of the Shanghai Five.
- India and Pakistan became members in 2017.
- On 17th September, 2021, it was announced that Iran would become a full member of the SCO.

**Source:** [Article](#)

**Q.6) Which of the following is/are the advantages of Build-Operate-Transfer (BOT) Model?**

1. The model provides a mechanism and incentives for enterprises to improve efficiency.
2. The risks of the project are shared by the private sector.
3. Smaller projects can be completed in a short time along with low upfront cost.

**Select the correct answer using the codes given below;**

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

**Answer: B**

**Statement 1 is correct:** BOT provides a mechanism and incentives for enterprises to improve efficiency through performance-based contracts and output-oriented targets.

**Statement 2 is correct:** Under this model, the risks of the project are shared by the private sector.

**Statement 3 is incorrect:** It may take a long time and considerable up front expenses to prepare and close a BOT financing deal as it involves multiple entities and requires a relatively complicated legal and institutional framework. There the BOT may not be suitable for small projects.

Source: [Indian Express](#)

**Q.7) With reference to Alcohol Consumption, consider the following statements;**

1. People aged above 40 are at greatest risk of harmful alcohol consumption.
2. Alcohol Consumption has no associated health benefits.

**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:** According to the recent study, young men are at the greatest risk of harmful alcohol consumption. Males between the ages 15-39 are at the greatest risk of harmful alcohol consumption. In every region, males in this age group comprised the largest segment of the population drinking unsafe amounts.

There are only health risks with 60% of alcohol-related injuries occurring among this segment including motor vehicle accidents, suicides and homicides.

**Statement 2 is incorrect:** For adults over age 40, health risks from alcohol consumption vary by age and region. However, consuming a small amount of alcohol can provide some health benefits for people in this age group such as reducing the risk of cardiovascular disease, stroke, and diabetes.

Source: [Indian Express](#)

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**Q.8) Y- 3023 Dunagiri which was seen in news recently is related to which of the following statement?**

- a) Newly found asteroids by James Webb space telescope.
- b) New mountain peak identified in Indian Ocean.
- c) New warship launched under Project 17A.
- d) The missile system invented by DRDO to tackle cruise missiles.

**Answer: C**

Y- 3023 Dunagiri is the fourth warship of Project 17A. The ship is named after an earlier frigate. The former one was a Leander class ASW frigate which was decommissioned in 2010.

**Features:** The ships are designed with extensive use of low-observability technologies, including the use of composite materials and radar-absorbing coatings. These materials assist the vessel in maintaining a low radar cross-section(RCS).

Source: [PIB](#)

**Q.9) With reference to Multiple First Information Reports, consider the following statements;**

- 1. Multiple FIRs can be filed against the same person for the same offence.
- 2. Once framed, all FIRs must be investigated.

**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:** Multiple FIRs can be filed against the same person for the same offence. For instance, In a recent case against former spokesperson of a political party, at least nine FIRs have been filed in multiple states. The date and time of the occurrence of the alleged offence are the same in all the FIRs.

All the FIRs refer to the same television debate in which the former spokesperson made remarks against the Prophet. The sections of the Indian Penal Code are almost the same in all the FIRs.

**Statement 2 is incorrect:**

**In TT Antony vs. State of Kerala case, 2001:** In this, the SC held that only the earliest information in regard to the commission of an offence could be investigated and tried. (Not all of them have to be investigated, only the earliest one has to be investigated).

**In Babubhai vs. State of Gujarat case, 2010:** The Court explained that the test to determine the sameness of the offence is to identify whether “the subject matter of the FIRs is the same incident, same occurrence or are in regard to incidents which are two or more parts of the same transaction”.

Source: [Indian Express](#)

**10 PM Compilation for the Month of July, (Second Week) 2022**

**Q.10) With reference to Monkeypox, consider the following statements;**

1. Monkeypox virus DNA is not present in samples of saliva, urine, rectal swabs and faeces.
2. Human-to-human transmission of virus is largely due to sexual contact, especially among men who have sex with men (MSM).

**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:** Monkeypox virus DNA has been found in samples of semen, saliva, urine, rectal swabs and faeces at high viral loads.

**Statement 2 is correct:** The rapid increase in cases and geographical spread have primarily been due to human-to-human transmission largely during sexual contact, especially among men who have sex with men (MSM).

**Source:** [The Hindu](#)