Q1. Which of the following provisions are correct regarding the Autonomous District Council (ADC) under **sixth schedule of Indian Constitution**?

- Majority of members of district councils under sixth schedule are elected based on adult suffrage.
- 2. The Governor is empowered to make rules regarding the composition of District Councils and Regional Councils and the allocation of seats therein.
- 3. Governor has the power to dissolve an Autonomous District Council (ADC) or suspend it if they believe that the ADSC is not functioning properly.

How many of the above statements is/are correct?

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

Solution: c

Explanation:

All statements are correct.

Read

**22.** Constitution of District Councils and Regional Councils.—(1) There shall be a District Council for each autonomous district consisting of not more than thirty members, of whom not more than four persons shall be nominated by the Governor and the rest shall be elected on the basis of adult suffrage.

The Governor shall make rules for the first constitution of District Councils and Regional Councils in consultation with the existing tribal Councils or other representative tribal organisations within the autonomous districts or regions concerned, and such rules shall provide for—

- (a) the composition of the District Councils and Regional Councils and the allocation of seats therein;
- (b) the delimitation of territorial constituencies for the purpose of elections to those Councils;
- (c) the qualifications for voting at such elections and the preparation of electoral rolls therefor;
  - (d) the qualifications for being elected at such elections as members of such Councils;
  - (e) the term of office of members of Regional Councils;
- (f) any other matter relating to or connected with elections or nominations to such Councils;

- Regional Councils.—(1) If at any time the Governor is satisfied that an act or resolution of a District or a Regional Council is likely to endanger the safety of India <sup>2</sup>[or is likely to be prejudicial to public order], he may annul or suspend such act or resolution and take such steps as he may consider necessary (including the suspension of the Council and the assumption to himself of all or any of the powers vested in or exercisable by the Council) to prevent the commission or continuance of such act, or the giving of effect to such resolution.
- (2) Any order made by the Governor under sub-paragraph (1) of this paragraph together with the reasons therefor shall be laid before the Legislature of the State as soon as possible and the order shall, unless revoked by the Legislature of the State, continue in force for a period of twelve months from the date on which it was so made:
- Q2. Which of the below statements are correct regarding **removal procedure of Supreme court/High court judges?** 
  - 1. If the motion to remove SC judge is adopted by each House of Parliament, the judge is removed from his office with immediate effect.
  - 2. If the notice given of a for the removal of a Judge is signed by the required number of members from both the Houses, the presiding officer of the house cannot reject it.
  - 3. The procedure to remove SC and HC judges is similar.

Select the correct code.

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

Solution: c

Explanation:

**First statement is incorrect** as an order of President is required after motions adopted by both the House. **Not with an immediate effect**.

(4) A Judge of the Supreme Court shall not be removed from his office except by an order of the President passed after an address by each House of Parliament supported by a majority of the total membership of that House and by a majority of not less than two-thirds of the members of that House present and voting has been presented to the President in the same session for such removal on the ground of proved misbehaviour or incapacity.

Second statement is incorrect as presiding officer can reject it.

- 3. Investigation into misbehaviour or incapacity of Judge by Committee.—(1) If notice is given of a motion for presenting an address to the President praying for the removal of a Judge signed,—
  - (a) in the case of a notice given in the House of the People, by not less than one hundred members of that House;
  - (b) in the case of a notice given in the Council of States, by not less than fifty members of that Council:

then, the Speaker or, as the case may be, the Chairman may, after consulting such persons, if any, as he thinks fit and after considering such materials, if any, as may be available to him, either admit the motion or refuse to admit the same.

### Third is correct:

217. Appointment and conditions of the office of a Judge of a High Court.—(1) Every Judge of a High Court shall be appointed by the President by warrant under his hand and seal <sup>2</sup>[on the recommendation of the National Judicial Appointments Commission referred to in article 124A], and the Governor of the State, and, in the case of appointment of a Judge other than the

Chief Justice, the Chief Justice of the High Court, <sup>3</sup>[shall hold office, in the case of an additional or acting Judge, as provided in article 224, and in any other case, until he attains the age of <sup>4</sup>[sixty-two years:]]

Provided that—

(a) a Judge may, by writing under his hand addressed to the President, resign his office;

(b) a Judge may be removed from his office by the President in the manner provided in clause (4) of article 124 for the removal of a Judge of the Supreme Court;

- Q3. Consider the following statements regarding **removal procedure of the chairperson of the Rajya Sabha**.
  - 1. The numbers required in the Houses to pass a resolution to remove Vice President is same as that of numbers required to pass a motion to impeach the President.
  - 2. The resolution to impeach Vice President can only be considered for discussion once the constitutionally mandated 14-day notice period has elapsed.
  - 3. A resolution for removing the Vice-President automatically lapse upon prorogation of the session.

Which of the above statements is/are correct?

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

Solution: c

Explanation:

First is incorrect as for Vice President, it just requires simple majority:

**67. Term of office of Vice-President.**—The Vice-President shall hold office for a term of five years from the date on which he enters upon his office:

Provided that—

- (a) a Vice-President may, by writing under his hand addressed to the President, resign his office;
- (b) a Vice-President may be removed from his office by a resolution of the Council of States passed by a majority of all the then members of the Council and agreed to by the House of the People; but no resolution for the purpose of this clause shall be moved unless at least fourteen days' notice has been given of the intention to move the resolution;
- (c) a Vice-President shall, notwithstanding the expiration of his term, continue to hold office until his successor enters upon his office.

Second is correct as seen in above image.

Third statement is incorrect. A resolution for removing the Vice-President does not automatically lapse upon prorogation of the session.

### 'Resolution does not lapse'

It is however unlikely that the no-confidence motion will be taken up for discussion in the House since the Winter Session of Parliament is scheduled to conclude on December 20, which is less than 14 days away. For instance, in 2020 then Rajya Sabha Chairman M. Venkaiah Naidu dismissed a no-confidence motion against Deputy Chairman Harivansh on the ground that it required a 14-day notice.

Even if the motion is taken up in the House, it is unlikely to yield any result since the Opposition lacks the requisite numbers for its passage. Ultimately, this move appears to be more of a symbolic protest against Mr. Dhankar's purported partisan conduct.

"Since it is a constitutional resolution, it does not lapse when the session is prorogued It can be taken up in the next session of Parliament, or even in a special session convened specifically for that purpose," Mr. Achary clarified.

Q4. How many of the following bodies hold office 'during the pleasure of the President' as per the Indian Constitution?

- 1. Governor
- 2. Union Ministers
- 3. Comptroller and Auditor General (CAG)
- 4. Attorney General

Select the correct code.

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

Solution: c

Explanation:

The phrase "Pleasure of the President" refers to the doctrine of pleasure, which means that certain officials hold office at the will of the President and can be removed at any time without providing reasons or justification. However, this power is not absolute and is subject to constitutional provisions.

Comptroller and Auditor General (CAG) of India does not hold office during the pleasure of the President; they hold office for a fixed term of six years or until they reach the age of 65, whichever comes first, and can only be removed in the same manner as a Supreme Court Judge.

Q5. How many of the following is/are statutory bodies?

- 1. National Commission for Backward Classes
- 2. National Commission for Women
- 3. National Commission for Minorities
- 4. National Commission for Scheduled Castes

Select the correct code.

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

Solution: b

Explanation:

The National Commission for Backward Classes (NCBC) is a constitutional body under the Ministry of Social Justice and Empowerment, Government of India. It was originally a statutory body established in 1993 through the National Commission for Backward Classes Act of 1993.

National Commission for Women (NCW) is a statutory body established in 1992 under the National Commission for Women Act. 1990

### 2. National Commission for Minorities

With the enactment of the National Commission for Minorities Act, 1992, the Minorities Commission became a statutory body and renamed as National Commission for Minorities.

National Commission for Scheduled Castes (NCSC) is a constitutional body established under Article 338 of the Indian Constitution.

Q6. Consider the following statements.

- 1. The Constitution mandates that every member of either House of Parliament must take an oath or affirmation before participating in House proceedings.
- 2. The Third Schedule of the Indian Constitution contains the oaths of office and secrecy both for Union Ministers.

3. The Constitution imposes a financial penalty if a person participates or votes without taking the oath.

Which of the above statements is/are correct?

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

Solution: d

### **Explanation:**

Article 99 of the Constitution of India mandates that every member of either House of Parliament (Lok Sabha or Rajya Sabha) must take an oath or affirmation before taking their seat. This is a prerequisite for participating in parliamentary proceedings, voting, and exercising any legislative powers.

99. Oath or affirmation by members.—Every member of either House of Parliament shall, before taking his seat, make and subscribe before the President, or some person appointed in that behalf by him, an oath or affirmation according to the form set out for the purpose in the Third Schedule.

Second statement is also correct:

Form of oath of office for a Minister for the Union:—

"I, A. B., do  $\frac{\text{swear in the name of God}}{\text{solemnly affirm}}$  that I will bear true faith and

allegiance to the Constitution of India as by law established, <sup>1</sup>[that I will uphold the sovereignty and integrity of India,] that I will faithfully and conscientiously discharge my duties as a Minister for the Union and that I will do right to all manner of people in accordance with the Constitution and the law, without fear or favour, affection or ill-will."

Form of oath of secrecy for a Minister for the Union:—

"I, A.B., do  $\frac{\text{swear in the name of God}}{\text{solemnly affirm}}$  that I will not directly or indirectly

communicate or reveal to any person or persons any matter which shall be brought under my consideration or shall become known to me as a Minister for the Union except as may be required for the due discharge of my duties as such Minister."

### Third is also correct:

104. Penalty for sitting and voting before making oath or affirmation under article 99 or when not qualified or when disqualified.—If a person sits or votes as a member of either House of Parliament before he has complied with the requirements of article 99, or when he knows that he is not qualified or that he is disqualified for membership thereof, or that he is prohibited from so doing by the provisions of any law made by Parliament, he shall be liable in respect of each day on which he so sits or votes to a penalty of five hundred rupees to be recovered as a debt due to the Union.

Q7. Which of the following statements regarding Panchayat system is/are correct?

- 1. After the 73rd Amendment Act, powers and functions of the Gram Sabha are determined by the Constitution.
- 2. The chairpersons of the Panchayats at all levels are elected indirectly from among the elected members.
- 3. A Panchayat reconstituted after premature dissolution shall continue only for the remainder of the period.

How many of the above statements is/are correct?

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

Solution: a

Explanation:

### Only third is correct.

Gram Sabha has certain powers and responsibilities at the village level. However, these powers and functions are not fixed by the Indian Constitution directly. Instead, they are **determined by the State Legislature through laws.** 

**243A. Gram Sabha.**—A Gram Sabha may exercise such powers and perform such functions at the village level as the Legislature of a State may, by law, provide.

### Second statement is incorrect.

The chairpersons of the intermediate and district level Panchayats are elected indirectly from among the elected members, while the chairperson of the village level Panchayat is elected as determined by the State Legislature.

- (5) The Chairperson of-
- (a) a Panchayat at the village level shall be elected in such manner as the Legislature of a State may, by law, provide; and
- (b) a Panchayat at the intermediate level or district level shall be elected by, and from amongst, the elected members thereof.
  - (3) An election to constitute a Panchayat shall be completed—
    - (a) before the expiry of its duration specified in clause (1);
  - (b) before the expiration of a period of six months from the date of its dissolution:

Provided that where the remainder of the period for which the dissolved Panchayat would have continued is less than six months, it shall not be necessary to hold any election under this clause for constituting the Panchayat for such period.

(4) A Panchayat constituted upon the dissolution of a Panchayat before the expiration of its duration shall continue only for the remainder of the period for which the dissolved Panchayat would have continued under clause (1) had it not been so dissolved.

### Q8. Consider the following statements.

- 1. The session of the House is terminated by an order called the "Prorogation Order" made by the President.
- 2. It is necessary that both Houses should be prorogued simultaneously to terminate the session.
- 3. If the sitting needs to be extended beyond the scheduled time for the transaction of Government business, prorogation is required to resummon the Houses.

How many of the above statements is/are correct?

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

Solution: a

Explanation:

Only first is correct.

### Prorogation and its effects

"Prorogation means the end of a session (not of a Parliament)." A prorogation terminates a session; an adjournment is an interruption in the course of a single session." A session is terminated only by prorogation and not by adjournment. The period between the prorogation of the House and its reassembly in a new session is termed as "inter-session" period. The session of the House is terminated by an order called the "Prorogation Order" made by the President under article 85(2) of the

### Second statement is correct:

It is not necessary that both Houses should be prorogued simultaneously.<sup>66</sup>

The 170<sup>th</sup> Session of the Rajya Sabha commenced on 21 February 1994, and adjourned on 18 March 1994, to meet again on 18 April 1994; it again adjourned on 13 May 1994, to meet on 13 June 1994. The Lok Sabha was also adjourned likewise. However, on 24 May 1994, the Lok Sabha was prorogued<sup>67</sup> but the Rajya Sabha continued to be "in session."

### Third statement is incorrect:

Prorogation is not required to extend the sitting. If the House needs extra time on a particular day, the Presiding Officer (Speaker of Lok Sabha or Chairman of Rajya Sabha) can extend the sitting without requiring prorogation.

Q9. Consider the following statements.

- 1. The wave-particle duality and superposition are the key principles of Quantum mechanics.
- 2. National Quantum Mission will establish four Thematic Hubs (T-Hubs) in selected premier institutions to promote research and innovation.
- 3. The mission will help in developing the magnetometers with high sensitivity in Atomic Clocks for precision timing.

How many of the above statements is/are correct?

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

Solution: c

Explanation:

### All statements are correct.

From the original document:

### Subject: Regarding setting up of National Quantum Mission (NQM)

Respected Madam/Sir,

Recently, the Union Cabinet has approved National Quantum Mission at a total cost of R\$.6003.65 or the period 2023-24 to 2030-31 aiming to seed, nurture and scale up scientific and industrial R&D and create a vibrant and innovative ecosystem in Quantum Technology. It has also been decided to set up a National Quantum Mission (NQM) under Ministry of Science and Technology. This initiative is expected to accelerate QT led economic growth, nurture the ecosystem in the country and make India one of the leading nations in the development of Quantum Technologies & Applications (QTA).

In this regard, the new mission targets developing intermediate scale quantum computers with 50-1000 physical qubits in 8 years in various platforms like superconducting and photonic technology. Satellite based secure quantum communications between ground stations over a range of 2000 kilometres within India, long distance secure quantum communications with other countries, inter-city quantum key distribution over 2000 kilometres as well as multi-node quantum network with quantum memories are also some of the deliverables of the Mission.

This mission will help in developing the <u>magnetometers</u> with high sensitivity in atomic systems and Atomic Clocks for precision timing, communications and navigation. It will also support design and synthesis of quantum materials such as superconductors, novel semiconductor structures and topological materials for fabrication of quantum devices. Single photon sources/detectors, entangled photon sources will also be developed for quantum communications, sensing and meteorological applications.

Four Thematic Hubs (T-Hubs) will be set up in top academic and National R&D Institutes on the domains-Quantum Computing, Quantum Communication, Quantum Sensing & Metrology and Quantum Materials & Devices. The hubs which will focus on generation of new knowledge through basic and applied research as well as promote R&D in areas that are mandated to them. NQM can take the technology development eco-system in the country to a globally competitive level. The mission would greatly benefit communication, health, financial and energy sectors as well as drug design, and space applications. It will provide a huge boost to national priorities like digital India, Make in India, Skill India and Stand-up India, Start-up India, Self-reliant India and Sustainable Development Goals (SDG).

### Q10. Consider the following statements.

- International Institute for Population Sciences (IIPS) in coordination with United Nations
  Development Programme (UNDP) used data of all-India National Family Health Survey
  (NFHS) to publish National MPI.
- 2. All National Multidimensional Poverty Index (MPI) indicators are part of Global MPI except Housing and Maternal Health.

Which of the above statements is/are correct?

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

Solution: d

### Explanation:

NITI Aayog, the United Nations Development Programme (UNDP), and the Oxford Poverty and Human Development Initiative (OPHI) collaborated to develop India's National Multidimensional Poverty Index (MPI).

The latest national MPI was released in 2023, first in 2021.

The latest national MPI was released **based on latest household microdata of the all-India**National Family Health Survey (NFHS), sourced by the International Institute for Population
Sciences in coordination with the Ministry of Health and Family Welfare.

Actual source if you want to read:

multidimensional poverty at the sub-national and district levels. This report, National Multidimensional Poverty Index (MPI): A Progress Review 2023 (based on NFHS-5) is a significant update to its baseline and reaffirms India's commitment to achieving this vital target well before 2030.

Similar to its baseline edition launched in 2021, the second national MPI uses the latest household microdata of the all-India National Family Health Survey (NFHS), sourced by the International Institute for Population Sciences in coordination with the Ministry of Health and Family Welfare. The MPI measures simultaneous deprivations across the three dimensions of health and nutrition, education, and standard of living. It also retains the robust Alkire-Foster methodology developed by our technical partners, the Oxford Poverty and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP). The report offers a detailed analysis of the headcount ratio and intensity of multidimensional poverty at the State/UT and district levels. Additionally, this time, it captures the changes in multidimensional poverty between the survey periods of NFHS-4 (2015-16) and NFHS-5 (2019-21).

### Now the indicators:

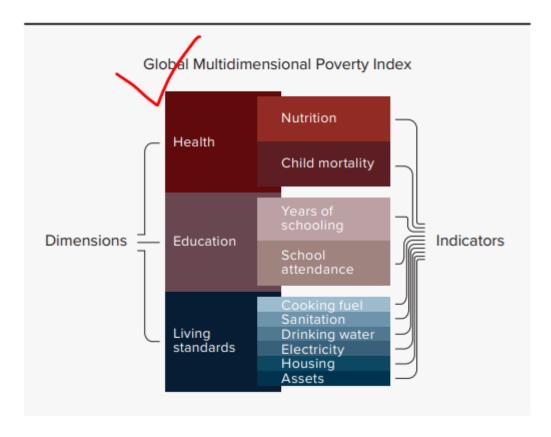
All National MPI indicators are part to Global MPI except <u>Maternal Health and Bank</u> Accounts.

### Indicators and their weights



**Global MPI indicators:** 

Figure 1 Structure of the global Multidimensional Poverty Index



### Q11. Consider the following statements.

- 1. All countries bordering Russia to the west are members of NATO.
- 2. UN Security Council Resolutions have occasionally provided the mandate for NATO's operations in different regions of the world.
- 3. The membership of NATO is open to all UN members.

How many of the above statements is/are correct?

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

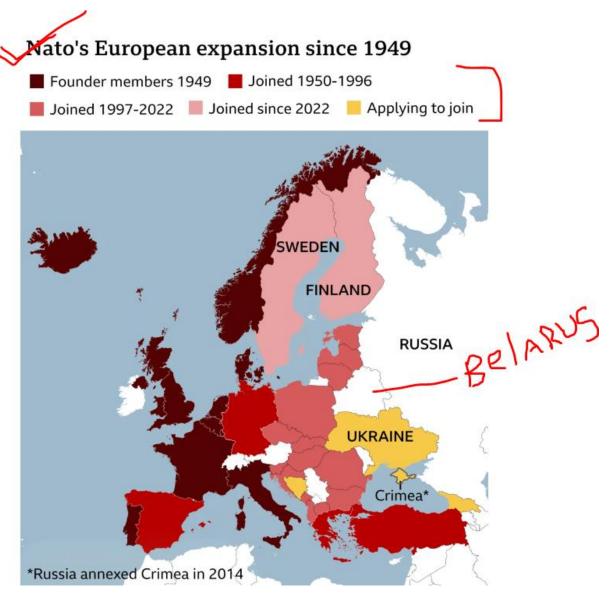
Solution: a

Explanation:

### First and third are incorrect.

Nato - the North Atlantic Treaty Organization - was formed in Washington DC in 1949 by 12 countries: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the UK and the US.

Nato's primary purpose, external was to block expansion in Europe by the former Soviet Union - a group of communist republics which included Russia.



**No, not any member country of NATO can invite another country to join**. Only European countries and countries in North America can join NATO, and they must meet certain requirements.

### Article 10

The Parties may, by unanimous agreement, invite any other European State in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area to accede to this Treaty. Any State so invited may become a Party to the Treaty by depositing its instrument of accession with the Government of the United States of America. The Government of the United States of America will inform each of the Parties of the deposit of each such instrument of accession.

### Second statement is correct:

- NATO and the United Nations were both founded in the 1940s, in the
  aftermath of the Second World War, to preserve peace and security. NATO's
  North Atlantic Treaty operates within the framework of the United Nations
  Charter including Article 51, which establishes the inherent right of individual
  or collective defence of all UN member countries.
- The two organisations began working together on issues of common concern in the 1990s, and signed a framework for expanded consultation and cooperation in September 2008. An updated Joint Declaration setting out plans for future cooperation between NATO and the UN was signed on 26 October 2018.
- NATO's 2022 Strategic Concept, the Alliance's core policy document, commits NATO to preventing crises, managing conflicts and stabilising post-conflict situations by reinforcing its coordination and cooperation with the United Nations and the European Union.
- UN Security Council Resolutions have provided the mandate for NATO's operations in the Western Balkans, Afghanistan and Libya, as well as for NATO's first training mission in Iraq.

Q12. Consider the following statements regarding 'One District One Product (ODOP)' scheme in India.

- 1. One District One Product scheme is a part of Pradhan Mantri Kisan SAMPADA Yojana (PMKSY) administered by Ministry of Food Processing Industries (MoFPI).
- 2. The focus of the scheme is primarily on non-perishable products.
- 3. The scheme provides infrastructure and marketing and branding support for ODOP products.
- 4. The minor forest products in tribal areas are not the part of ODOP scheme.

How many of the above statements is/are correct?

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

Solution: a

Explanation:

### Only third is correct.

Ministry of Food Processing Industries (MoFPI) has approved One District One Product (ODOP) for 713 districts of 35 States and UTs under **PM Formalization of Micro Food Processing Enterprises (PMFME) scheme.** 

The focus of the ODOP (One District One Product) scheme is primarily on perishable agricultural produce; meaning the scheme aims to promote and support the processing and marketing of fresh, easily spoilable products like fruits, vegetables, and other locally abundant food items within a specific district, rather than non-perishable goods.

Besides, certain **other traditional and innovative products** including waste to wealth products could be supported under the Scheme. For example, honey, **minor forest products in tribal areas**, traditional Indian herbal edible items like turmeric, amla, Haldi, etc.

**Support for common infrastructure and marketing & branding** would be for ODOP products.

You can read here if any queries: <a href="https://www.mofpi.gov.in/en/pmfme/one-district-one-product">https://www.mofpi.gov.in/en/pmfme/one-district-one-product</a>

Q13. Consider the following statements.

- 1. The 2024 Paralympics games were held in Beijing, China.
- 2. India recorded their most successful performance at the Paralympic Games by reaching double-digit medals for the first time.
- 3. Avani Lekhara became the first Indian woman to win two gold medals at the Paralympic Games 2024.

How many of the above statements is/are correct?

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

Solution: a

Explanation:

The 2024 Summer Paralympics were held in Paris, France, from August 28 to September 8, 2024. This marked the second time France hosted the Paralympic Games, following the 1992 Winter Paralympics in Tignes-Albertville.

### In 2024:



### Previous medals for India:

GAMES	YEAR	WINTER/SUMMER	MEDALS				
Tokyo 2020	2021	Summer	5	Ö	8	6	<b>8</b>
Rio 2016	2016	Summer	2	Ö	1	1	8
London 2012	2012	Summer	0	Ö	1	0	8

So, second statement is incorrect.

Now, remember some gold medalists:

A record 84 para-athletes represented India at the **Paris 2024 Paralympics**, held in the French capital from August 28 to

September 8. India competed across 12 disciplines, three more than at Tokyo 2020. Indian para-athletes participated in three new sports at **Paris 2024** para cycling, para rowing, and blind judo.

India had some impressive performances at the Paris 2024 **Paralympic Games**.

Avani Lekhara became the first Indian woman to win two gold medals at the Paralympic Games, defending her title in the women's 10m air rifle standing SH1 shooting event with a world record score.

India recorded a one-two in <u>athletics</u> for the first time, with Dharambir and Parnav Soorma clinching gold and silver, respectively, in the men's club throw F51 event. Dharambir also set a new Asian record of 34.92m. Later, Praveen Kumar also logged an Asian record to win the <u>high jump</u> T64 title and fetched India's sixth gold, their highest ever at the Paralympics.

Javelin ace Sumit Antil too made history as the first Indian man to defend his title at the Paralympics, winning gold in the men's javelin throw F64 with a stunning throw of 70.59m—a new Paralympic

Q14. Consider the following statements regarding Small Modular Reactors (SMRs).

- 1. SMR-based power plants need more frequent fuelling as compared to traditional nuclear plants.
- 2. SMRs could not be paired with and increase the efficiency of renewable sources in a hybrid energy system.
- 3. In Budget 2025-26, a Nuclear Energy Mission for research & development of SMRs with an outlay of 20,000 crore was announced.
- 4. India and US have signed a declaration to establish a partnership on small modular nuclear reactors.

How many of the above statements is/are correct?

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

Solution: a

**Explanation:** 

### Only third statement is correct.

This below table taken from NITI Aayog report:

### Table 3.2: Benefits and Challenges of SMRs

### **Benefits of SMR**

### **Challenges Associated with SMR**

### SMRs are adaptable and scalable

SMRs are adaptable and can be scaled up or down to supply more or less power. It can also be used to supplement existing power plants with zero-emission fuel or to help repurpose ageing thermal power stations.

### Refueling interval

SMR-based power plants might only need to refuel every three to seven years, as opposed to every one to two years for traditional plants. It is stated that some SMRs have a 30-year without refueling operating life expectancy[11].

### Compact design

Land implications in the case of SMRs are less as compared to land requirements for large reactors and renewable energy sources. SMRs are anticipated to reutilize parts of ageing/decommissioned fossil fuel based power plants and can also act as an alternative to decarbonize industrial processes.

### Technology choice issue

Many SMR technology alternatives are available at present with varying requirements of supply chains, regulation, operations, etc. For large scale commercial deployment of SMRs, the technology choice needs prioritization. Technology Readiness Levels (TRLs) of available SMR designs need to improve for consideration by utilities, investors and governments for deployment. There is need for extensive additional research and experimental facilities for new technological solutions. Further, development of analysis tools is crucial.

### Supply chain issues

As with big LWRs, the supply chain is an important factor in SMR competitiveness. Recent major construction projects are helping to establish global supply chains. Therefore, more effort would be required to establish resilient Global supply chains

Supply chains for the SMR industry may need consolidation in order to capitalise on economies of scale, as witnessed in the aviation industry.

### Licensing challenges

Newly developed SMR technologies may find it difficult to accommodate in the existing licensing process. The lack of experience with innovative designs within the nuclear safety regulatory organisations presents a substantial problem in examining and approving the safety standards.

### **Benefits of SMR**

### **Challenges Associated with SMR**

### Safety features

# Extensive use of passive safety features in SMR designs, which rely on the laws of physics to shut down and cool the reactor under abnormal circumstances, provide inherent safety. In most cases, these technologies don't need a power supply and can handle accidents without the assistance of a person or a computer.

A molten salt reactor with a freeze stopper is an example of a passive safety mechanism.

### Safeguards challenges

In most countries, novel SMR technologies will require the application of international safeguards, potentially requiring the development of novel or customized technical measures that demand time and resources, typically in collaboration with the relevant governments and industry.

### **Economical**

SMRs could provide a pathway for developing economies to promote sustainable growth by adopting SMRs with a low capital outlay and/ or a phased capital expenditure[15, 16]. They have the adaptability to allow co-generation, supply heat for desalination and manufacturing etc.

### Potential disadvantages

SMRs also produce radioactive waste from spent fuel and require spent fuel storage & disposal facilities. Apart from the technological and cost aspects of such a requirement, this requirement can also lead to socio-political resistance.

Additionally SMRs, because of their unique nature, may entail extra technological aspects that are not necessarily present in existing massive LWR designs. LWR-based SMRs, for example, include non-conventional components like helical coil SGs, internal Control Rod Drive Mechanism (CRDM), or novel types of in-vessel instrumentation with minimal operating expertise. SMRs in GEN IV will contain characteristics that have never been tested before.

#### SMRs are flexible

SMRs can be integrated with RE to fulfill the need for flexibility, producing energy services, and low-carbon co-products. These can include electricity, hydrogen, synthetic fuels, hot process gases or steam. When coupled with variable energy sources SMRs can mitigate fluctuations on a daily and seasonal basis [4].

### Public perception and engagement

Nuclear power has faced traditional opposition due to the potential consequences of a nuclear disaster, notwithstanding the low likelihood of such events.

Creating awareness and integrating the large masses with mainstream of this industry is a challenge.

### From 2025-26 budget:

### **Nuclear Energy Mission for Viksit Bharat**

- **61.** Development of at least 100 GW of nuclear energy by 2047 is essential for our energy transition efforts. For an active partnership with the private sector towards this goal, amendments to the Atomic Energy Act and the Civil Liability for Nuclear Damage Act will be taken up.
- **62.** A Nuclear Energy Mission for research & development of Small Modular Reactors (SMR) with an outlay of ₹ 20,000 crore will be set up. At least 5 indigenously developed SMRs will be operationalized by 2033.

SMRs could be paired with and increase the efficiency of renewable sources in a hybrid energy system.

# India, France sign declaration for modular nuclear reactor partnership

By Reuters

February 12, 2025 11:04 PM GMT+5:30 · Updated 23 days ago



Aa

Q15. Consider the following statements.

- 1. EVMs were used for the first time in 2004 Lok Sabha elections.
- 2. The legal sanction for the use of EVMs was provided after the Supreme Court's Judgment in A.C. Jose v. Sivan Pillai.
- 3. Presently, EVMs are imported in India from Germany and US.
- 4. EVMs do not require any external power supply.

How many of the above statements is/are correct?

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

Solution: b

**Explanation:** 

Only second and fourth are correct.

**EVMs/VVPATs** are not imported but indigenously designed and manufactured by two Public Sector Undertakings (PSUs) namely Bharat Electronics Limited (BEL), under the Ministry of Defence and Electronics Corporation of India Limited (ECIL), under the Department of Atomic Energy under the guidance of the Technical Experts Committee (TEC) constituted by the Election Commission of India.

EVM was first used by the Election Commission in fifty polling stations for election to No. 70 Parur Assembly Constituency in Kerala on May 19, 1982.

EVMs / VVPATs are non-networked, stand-alone units that **run on power-packs / batteries of their own. NO EXTERNAL POWER.** 

### CHAPTER 3: LEGISLATIVE AMENDMENT TO ENABLE USAGE OF EVM

Subsequent to the Hon'ble Supreme Court's Judgment in A.C. Jose v. Sivan Pillai, 1984 SCR (3) 74, the Commission recommended the Government of India to bring legislative amendment in order to provide legal sanction for the use of EVMs.

Consequently, Section 61A was inserted in the year 1989 in the Representation of the People Act, 1951 which reads as follows:

### Section 61A. Voting machines at elections —

Notwithstanding anything contained in this Act or the rules made thereunder, the giving and recording of votes by voting machines in such manner as may be prescribed, may be adopted in such constituency or constituencies as the Election Commission may, having regard to the circumstances of each case, specify.

Q16. Consider the following statements.

- 1. India and EFTA have signed trade and economic partnership agreement (TEPA).
- 2. Among EFTA countries, Switzerland is the largest trading partner of India.

Which of the above statements is/are correct?

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

Solution: c Explanation:

Read:



EFTA countries comprising Switzerland, Iceland, Norway & Liechtenstein.

Among EFTA countries, Switzerland is the largest trading partner of India followed by Norway.

### One more thing, I want you to learn is:

The European Economic Area (EEA) was established by the EEA Agreement, which entered into force on 1 January 1994. Its objective is to extend the EU's Internal Market to the three participating EFTA States (Iceland, Liechtenstein and Norway). **Switzerland is not the part of EEA.** 

Q17. Consider the following species.

- 1. Spiders
- 2. Caterpillars
- 3. Scorpions

How many of the above species use electroreception to detect predators?

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

Solution: c

Explanation:

All are correct.



HOME / SCI-TECH / SCIENCE

### Caterpillars may sense threats using electric fields

In this article, the above species are mentioned along with bumblebees and hoverflies. Remember all.

Q18. 'Monsoon Croaks' project was launched for which of the following species in India?

- a. Olive Ridly Turtles
- b. Frogs
- c. Geckos
- d. Gangetic Dolphins

Solution: b

**Explanation:** 

Read:

# 'Monsoon Croaks' project ropes in public to document frogs in farms and backyard

### Mini Muringatheri

THRISSUR

Monsoon is a festive season for frogs. They are most active and breed during the rain.

However, the survival of frogs, which serves as an indicator of the ecosystem's health, is being challenged by many factors such as climate change, untimely rainfall patterns, habitat loss and water pollution. As a result, 41% of the world's frogs are on the IUCN (International Union for Conservation of Nature) Red List of endan-



People of all ages can upload photographs of frogs and their sounds on the iNaturalist app.

The Centre for Citizen Science and Biodiversity Informatics under the Kerala Forest Research Institute (KFKI) is organising Monsoon Croaks Bioblitz A bioblitz is an intensive survey conducted over a period of time to identify as many species as possible within a designated area. The survey was held in 2023 as well.

### Four-month survey

"Although forests are the main habitats of frogs, they are also found on farms, in gardens and in our back-yards. Identifying key habitats is a critical first step in protecting them. Addressing this knowledge gap is the aim of Monsoon Croaks Bioblitz, a four-month public participation science

and Biodiversity Informatics, KFRI.

People of all ages can participate in this project by uploading photographs of frogs and their sounds on the iNaturalist app. All scientific observations made available during the bioblitz will become part of the Global Biodiversity Information Facility (GBIF), a biodiversity open source database. This information can be used for biodiversity awareness, habitat conservation, climate change research and policy making.

More details are availa-

Q19. Consider the following.

- 1. Venus flytrap
- 2. Banyan
- 3. Birch plants

Which of the above is/are predatory plants?

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

Solution: b

### Explanation:

Carnivorous plants are usually categorized based on the way they catch the insects. There are wide varieties of common predator plants — pitcher plants, strangler figs (banyan) sundews, sarracenia, Venus fly trap and butterworts.



Q20. Consider the following statements.

- 1. The size and shape of a bird's body and beak affect the sounds it produces.
- 2. Smaller birds will generate higher-frequency sounds, while larger birds produce lower-frequency calls.
- 3. The environmental conditions, such as climate play a significant role in shaping bird communication.

How many of the above pairs is/are correct?

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

Solution: c

**Explanation:** 

Taken from:

# The Hindu's weekly Science for All newsletter explains all things Science, without the jargon.

One of the most surprising discoveries was the relationship between a bird's habitat and the frequency of its sounds. In ecosystems with a lot of background noise — such as those with rushing water or dense vegetation — birds tend to produce higher-frequency sounds. This adaptation likely helps them avoid being drowned out by low-frequency environmental noise, allowing their calls to remain distinct.

The study also uncovered a geographic pattern in bird vocalisations. Bird species living at similar latitudes tend to produce similar types of sounds across the globe, suggesting that environmental conditions linked to latitude — such as climate — play a significant role in shaping bird communication.

The size and shape of a bird's body and beak also affect the sounds it produces. Smaller birds will generate higher-frequency sounds, while larger birds produce lower-frequency calls. This is consistent with physical principles — smaller vocal cords and shorter beaks are better suited for creating high-pitched sounds, while larger body mass and longer beaks favour deeper tones.

Q21. Consider the following statements.

- 1. The first official estimates of national income were prepared by the Central Statistical Organisation (CSO) with base year 1948-49.
- 2. The base year revision for GDP calculation is done after every 5 years.
- 3. National Statistical Office under the Ministry of Statistics and Programme Implementation (MoSPI) is responsible for GDP base year revisions.
- 4. A bill considered as a Money Bill is passed in the Parliament with simple majority to change the base year.

How many of the above statements is/are correct?

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

Solution: b

### Explanation:

The government of India is considering revising the base year for calculating Gross Domestic Product (GDP) from 2011-12 to 2022-23, aiming for a more accurate representation of the country's economic structure.

### First statement is correct:

requirements for planning and policy purposes. Recognising the need for providing estimates of national income on a regular basis, the Government of India set up a High Powered Expert Committee in 1949 known as 'National Income Committee' under the Chairmanship of Prof. P.C. Mahalanobis. It was for the first time that this Committee provided the estimates of national income for the entire Indian Union. The estimates of national income and details of methodology adopted were published in the First and Final reports of the National Income Committee brought out in April 1951 and February 1954 respectively. As per the methodology and the pattern of presentation recommended by the National Income Committee, the first official estimates of national income were prepared by the Central Statistical Organisation (CSO) with base year 1948-49 for the estimates at constant prices. These estimates at

5 years' time is not fixed. The last base year revision for India's GDP calculations, changing from 2004-05 to 2011-12, occurred in January 2015. Second is incorrect.

Base Year	Year of Revision	Implementing Body	
1948-49	1956	CSO (now NSO)	
1960-61	1967	CSO	
1970-71	1978	CSO	
1980-81	1988	CSO	
1993-94	1999	CSO	
1999-2000	2004	CSO	
2004-05	2010	CSO	
2011-12	2015	NSO	

National Statistical Office (NSO), under the Ministry of Statistics and Programme Implementation (MoSPI), is indeed responsible for GDP base year revisions and the compilation of national accounts statistics. Third is correct.

No bill is passed in Parliament. It is approved by Government. Fourth is incorrect.

Q22. In reference to **new RBI rules for converting FPI to FDI**, consider the following statements.

- 1. If the FPI's holding exceeds 10 percent, they must convert their shares to FDI. They cannot sell their shares to stay below 10 percent.
- 2. Government approval is not required to convert exceeded FPI to FDI.
- 3. Under the new RBI guidelines, reclassification to FDI must occur within 5 trading days from the date of settlement of the trade causing the breach.

How many of the above pairs is/are correct?

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

Solution: a

Explanation:

### Only third is correct.

The new RBI framework allows FPIs to hold investments beyond a certain limit in Indian companies by converting any excess as FDI. For instance, an FPI holding a 22 percent stake can classify the surplus 12 percent as FDI, provided it has the necessary approvals from the government and the investee company.

### FPI ownership limit

- > Current cap: FPIs in India are restricted to holding a maximum of 10 percent of a company's paid-up equity.
  - Exceeding the cap: If this cap is surpassed, FPIs previously had to either sell off the excess shares or reclassify them as FDI.
  - New requirement: Under the new RBI guidelines, <u>reclassification to FDI must occur</u> within 5 trading days of breaching the limit, with approval from the Indian government and the relevant company. <u>Reclassification remains restricted in sectors where FDI is limited</u>.

### You can also watch:

https://www.youtube.com/watch?v=4T1aCD3fwhA&ab\_channel=BusinessStandard

Q23. Consider the following statements.

- 1. The total outstanding debt of the Union government remains to be less than 60 per cent of GDP in last three years.
- 2. In revised FRBM framework, Central Government debt is to be contained at 40 per cent of GDP.
- 3. Higher debt to GDP ratio necessarily leads to downgrade of the country's credit rating.

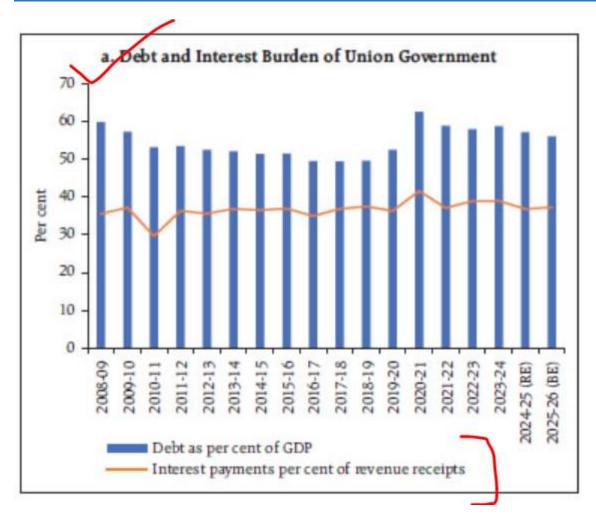
Which of the above statements is/are correct?

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

Solution: a

Explanation:

After peaking at 62.6 per cent of GDP in 2020-21 amidst the COVID-19 pandemic, the total outstanding debt of the Union government declined to 57.1 per cent of GDP in 2024-25 (RE) from 58.7 per cent in 2023-24 and is budgeted to decline further to 56.0 per cent of GDP in 2025-26.



In 2018, the central government amended the Fiscal Responsibility and Budget Management (FRBM) Act, 2003, in an effort to reduce debt-to-gross domestic product (GDP) ratio to 40 per cent by FY25 and the fiscal deficit to 3 per cent by FY21.

While a higher debt-to-GDP ratio generally raises concerns about a country's ability to repay its debts and can lead to lower credit ratings, it's not a guaranteed downgrade, as other factors like economic growth, fiscal stability, and political conditions also play a crucial role. The 'necessarily' is wrong here.

Q24. Consider the following statements regarding investment in bonds (debt securities) under 'Fully Accessible Route' (FAR).

- 1. FAR enable non-resident investor to invest in specified Government securities and corporate bonds.
- 2. Under FAR, there is no ceiling on investment by eligible investors in the specified Government securities.
- 3. Presently, only short-term G-secs with maturity of 2-5 years will be eligible for investment under the FAR.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 and 3 only
- c. 2 only

d.	1, 2 and 3				
Soluti	on: c				
Explanation:					
News	:				

## RBI designates 10-year Sovereign Green Bonds under FAR for investment by non-residents

Updated - November 07, 2024 at 09:20 PM. | Mumbai

Reserve Bank of India has decided to designate SGrBs of 10-year tenor to be issued by the government in the second half of the fiscal year 2024-25 as 'specified securities' under the FAR

"Fully Accessible Route" (FAR) enables nonresident investor to invest in specified Government securities without any ceiling limits. NO CORPORATE BONDS.

All issuances of G-secs of 5-year, 10-year and 30-year tenors from the financial year 2020-21 are eligible for investment under the FAR as "specified securities".

Q25. Why are central banks accumulating gold in large quantities?

- a. Because gold is becoming the primary global currency, replacing all fiat money.
- b. To diversify reserves and reduce dependency on the US dollar.
- c. Due to increase demand of gold domestically
- d. Because gold generates high annual interest, making it a profitable investment.

Solution: b

**Explanation:** 

Central banks worldwide are actively accumulating gold to diversify reserves and reduce dependency on the US dollar.

Q26. In reference to **Securities Market index in India**, consider the following statements.

- 1. The Nifty represents the performance of the top 50 largest companies listed on the National Stock Exchange (NSE) whereas Sensex is the market index of 30 companies listed on the Bombay Stock Exchange (BSE)
- 2. Sensex 50 contains big companies, but Nifty 50 consists of small companies.
- 3. Public Sector Undertakings (PSUs) or government-owned companies are not part of Sensex 30 but included in Nifty 50.

Which of the above statements is/are correct?

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

Solution: a

Explanation:

### Only first is correct.

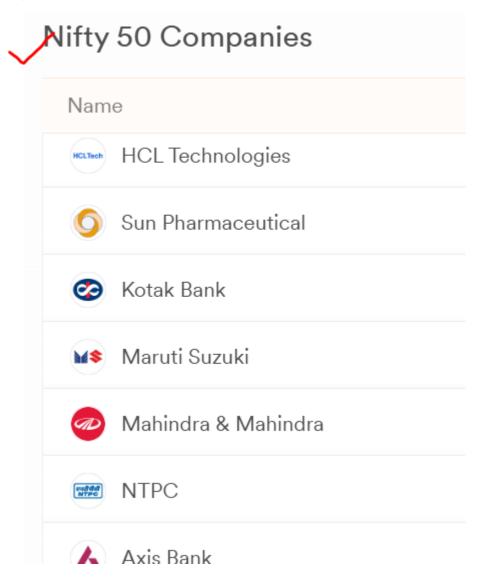
In India, the major securities market indices are the S&P BSE Sensex and the NSE Nifty 50.

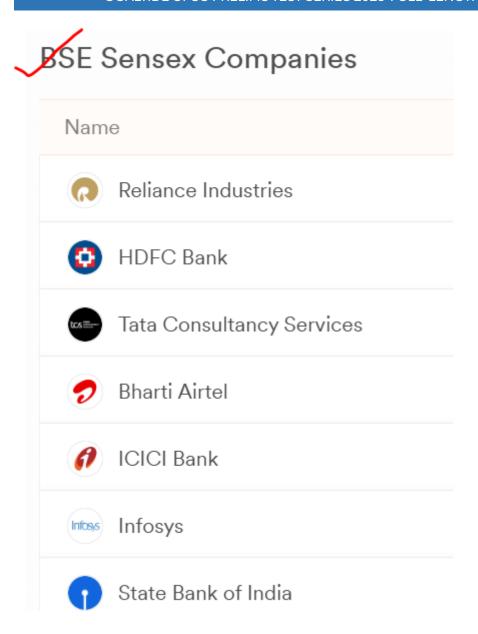
The BSE Sensex is the oldest and most popular securities market index in India. It includes 30 big and well-known companies from different sectors of the Indian economy. The Sensex shows how these top 30 companies are performing. If these companies are doing well, the Sensex will go up. If they are not doing well, the Sensex will go down.

The NSE Nifty 50 represents the performance of the top 50 largest and most frequently traded companies listed on the National Stock Exchange (NSE).

I will give you example. Below are examples of few companies listed in Sensex and Nifty both.

Nifty and Sensex both consist of large companies. In fact, all Sensex 30 companies are part of Nifty 50. However, Nifty includes 20 additional companies, making it a broader representation of the market.





Also, you can see PSUs are part of Sensex and Nifty both.

Both the Nifty 50 and Sensex indices are calculated using the free-float market capitalization-weighted method, meaning they consider only the shares available for public trading when determining a company's weight in the index.

Q27. Consider the following statements.

- 1. Sovereign Green Bonds (SGrBs) were first announced in the 2024-25 budget by Indian Government to raise funds for green projects.
- 2. Indian government has retained the right to utilize the green shoe option in Sovereign Green Bonds.
- 3. Investors in bonds issued under this Framework do not bear any project related risks.
- 4. In India, Foreign Institutional Investors (FII) can invest in Sovereign Green Bonds.

How many of the above statements is/are correct?

a. Only one

- b. Only two
- c. Only three
- d. All four

Solution: c

**Explanation:** 

News:

### Central govt to issue Rs 20,000 crore 'Sovereign Green Bonds' in four tranches in FY25

TOI Business Desk / TIMESOFINDIA.COM / Sep 27, 2024, 21:47 IST





### Only first is incorrect.

No, Sovereign Green Bonds (SGrBs) were not announced in the 2024-25 budget. They were first introduced in the Union Budget 2022-23 by the Indian government to raise funds for green projects.

### 1.3 Context for Indian Sovereign Green Bonds

In keeping with the ambition to significantly reduce the carbon intensity of the economy, the Union Budget 2022-23 announced the issue of Sovereign Green Bonds (para 103). The budget para 103 is reproduced as below:

'As a part of the government's overall market borrowings in 2022-23, sovereign Green Bonds will be issued for mobilizing resources for green infrastructure. The proceeds will be deployed in public sector projects which help in reducing the carbon intensity of the economy.'

This Green Bond Framework (Framework) sets forth the obligations of the Government of India as a Green Bond issuer. The Framework applies to all sovereign Green Bonds issued by the Government of India. Payments of principal and interest on the issuances under this Framework are not conditional on the performance of the eligible projects. Investors in bonds issued under this Framework do not bear any project related risks.

Yes, the Indian government has retained the right to utilize the green shoe option in Sovereign Green Bonds (SGrBs).

### What is the Green Shoe Option?

The green shoe option allows the government to issue additional bonds beyond the initially announced amount in case of high investor demand. This helps in:

1. Managing oversubscription efficiently

- 2. Raising more funds for green projects
- 3. Ensuring price stability in the bond market

In India, Foreign Institutional Investors (FII) can invest in Sovereign Green Bonds.

Q28. With reference to the **resource transfer to States/UTs in the Union Budget 2025-26**, consider the following statements:

- 1. The largest component of resource transfer to states is the devolution of states' share in taxes.
- 2. The allocation for Finance Commission grants is expected to increase significantly in 2025-
- 3. Transfers under centrally sponsored schemes are projected to rise from 2024-25 to 2025-26.

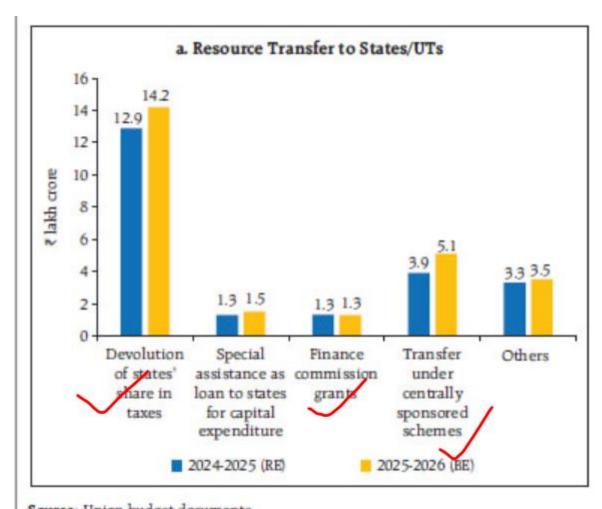
Which of the above statements is/are correct?

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

Solution: b

Explanation:

The gross transfers to States have been budgeted to increase by 12.5 per cent for 2025-26 [10.2 per cent during 2024-25 (RE)], largely on account of transfers under centrally sponsored schemes



Source: Union budget documents.

The Finance Commission grants remain unchanged at ₹1.3 lakh crore for both years.

The largest component of resource transfer is the devolution of states' share in taxes, increasing from ₹12.9 lakh crore (2024-25) to ₹14.2 lakh crore (2025-26).

Q29. When RBI print extra cash, it will:

- a. Increase liability of RBI
- b. It will decrease asset of RBI
- c. It will increase both Liability and Asset
- d. Both and b

Solution: c

### Explanation:

When Govt. will directly borrow from RBI then RBI will print extra cash and give it to Govt. and Govt. will have to issue/give securities/bonds to RBI. The cash which RBI prints is a liability on RBI but the Govt. securities which RBI will get, is asset for RBI. So, when RBI prints additional Rs. 3 lakh crore cash and give it to Govt. then RBI's liability (represented by cash) will increase by an amount of Rs. 3 lakh crore and RBI's assets will also increase by Rs. 3 lakh crores represented by Govt. bonds/securities.

Q30. Which of the following may result in Rupee depreciation?

- 1. RBI following an expansionary monetary policy
- 2. Govt stimulating the economy through deficit financing from RBI

Select the correct code.

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

Solution: c

### Explanation:

The answer to the above question is Both statements are true. Let us understand this:

Because of expansionary monetary policy, either repo rate is reduced (which will result in decrease in interest rate in economy) or may be Open market operation (OMO) can be done which will give more money to the banking and financial system which again will result in decrease in interest rate (because of surplus liquidity). So, expansionary monetary policy will result in reduction in interest rate in economy which may result in foreign portfolio investors (bond market) leaving the domestic economy resulting in depreciation of Rupee.

Deficit financing from RBI means govt is borrowing money from RBI (RBI is printing new money) and spending in the economy through infra construction/payment of MGNREGA wages/ subsidies etc., which results in reaching more money to the public resulting in increase in **demand in economy and inflation in domestic economy which will result in depreciation of domestic currency in forex market (inflation results in depreciation of currency).** 

Q31. If the "Currency in Circulation" is increasing in the economy then it represents/means:

- 1. Monetary Base is increasing
- 2. Money Supply is increasing
- 3. Money Multiplier is increasing
- 4. RBI's assets are increasing

Select the correct code.

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

Solution: d

### **Explanation:**

If "Currency in circulation is increasing" that means RBI is pumping more cash into the economy. This can happen in several ways:

- 1. RBI purchase physical gold from the market and print extra cash and pay for it. RBI's assets (physical gold) will increase and Liabilities (cash/currency) will also increase that means "monetary base" also increases.
- 2. RBI purchases "govt bonds" from the market and prints extra cash to pay for the bonds. RBI's assets (govt bonds) will increase and Liabilities (cash/currency) will also increase that means "monetary base" also increases.

3. RBI is purchasing extra dollars (from foreign investors coming to India or from exporters) and printing cash/currency (rupee) and paying for it. RBI's assets (dollars) will increase and liabilities (cash/currency) will also increase that means "monetary base" also increases.

Now, you all know that,

### Money Supply = Money Multiplier X Monetary Base

Since in the above 3 examples, "Monetary Base" is increasing HENCE "Money Supply" will (also) increase and "Money Multiplier" will remain constant.

# (Money Multiplier will change only when if there is change in behaviour of people or RBI changing CRR/SLR)

And you all must understand that when RBI's liabilities increase (which is also called monetary base), RBI's assets will also increase. It's very simple logic, I explained above.

Q32. Consider the following statements regarding FDI/FPI:

- 1. FDI is considered as an asset for India.
- 2. FDI investments in India is liability on India
- 3. All FPI investments in India is an asset for India.
- 4. All FPI investments in India is liability on India.

Which of the above statements is/are correct?

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

Solution: d

#### Explanation:

When a foreign investor puts money into an Indian company, then the Indian company gets the "cash" and it issues "shares" to the FDI investor OR "shares/bonds" in case of FPI investor. For the company, this "cash" is asset but the "shares or bonds" which the company issued to the foreign investor (FDI/FPI investor), is a liability for the Company and asset for the FDI/FPI investor.

When we say "FDI investments in India is a liability on India", this basically is referring to the shares issued by the Indian company (in return of the cash which it got).

And when we say "All FPI investments in India is a liability on India", this basically referred to the shares or bonds issued by the Indian company (in return of the cash it got). Basically "All" meant both shares and bonds, because FPI can be in both shares or bonds.

So, the shares/bonds issued by the Indian company to the foreign investor is liability for the Indian Company. And since it's a liability for the Indian Company, we can say that it's a liability on India. India does not mean just "Govt. of India", rather it includes Govts, people, companies all.

Q33. Consider the following statements.

- 1. All commercial banks, including branches of foreign banks functioning in India and cooperative banks enjoys deposit insurance cover in India.
- 2. If an individual opens more than one deposit accounts in one or more branches of a bank, all these will be considered as one account and the aggregate insurance cover will be Rs 5 lakh.
- 3. India is a member of International Association of Deposit Insurers (IADI).

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

Solution: d

### Explanation:

All commercial banks, including branches of foreign banks functioning in India, local area banks, regional rural banks and all state, central and primary cooperative banks, also called urban cooperative banks, which have amended the local Co-operative Societies Act empowering the RBI to wind up a cooperative bank and supersede its committee of management through the Registrar of Cooperative Societies.

Every depositor in a bank is insured up to a maximum Rs 5 lakh for both principal and interest. If an individual opens more than one deposit accounts in one or more branches of a bank (savings/current accounts and/or fixed/recurring deposits), all these will be considered as one account and the aggregate insurance cover will be Rs 5 lakh.

**India is a member of International Association of Deposit Insurers (IADI.** Formed in 2002, IADI, a forum for deposit insurers from around the world, works in close coordination with the Basel Committee on Banking Supervision and produces research and guidance on deposit insurance.

Q34. What are the possible consequences of Foreign Portfolio Investors (FPIs) moving out of India?

- 1. Dollar starts appreciating and Rupee depreciating.
- 2. Bond price of US govt bonds will come down and yield will go up.
- 3. Countries may adopt SWAP facility to curb turbulence in economy.

Select the correct code.

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

Solution: d

### Explanation:

If I explain you just three statements, it will not make clear understanding. We will try here to connect points. So, bit lengthy.

Presently, Foreign Portfolio Investors (FPIs) (also called Foreign Institutional Investors, FII) are leaving the Indian markets (shares and bonds market both). In case of normal situation, these FPIs come to emerging economies like India (because of higher growth and higher interest rate) but when there is a crisis, they sell their investments and want to hold CASH (in dollars).

Since they were selling their investments in India, they were getting RUPEEs and this rupee they were selling in the FOREX MARKET to purchase dollars. So, dollar was appreciating and Rupee depreciating.

Now, when RUPEE starts depreciating, **RBI**, from its FOREX reserves, started selling dollars in the FOREX market, which resulted in increase in supply of dollars and hence dollars started depreciating and rupee starts appreciating, or we can say rupee's depreciation stopped.

Out of the total Forex Reserves, around 64% is in foreign currency, which is mostly dollars. (Actually, Forex Reserves consist of four things = Foreign Currency Assets + Gold + SDR + RTP). **Now these dollars, RBI does not hold in cash in its lockers**, RATHER it has invested in US GOVT BONDS. (And this has been done by other countries also like China). Now, if RBI, **TO SELLL DOLLARS IN THE FOREX MARKET (to curb rupee depreciation), FIRST RBI WILL HAVE TO SELL US GOVT BONDS.** 

Now if India (and China), starts selling (liquidate) **US govt. bonds, bond price will come down and yield will go up.** Why?

There is another logic also to judge about the yield. If RBI will sell US govt bonds and take out the dollars, then there will be shortage of liquidity (dollars) in US market and the interest rate on dollars will go up and when interest rate goes up YIELD also goes up.

Now US don't want this, because it will further hurt their economy. **So, that is why US FED may** agree on a DOLLAR-RUPEE SWAP FACILITY.

Q35. Which of the following correctly describes the characteristics of the Early Expanding Stage of the Demographic Transition Model?

- a. Low birth and low death rates with negligible population growth.
- b. High birth rate and rapidly declining death rate, leading to population explosion.
- c. Declining birth rate and stabilizing death rate, leading to a slowing population growth.
- d. Extremely low birth and death rates, resulting in population decline.

Solution: b		
Explanation:		
See diagram:		

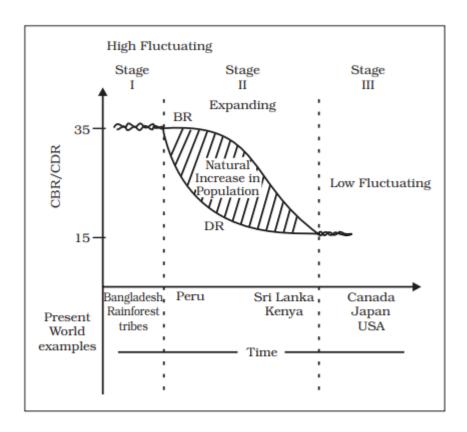


Fig. 2.2: Demographic Transition Theory

The first stage has high fertility and high mortality because people reproduce more to compensate for the deaths due to epidemics and variable food supply. The population growth is slow and most of the people are engaged in agriculture where large families are an asset. Life expectancy is low, people are mostly illiterate and have low levels of technology. Two hundred years ago all the countries of the world were in this stage.

Fertility remains high in the beginning of second stage but it declines with time. This is accompanied by reduced mortality rate. Improvements in sanitation and health conditions lead to decline in mortality. Because of this gap the net addition to population is high.

In the last stage, both fertility and mortality decline considerably. The population is either stable or grows slowly. The population becomes urbanised, literate and has high technical know- how and deliberately controls the family size.

This shows that human beings are extremely flexible and are able to adjust their fertility.

Q36. Which of the following are the possible consequences of 'thermal inversion' in urban areas?

- 1. Increased air pollution concentration
- 2. Enhanced vertical movement of air
- 3. Reduced smog formation
- 4. Longer duration of pollutants in the lower atmosphere

Select the correct answer using the code below:

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

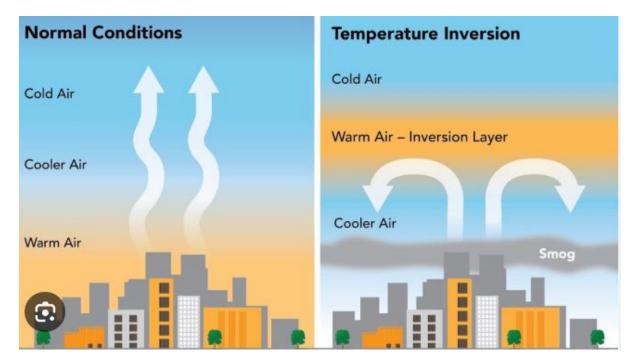
Solution: a

### Explanation:

The correct answer is (a) 1 and 4 only, as thermal inversion leads to increased air pollution concentration and longer duration of pollutants in the lower atmosphere.

Thermal inversion traps pollutants close to the ground, leading to increased air pollution and prolonging the duration of pollutants in the lower atmosphere.

It suppresses vertical air movement, preventing the dispersal of pollutants.



Q37. Which of the following processes is primarily responsible for the formation of a Rift Valley?

- a. Compression of the lithosphere
- b. Subduction of oceanic crust
- c. Extension and thinning of the lithosphere
- d. Folding and faulting due to plate collision

Solution: c

### **Explanation:**

Rift valleys are formed when tectonic forces pull the lithosphere apart (divergence), causing the crust to thin and subside between parallel faults.

**Compression** is the opposite process, leading to mountain-building rather than valley formation.

**Subduction** occurs when an oceanic plate sinks beneath a continental or another oceanic plate due to its higher density.

### Subduction leads to the formation of:

- 1. Deep ocean trenches (e.g., Mariana Trench).
- 2. Volcanic arcs (e.g., Andes or Japan's volcanic islands).
- 3. Earthquakes and tsunamis due to intense tectonic activity.

Folding and faulting result from convergent tectonic forces, where two plates collide and compress the crust.

### This process leads to:

- 1. Folds: Formed due to the bending of rock layers.
- 2. Faults: Formed when rocks break under compressive stress.
- 3. Fold Mountains: Created by the upward thrust of crustal material.

You can learn few examples if you want from here:

https://education.nationalgeographic.org/resource/rift-valley/

Q38. Consider the following statements:

- 1. The continental crust is thicker and heavier compared to the oceanic crust.
- 2. The oceanic crust is an extension of the continental crust.
- 3. The oceanic crust is very young compared to the oldest continental rocks.

Which of the statements given above is/are not correct?

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

Solution: c

### Explanation:

The structure of the Earth's interior is made up of several concentric layers. Broadly three layers can be identified—**crust**, **mantle**, **and the core**.

The crust is the outer thin layer with a total thickness around 30-50 km. The thickness of the crust varies under the oceanic and continental areas. Continental crust (50-70 km thick) is thicker as compared to Oceanic crust (5-30 km thick). But it is lighter (average density 2.833 g/cm3) than oceanic crust (average density 3.3g/cm3).

### So, Statement 1 is incorrect.

Oceanic crust is not an extension of continental crust. They have a different composition of rocks. The continents are composed of lighter silicates—silica + aluminum (also called 'sial') while the oceans have the heavier silicates—silica + magnesium (also called 'sima'). **So, Statement 2 is incorrect:** 

The oldest oceanic crust (about 260 million years old) is very young compared to the oldest continental rocks, which are 4 billion years old. It is due to the process of subduction; oceanic crust tends to get colder and denser with age as it spreads off the mid-ocean ridges. It gets so dense that it sinks in the upper mantle (Subduction). This is like a giant recycling system for the oceanic lithosphere. As the continental crust is lighter than the oceanic crust, the continental crust cannot Sub ducts. Therefore, we still have some ancient continental rocks at the surface of the Earth. So, Statement 3 is correct.

Q39. Consider the following Submarine Reliefs:

- 1. Continental Shelf
- 2. Abyssal Plain
- 3. Continental Rise
- 4. Continental Slope
- 5. Mid Oceanic Ridge

Which of the following is the correct sequence of the above reliefs from the continent towards the ocean floor?

a. 1-4-3-2-5

b. 1-4-2-3-5

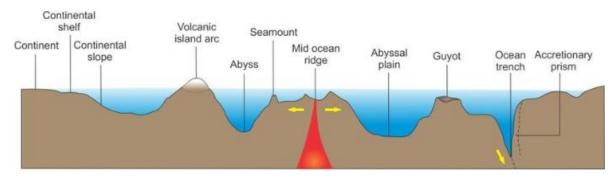
c. 3-1-2-5-4

d. 1-4-3-5-2

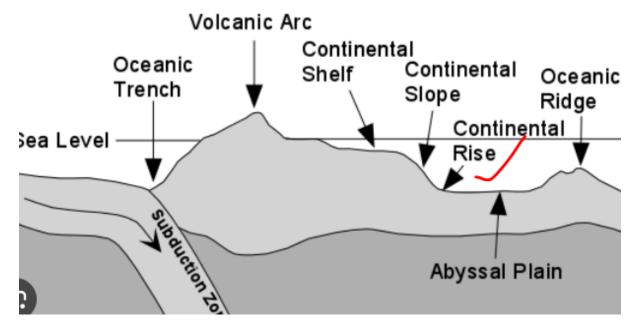
Solution: a

Explanation:

### Check:



Main features of the ocean floor: continental shelf (1), continental slope (2), continental rise (3), mid-ocean ridge (4), ocean trench (5), volcanic island arc (6), abyss (7), abyssal plain (8), guyot (9), and seamount (10).



Q40. Consider the following statements:

- 1. Near the equator, the level of ocean water is higher than in the middle latitudes.
- 2. The Coriolis force causes the ocean water to move to the left in the northern hemisphere.
- 3. Water with high salinity is denser than water with low salinity.

How many of the above statements is/are correct?

- a. Only one
- b. Only two

- c. All three
- d. None

Solution: b

**Explanation:** 

Ocean currents are influenced by two types of forces, namely: (i) primary forces that initiate the movement of water; (ii) secondary forces that influence the currents to flow.

### The primary forces that influence the currents are:

- a. Heating by solar energy
- b. Wind
- c. Gravity
- d. Coriolis force.

Heating by solar energy causes the water to expand. That is why near the equator, the ocean water is about 8 cm higher in level than in the middle latitudes. This causes a very slight gradient, and water tends to flow down the slope. **So, Statement 1 is correct.** 

The Coriolis force intervenes and causes the water to move to the right in the northern hemisphere and to the left in the southern hemisphere. **So, Statement 2 is incorrect.** 

Differences in water density affect the vertical mobility of ocean currents. Water with high salinity is denser than water with low salinity, and in the same way, cold water is denser than warm water. Denser water tends to sink, while relatively lighter water tends to rise. **So, Statement 3 is correct**.

Q41. Consider the following statements.

- 1. Secondary activities add value to natural resources by transforming raw materials into valuable products.
- 2. Quaternary Activities are considered a part of Tertiary Activities that involve high-level knowledge-based services.
- 3. Mixed Farming is an example of a Quaternary activity.

Which of the statements given above is/are not correct?

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

Solution: a

Explanation:

Directly from NCERT. Learn from there if you do not know the answer.

### Mixed farming is a part of Primary Activity.

Q42. There are two places A and B. A is located on 50°E longitude while B is located on 10°W longitude. If winds blow with equal speed at these two places, then?

a. relatively more Coriolis force will be experienced by wind at place A

- b. relatively more Coriolis force will be experienced by wind at place B
- c. wind at both places A and B will experience same Coriolis force
- d. cannot be determined.

Solution: d

### **Explanation:**

Coriolis force is an apparent force caused by the earth's rotation. The Coriolis force is responsible for deflecting winds towards the right in the northern hemisphere and towards the left in the southern hemisphere. This is also known as 'Ferrel's Law'. The Coriolis force is absent at the equator but increases progressively towards the poles.

The magnitude of Coriolis force depends on the speed of wind and latitude (and not longitude) where the wind blows. The information about latitude is not given in the question text. Hence, it cannot be determined that wind at which place will experience more Coriolis force.

Q43. Which of the following factors can affect the tidal range of a region?

- 1. Shape of the coastline
- 2. Depth of the ocean floor
- 3. Position of the moon and sun

Select the correct code.

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

Solution: d

### **Explanation:**

Forces that contribute to tides are called tidal constituents. The Earth's rotation is a tidal constituent. The major tidal constituent is the moon's gravitational pull on the Earth. The closer objects are, the greater the gravitational force is between them. Although the sun and moon both exert gravitational force on the Earth, the moon's pull is stronger because the moon is much closer to the Earth than the sun is.

Because the Earth's surface is not <u>uniform</u>, tides do not follow the same patterns in all places. The shape of a seacoast and the shape of the ocean floor both make a difference in the range and frequency of the tides. Along a smooth, wide <u>beach</u>, the water can spread over a large area. The tidal range may be a few centimeters. In a confined area, such as a narrow, rocky <u>inlet</u> or <u>bay</u>, the tidal range could be many meters. The lowest tides are found in enclosed seas like the

### Yes, the depth of the ocean floor can affect tidal behavior.

Shallow Waters: In shallow regions, tidal waves slow down and their height increases, leading to higher tidal ranges.

Deep Waters: In deeper regions, tidal waves travel faster but with lower amplitude, resulting in lower tidal ranges.

Q44. Consider the following statements about abiotic factors:

- 1. Salinity and ocean currents are examples of abiotic factors in marine ecosystems.
- 2. In terrestrial ecosystems, biotic factors such as herbivores directly influence abiotic factors like temperature.
- 3. Abiotic factors are independent of biotic interactions in ecosystems.

Which of the statements given above is/are correct?

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

Solution: a

Explanation:

Statement 1 is Correct:

**Salinity and ocean currents are non-living (abiotic) factors in marine ecosystems**. They influence marine biodiversity, distribution of species, and nutrient cycling.

**Statement 2 is Incorrect:** Biotic factors (like herbivores) do not directly influence abiotic factors such as temperature. However, biotic interactions can indirectly modify some abiotic conditions (e.g., vegetation affecting local humidity).

Statement 3 is Incorrect:

Abiotic and biotic factors interact to maintain ecological balance. For example, temperature affects species distribution, and species in turn modify their habitat.

Q45. The earth revolves around the sun in anticlockwise direction. If this was to change and revolve around the sun in clockwise direction, which of the following would be true?

- 1. Sun would rise in the east.
- 2. There would be a reversal of seasons.
- 3. The pole alignment of earth would change.

Select the correct answer using the codes given below.

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

Solution: a

Explanation:

**Sun would rise in the east:** This would remain true regardless of the direction of Earth's revolution around the Sun. The Sun rises in the east because of Earth's rotation on its axis, **not its revolution around the Sun.** 

There would be a reversal of seasons: This is incorrect. The seasons are caused by Earth's axial tilt, not the direction of its revolution around the Sun. Reversing the direction of revolution would not change the timing or order of the seasons.

The pole alignment of Earth would change: This is incorrect. The direction of Earth's revolution around the Sun does not affect the alignment of Earth's rotational axis (its poles). The shift in Magnetic North and Magnetic South is governed by the changes in the interior of the earth and is not related to the direction of earth's revolution.

Q46. Which of the following statements best describes the role of ocean currents in global heat distribution?

- a. They transport heat from the poles to the equator.
- b. They distribute heat from the equator to higher latitudes, moderating global temperatures.
- c. They move heat uniformly across the oceans, maintaining consistent temperatures.
- d. They primarily cool equatorial regions by bringing cold water from the poles.

Solution: b

Explanation:

They distribute heat from the equator to higher latitudes, moderating global temperatures.

### **Equator-to-Pole Heat Distribution:**

Warm ocean currents, like the Gulf Stream, carry heat from the equator toward higher latitudes. Cold currents, such as the Canary Current, return cooler waters toward the equator. This system helps balance global temperatures and prevents extreme climatic variations.

### **Moderating Climate:**

Without this transfer of heat, tropical regions would become excessively hot, and polar regions would become colder. Ocean currents play a crucial role in maintaining the Earth's climatic equilibrium.

### Why Other Options Are Incorrect?

A: Heat is not transported from the poles to the equator.

C: Currents do not move heat uniformly; they follow specific patterns.

D: Equatorial regions are heated by direct solar radiation, not cooled by polar currents.

Q47. Which of the following characteristics make a braided river different from a meandering river of similar discharge?

- 1. Wider and shallower
- 2. Transports high sediment load
- 3. Erodes riverbanks rapidly

Select the correct answers using code given below.

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

Solution: d

### Explanation:

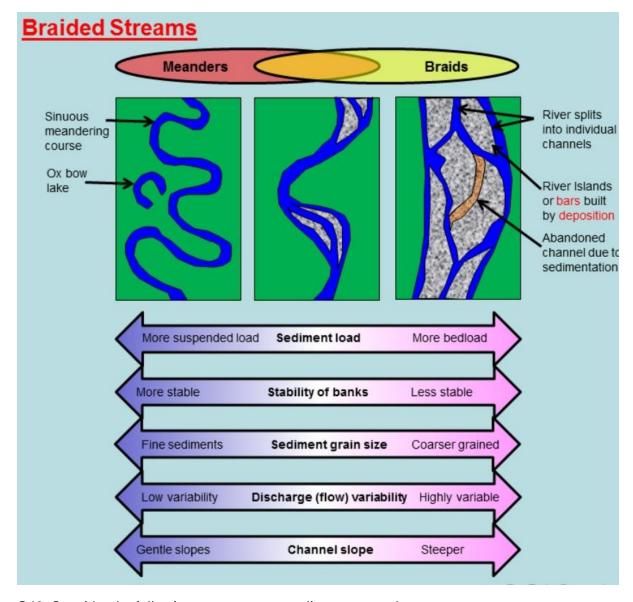
Meandering rivers result in widening of the river valley and the production of Ox-bow lakes.

They are typical of the middle and lower course of a river where vertical erosion is replaced by a sideways form of erosion called LATERAL erosion, plus deposition within the floodplain.

Braided rivers are basically rivers that have multiple channels and islands of sediment in between those channels. We find braided rivers in deltas, in areas where the river channel banks are made of easily erodible material or in areas of high sediment load where discharge varies (e.g. glacial melt water rivers).



Braided rivers are typically wider and shallower than meanders of similar discharge; they transport more bedload and scour and fill their beds more dramatically; and above all they erode their banks more rapidly, extensively, and unpredictably.



Q48. Consider the following statements regarding to atmosphere.

- 1. The top of the mesosphere is the coldest area of the Earth's atmosphere.
- 2. Meteors primarily burn up in the mesosphere layer of the Earth's atmosphere.
- 3. Satellites, particularly those in Low Earth Orbit (LEO), orbit within the Mesosphere.

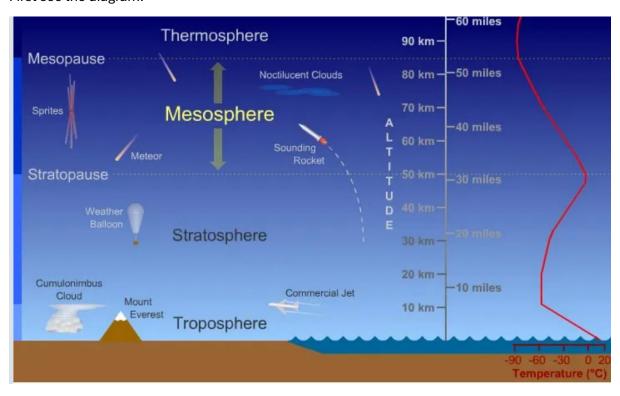
Which of the above statements is/are correct?

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

Solution: c

**Explanation:** 

First see the diagram:



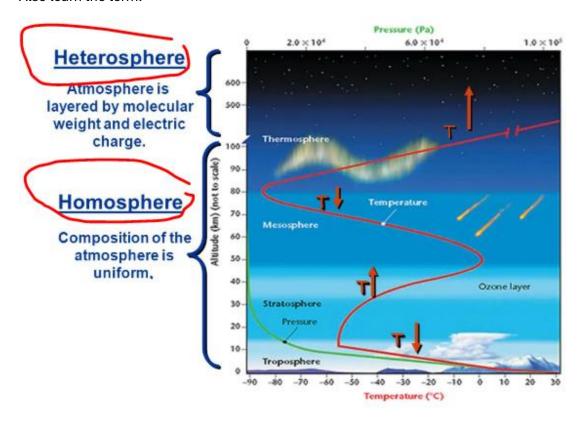
The mesosphere is the middle layer between the stratosphere and the thermosphere. Meteors burn up when they enter the mesosphere, due to their speed of travel and the increased presence of gas molecules in the mesosphere compared to the outer atmospheric layers: this creates friction and heat, which incinerate the incoming meteors.

Like the troposphere, temperatures begin to decrease with increasing altitude. **The mesosphere is the coldest atmospheric layer.** This is because the mesosphere receives less solar radiation (sunlight) than the layers above it, and the air is less dense than the layers below.

Satellites, particularly those in Low Earth Orbit (LEO), orbit within the **thermosphere** because the thermosphere (ranging from about 85 km to 600 km above Earth) provides a good balance between gravitational pull and atmospheric drag.

If satellites were much lower (like in the mesosphere), air resistance would slow them down too quickly, making their orbits unstable.

### Also learn the term:



Q49. Consider the following statements.

- 1. The United Nations System Staff College (UNSSC) launched the UN 2.0 Fundamentals e-Learning Path, a unique educational offering available to all United Nations personnel at no cost.
- 2. The Blue Line is an online learning hub created by the UNSSC.

Select the correct code.

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

Solution: c

Explanation:

The United Nations System Staff College (UNSSC) launched the UN 2.0 Fundamentals e-Learning Path, a unique educational offering available to all United Nations (UN) personnel at no cost.

The UN 2.0 Fundamentals E-Learning Path is based on micro-learning modules, videos from subject matter experts, storytelling and scenario-based learning.

I know, everyone is confused with Blue Line:

# What is the Blue Line?

The Blue Line is an online learning hub created by the UN System Staff College to equip all UN personnel with personalized and self-directed learning opportunities. Beyond an e-learning platform, the Blue Line is a value-drivel learning community where UN colleagues from across the globe share collective experiences and knowledge to advance the UN's goals and make a lasting impact.

### Another Blue line which you know is:



Such questions have been framed by UPSC recently:

Which of the following statements about the 'Blue Line' is correct?

- It is a learning ecosystem created by the UN System Staff College.
- It is a line of withdrawal, set by the UN
  for the purpose of confirming the
  withdrawal of Israeli forces from the
  south of Lebanon.

Select the answer using the code given below:

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

Q50. Which of the following correctly defines the term '**Financialization**' recently discussed in terms of India?

- a. Increasing presence of banks in the backward regions of the country.
- b. Combining small banks into larger entity to lessen risks and improve banking services
- c. Financial inclusion leading to more digital payments and less currency in circulation
- d. Moving investments away from traditional, 'physical' asset (like real estate, gold) towards 'financial assets' (like mutual funds).

Solution: d

Explanation:

#### Read:

### Development in capital markets

2.41 Capital markets are central to India's growth story, catalysing capital formation for the real economy, enhancing the financialisation of domestic savings, and enabling wealth creation. As of December 2024, the Indian stock market has achieved new highs, with intermittent corrections, in the midst of geopolitical uncertainties, currency depreciation and domestic market volatility challenges. Investor participation has been a contributor, with number of investors growing from 4.9 crore in FY20 to 13.2 crore as of 31 December 2024. This growth, combined with active listing activity and recent measures by the regulator, viz. Securities and Exchange Board of India (SEBI), to temper excesses, is expected to foster sustainable market expansion.

### Q51. Consider the following statements.

- 1. 'Summit of the Future Action' Days were convened by the World Economic Forum.
- 2. The summit resulted in the adoption of the Pact for the Future focusing on addressing global challenges.
- 3. The summit adopted the Global Digital Compact, focusing on responsible technology use and digital cooperation.

Which of the above statements is/are correct?

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

Solution: b

**Explanation:** 

Read:



# The Summit offers a once-in-a-generation opportunity for change.

It will pave a way to a better tomorrow that we can only shape together.

In support of this vision and objectives, the *Summit of the Future Action Days* were convened by the Secretary-General of the United Nations on 20 and 21 September 2024 at United Nations Headquarters in New York to generate additional opportunities for the engagement of all actors.

# What is the Pact for the Future?

The Summit of the Future in September, 2024, will produce an intergovernmentally negotiated, action-oriented Pact for the Future (Resolution A/RES/79/1) with chapters on:

- Sustainable development and financing for development;
- International peace and security;
- Science, technology and innovation and digital cooperation;
- · Youth and future generations; and
- Transforming global governance.

The Summit will also produce a global digital compact and a declaration on future generations (Resolution 76/307) that will be annexed to the Pact.

The <u>draft Pact</u> under negotiation has the potential to promote a multilateral system that reflects the realities of today and that delivers for everyone, everywhere.

Q52. Which of the following statements is/are correct regarding Soyabean cultivation in India.

- 1. Soyabean is a kharif crop.
- 2. Madhya Pradesh and Maharashtra are the major producers in India.
- 3. Brazil ranks first in soyabean production globally.
- 4. Presently, MSP for soybean is the same as that of rice.

How many of the above statements is/are correct?

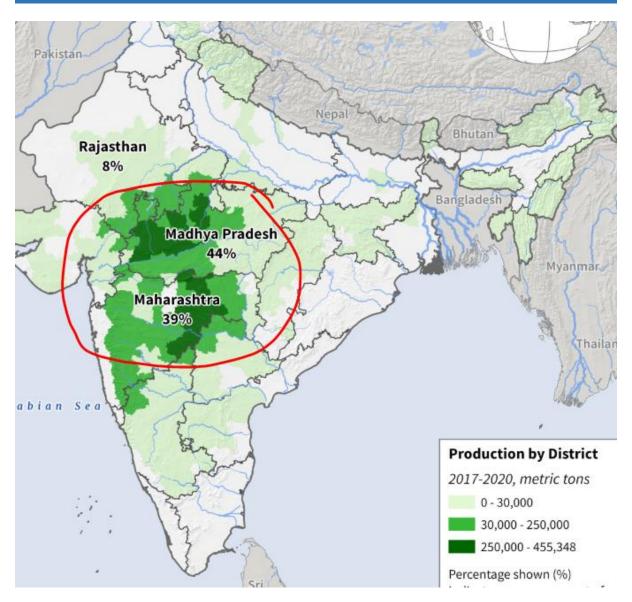
- a. Only one
- b. Only two
- c. Only three
- d. All four

Solution: c

Explanation:

Soyabean is a kharif crop

India's soyabean:



For Brazil:

Market Year	Area (1000 Ha)	Production (1000 Tons)	Yield (T/Ha)
2021/2022	41,800	130,500	3.12
2022/2023	44,600	162,000	3.63
2023/2024	46,100	153,000	3.32
2024/2025	47,400	169,000	3.57
5-year Average 2019/20 - 2023/24	41,900	142,700	3.41

In 2024, India's soybean production is estimated to be around 12.6 million tonnes.

The Minimum Support Price (MSP) for soybean (yellow) for the 2024-25 marketing season is ₹4,892 per quintal. In contrast, the MSP for paddy (common), a variety of rice, is ₹2,203 per quintal for the same period.

Therefore, the MSP for soybean is not equal to that of rice; it is significantly higher.

Common sense: same hoga toh why farmers will opt soyabean?? It must be higher.

Q53. According to the Hindustan Socialist Republican Association (HSRA), why was the murder of John Saunders, a British police officer in Lahore, planned?

- a. To protest the Simon Commission in 1928.
- b. John Saunders was targeted because he was directly responsible for implementing the Rowlatt Act
- c. The killing of John Saunders was an accident, as Bhagat Singh and his associates never intended to assassinate any British officer.
- d. As a revenge to the assassination of Lala Lajpat Rai

Solution: d

#### Explanation:

The Hindustan Socialist Republican Association (HSRA) planned the assassination of John Saunders, a British police officer in Lahore, **as an act of revenge for the brutal death of Lala Lajpat Rai.** 

Lala Lajpat Rai, a prominent freedom fighter, led a protest against the Simon Commission in 1928. During the protest, the British police, under the orders of James A. Scott, resorted to lathi (baton) charges, and Rai suffered severe injuries. He later succumbed to these injuries, leading to widespread outrage among revolutionaries.

In retaliation, Bhagat Singh, Sukhdev, and Rajguru, key members of HSRA, planned to assassinate James A. Scott, who they held responsible for Rai's death. However, due to mistaken identity, **they ended up killing John Saunders, a junior police officer, on December 17, 1928.** 

Q54. "Chhaap Tilak," "Zehal-e-Miskeen," and "Sakal Ban Phool Rahi Sarson" are popular compositions attributed to:

- a. Mirza Ghalib
- b. Amir Khusrau
- c. Kabir Das
- d. Tulsidas

Solution: B

### Explanation:

In his address to the 25th edition of Jahan-e-Khusrau at New Delhi's Sunder Nursery on Friday, Prime Minister Narendra Modi described the annual music festival that commemorates the Sufi poet-musician Amir Khusrau as imbued with the "fragrance of the soil of Hindustan".

His most popular compositions include *Chhaap Tilak, Zehal-e-Maskeen, and Sakal Ban Phool Rahi Sarson*.

Q55. The **Dramatic Performances Act, 1876** was enacted during British rule in India. What was the main objective of this act?

- a. To promote indigenous theatre and cultural performances
- b. To regulate and censor theatrical performances critical of the British government
- c. To encourage British-style theatre in India
- d. To provide financial assistance to Indian theatre groups

Solution: b

**Explanation:** 

The Dramatic Performances Act, 1876 was introduced by the British to suppress nationalist sentiments expressed through theatre and performances. It empowered the government to prohibit any drama, pantomime, or other performances deemed seditious, scandalous, or against the British administration.

On May 10, 1956, in a ruling titled State versus Baboo Lal and Ors, the Allahabad High Court ruled that the law was inconsistent with the Constitution of India. **The law was formally repealed by Parliament through the Repealing and Amending (Second) Act, 2017.** 

Q56. Consider the following pairs (Monuments projects: Locations)

- 1. National Maritime Heritage Complex: Lothal
- 2. India's First Underwater Tourism Facility: Dwarka
- 3. Dara Shikoh Library Building: Delhi

Which of the above pairs is/are correct?

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

Solution: d

Explanation:

All are correctly matched.

Q57. Which of the following relates to Gupta Empire?

- 1. Varahamihira as one of the Navaratnas
- 2. The Bhitari Pillar Inscription
- 3. Kamadaka Nitisara Literature

Select the correct code.

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

Solution: d

Explanation:

"Kamadaka Nitisara" was probably written during the Chandra Gupta-II reign by Sikhara, Prime Minister of Chandragupta-II. The object of the book was to give instructions to the king. The author defends the murder of Saka king by his sovereign.

The "Bhitari Pillar Inscription" of Skandagupta tells us about the fight with the Pushyamitras and probably also with the Hunas during the reign of his father Kumaragupta-I.

Varahamihira worked as one of the Navaratnas for Chandragupta Vikramaditya. His book Pancasiddhantika (or Pancha-Siddhantika, The Five Astronomical Canons) dated 575 AD gives us information about older Indian texts.

Q58. Which of the following items/sites were found in Harappan Civilizations?

- 1. Ploughed field at Kalibangan
- 2. Traces of canals have been found at the Harappan site of Shortughai in Afghanistan
- 3. Water reservoirs found in Dholavira
- 4. Saddle querns from Mohenjo-Daro

Select The correct code.

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

Solution: d

### Explanation:

Representations on seals and terracotta sculpture indicate that the bull was known, and archaeologists extrapolate from this that oxen were used for ploughing. Moreover, terracotta models of the plough have been found at sites in Cholistan and at Banawali (Haryana). Archaeologists have also found evidence of a ploughed field at Kalibangan (Rajasthan), associated with Early Harappan levels (see p. 20). The field had two sets of furrows at right angles to

Most Harappan sites are located in semi-arid lands, where irrigation was probably required for agriculture. Traces of canals have been found at the Harappan site of Shortughai in Afghanistan, but not in Punjab or Sind. It is possible that ancient

canals silted up long ago. It is also likely that water drawn from wells was used for irrigation. Besides, water reservoirs found in Dholavira (Gujarat) may have been used to store water for agriculture.

### How artefacts are identified

Processing of food required grinding equipment as well as vessels for mixing, blending and cooking. These were made of stone, metal and terracotta. This is an excerpt from one of the earliest reports on excavations at Mohenjodaro, the best-known Harappan site:

Saddle querns ... are found in considerable numbers ... and they seem to have been the only means in use for grinding cereals. As a rule, they were roughly made of hard, gritty, igneous rock or sandstone and mostly show signs of hard usage. As their bases are usually convex, they must have been set in the earth or in mud to prevent their rocking. Two main types have been found: those on which another smaller stone was pushed or rolled to and fro, and others with which a second stone was used as a pounder, eventually making a large cavity in the nether stone. Querns of the former type were probably used solely for grain: the second type possibly only for pounding herbs and spices for making curries. In fact, stones of this latter type are dubbed "curry stones" by our workmen and our cook asked for the loan of one from the museum for use in the kitchen.

FROM ERNEST MACKAY, Further Excavations at Mohenjodaro, 1937.



Q59. Which historian is related to following statements?

- 1. He constantly compared Mughal India with contemporary Europe, generally emphasising the superiority of the latter.
- 2. According to him, crown ownership of land in Mughal Empire is having disastrous consequences for the economy and society.
- 3. He is perhaps the only historian who provides a detailed account of the working of the imperial karkhanas or workshops.

Select the correct code.

- a. Duarte Barbosa
- b. Abdur Razzag
- c. Ibn Battuta
- d. François Bernier

Solution: d

**Explanation:** 

Bernier's Travels in the Mughal Empire is marked by detailed observations, critical insights and reflection. His account contains discussions trying to place the history of the Mughals within some sort of a universal framework. He constantly ompared Mughal India with contemporary Europe, generally emphasising the superiority of the latter. His representation of India works on the model of binary opposition, where India is presented as the inverse of Europe. He also ordered the perceived differences hierarchically, so that India appeared to be inferior to the Western world.

## 6.1 The question of landownership

According to Bernier, one of the fundamental differences between Mughal India and Europe was the lack of private property in land in the former. He was a firm believer in the virtues of private property, and saw crown ownership of land as being harmful for both the state and its people. He thought that in the Mughal Empire the emperor owned all the land and distributed it among his nobles, and that this had disastrous consequences for the economy and society. This perception was not unique to Bernier, but is found in most travellers' accounts of the sixteenth and seventeenth centuries.

## The imperial karkhanas

Bernier is perhaps the only historian who provides a detailed account of the working of the imperial karkhanas or workshops:

Large halls are seen at many places, called karkhanas or workshops for the artisans. In one hall, embroiderers are busily employed, superintended by a master. In another, you see the goldsmiths; in a third, painters; in a fourth, varnishers in lacquer-work; in a fifth, joiners, turners, tailors and shoe-makers; in a sixth, manufacturers of silk, brocade and fine muslins ...

Q60. With respect to Bhakti movement led by Alvars and Nayanars, consider the following statements.

- 1. They were criticized for having *Bhakhts* only from Brahmanas category.
- 2. Women were also part of this Tradition.
- 3. Nalayira Divyaprabandham is compilation of devotion literature of Nayanars.

Which of the above statements is/are correct?

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

Solution: c

### Explanation:

We are mentioning it again, these are not difficult questions. Every such statement mentioned in NCERT won't be considered tough. Every sincere student will know these things.

### 2.2 Attitudes towards caste

Some historians suggest that the Alvars and Nayanars initiated a movement of protest against the caste system and the dominance of Brahmanas or at least attempted to reform the system. To some extent this is corroborated by the fact that bhaktas hailed from diverse social backgrounds ranging from Brahmanas to artisans and cultivators and even from castes considered "untouchable".

### 2.3 Women devotees

Perhaps one of the most striking features of these traditions was the presence of women. For instance, the compositions of Andal, a woman Alvar, were widely sung (and continue to be sung to date). Andal saw herself as the beloved of Vishnu; her verses express her love for the deity. Another woman, Karaikkal Ammaiyar, a devotee of Shiva, adopted the path of extreme asceticism in order to attain

# Compilations of devotional literature

By the tenth century the compositions of the 12 Alvars were compiled in an anthology known as the *Nalayira Divyaprabandham* ("Four Thousand Sacred Compositions").

The poems of Appar, Sambandar and Sundarar form the *Tevaram*, a collection that was compiled and classified in the tenth century on the basis of the music of the songs.

Q61. Consider the following sites.

- 1. Mount Parsvanatha, Bihar
- 2. Abhay Prabhavana Museum
- 3. Dilwara Temples on Mount Abu, Rajasthan
- 4. Ranakpur Temple, Rajasthan

How many of the above sites are Jain religious sites or sites dedicated to Jain philosophy in India?

a. Only one

- b. Only two
- c. Only three
- d. All four

Solution: d

Explanation:

All are Jain Religious Heritage Sites.

### World's largest Jain museum: The newly opened Abhay Prabhavana museum and its unique architecture

TOI Lifestyle Desk / etimes.in / Nov 17, 2024, 14:00 IST







Q62. Who among the following rulers advised his subjects through this inscription? "People have various desires and various passions, and they may practice all or part of it. But one who receives great gifts yet is lacking in self-control, purity of heart, gratitude and firm devotion, such a person is mean".

- a. Krishna Deva Raya
- b. Ashok
- c. Akbar
- d. Samudragupta

Solution: b

Explanation:

7<sup>th</sup> ROCK EDICTS

Beloved-of-the-Gods, King Piyadasi, desires that all religions should reside everywhere, for all of them desire self-control and purity of heart. But people have various desires and various passions, and they may practice all of what they should or only a part of it. But one who receives great gifts yet is lacking in self-control, purity of heart, gratitude and firm devotion, such a person is mean.

Q63. Which of the following newspaper has published this during mid 1930? "If the Government wants to test the power of Satyagraha, both its action and inaction will cause injury to it. If it arrests Gandhi, it will incur the discontent of the nation; if it does not do that, the movement of civil disobedience will go on spreading. We therefore say that if the Government punishes Mr. Gandhi the nation will have won a victory, and if it lets him alone it will have won a still greater victory."

- A. Kesari
- B. Vital-Vidhvansak
- C. Mahratta
- D. Navjeewan

Solution: a

Explanation:

### Bombay

Press Kesari indulged in offensive language and in its usual attitude of blowing hot and cold wrote: "If the Government wants to test the power of Satyagraha, both its action and inaction will cause injury to it. If it arrests Gandhi it will incur the discontent of the nation; if it does not do that, the movement of civil disobedience will go on spreading. We therefore say that if the Government punishes Mr. Gandhi the nation will have won a victory, and if it lets himalone it will have won a still greater victory."

On the other hand the moderate paper Vividh Vritt pointed out the futility of the movement and opined that it could not achieve the end in view. It, however, reminded the government that repression would defeat its purpose.

Q64. Consider the following statements.

- 1. The U.S. elects its President through an Electoral College, where popular vote does not always decide the winner.
- 2. Kamla Harris won the popular vote but lost the presidential election in 2024.
- 3. All states have same number of electoral votes in United States for Presidential election.

How many of the above statements is/are correct?

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

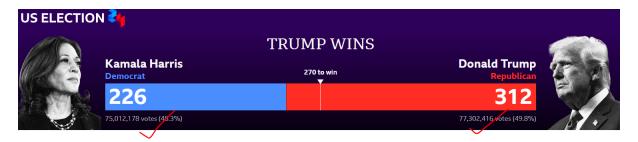
Solution: a

Explanation:

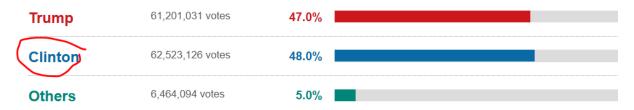
### Second and third are incorrect.

The U.S. elects its President through an Electoral College, where popular vote does not always decide the winner.

Highest popular votes not always decide the winner. But in 2024, Haris lost popular votes too.



But if you see 2016 elections, Clinton got highest popular votes, but lost election:



All states have different number of electoral votes: For example, California has highest number of 54 electoral votes. Texas has 40. Montana has 4 and others..



Q65. Consider the following statements.

- 1. Members of the European Parliament (MEPs) are selected by the members country's Parliament for a term of 5 years.
- 2. The European Commission is the executive body of the European Union which proposes new laws and policies for EU.

Select the correct code.

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

Solution: b

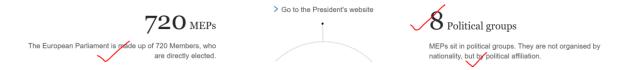
Explanation:

News:

The 2024 European Parliament election was held in the European Union (EU) between 6 and 9 June 2024. It was the tenth parliamentary election.

The European Parliament is made up of 720 Members elected in the 27 Member States of the enlarged European Union. Since 1979 MEPs have been **elected by direct universal suffrage for a five-year period. PEOPLE VOTE. NOT SELECTED BY THE PARLIAMENT.** 

Different countries can be part of one political group. There are 8 currently.

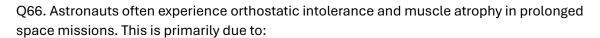


# Role of the European Commission

The European Commission is the executive body of the European Union. Its main roles include:

- proposing new laws and policies
- monitoring their implementation
- managing the EU budget

The Commission also ensures that EU policies and laws are correctly applied across Member States, negotiates international agreements on behalf of the EU, and allocates funding. Additionally, it represents the interests of the EU on the global stage, ensuring a coordinated approach among EU countries.



- a. Increased radiation exposure
- b. Microgravity
- c. Closed environment in spacecrafts affects body temperature
- d. Low calorie intake

Solution: b

Explanation:

**Transitioning from one gravity field to another is difficult**. It affects spatial orientation, headeye and hand-eye coordination, balance, and locomotion, with some crew members experiencing space motion sickness.

After few days in space, crews will be weightless. Finally, upon returning home, crews will have to readapt to Earth's gravity.

When shifting from weightlessness to gravity, astronauts may experience post-flight orthostatic intolerance or muscle atrophy where they are unable to maintain their blood pressure when standing up, which can lead to lightheadedness and fainting.

Moreover, the fluids in the body shift upward to the head in microgravity, which may put pressure on the eyes and cause vision problems.

Q67. Consider the following statements.

- 1. The European Airbus will launch its first assembly line for H125 helicopters in India.
- 2. This is the first time that private sector company in India is manufacturing helicopters in collaboration with Airbus.
- 3. The H125 is single engine, designed to operate in high-altitude and extreme environments.

How many of the above statements is/are correct?

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

Solution: c

Explanation:

The recent formalization of the contract between Tata Advanced Systems Limited (TASL) and Airbus Helicopters marks a significant advancement in India's aerospace and defence landscape.

This contract enables the establishment of the H125 Final Assembly Line (FAL) in India, signifying a landmark achievement **as it will be the first instance of a private sector helicopter assembly facility in the nation.** 

Airbus' H125 continues to lead the single-engine helicopter market in all mission segments, benefitting from its high performance and multi-role capacity.

The H125 is renowned for its ability to operate in high-altitude and hot conditions, making it ideal for missions in mountainous regions or extreme climates.

It holds the record for landing on the summit of Mount Everest, showcasing its exceptional power and maneuverability.

The H125 provides enhanced safety and reduced workload for pilots with its touchscreen glass cockpit instrument panel.

Something about HAL:

The Company which had its origin as Hindustan Aircraft Limited was incorporated on 23 Dec 1940 at Bangalore by Shri Walchand Hirachand, a farsighted visionary, in association with the then Government of Mysore, with the aim of manufacturing aircraft in India. In March 1941, the Government of India became one of the shareholders in the Company and subsequently took over its management in 1942. In collaboration with the Inter Continental Aircraft Company of USA, the Company commenced its business of manufacturing of Harlow Trainer, Curtiss Hawk Fighter and Vultee Bomber Aircraft.

In January 1951, Hindustan Aircraft Limited was placed under the administrative control of Ministry of Defence, Government of India.

Q68. Consider the following statements.

- 1. A Starred Question is one to which oral answer is given by the Minister in the House.
- 2. No supplementary questions can be asked to an Unstarred Question.
- 3. In questions hour, questions can be asked only to the ministers.
- 4. A short notice question is asked for an oral answer on a matter of public importance.

Which of the above statements is/are *incorrect* with respect to the type of questions asked in the Parliament?

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

Solution: a

Explanation:

A Starred Question is one to which a member desires an **oral answer** from the Minister in the House and is required to be distinguished by him/her with an asterisk. **Answer to such a question may be followed by supplementary questions by members.** 

**An Unstarred Question** is one to which written answer is desired by the member and is deemed to be laid on the Table of the House by Minister. Thus, it is not called for oral answer in the House and **no supplementary question can be asked thereon.** 

Questions can be asked even to Private members. So, third is incorrect.

A member may give a notice of **question on a matter of public importance and of urgent character for oral answer** at a notice less than 10 days prescribed as the minimum period of notice for asking a question in ordinary course. Such a question is known as **'Short Notice Question'**.

Q69. With reference to the **no-confidence motion**, consider the following statements:

- 1. Any Member of Parliament (MP), who can garner the support of 100 colleagues, can, at any point of time, introduce a motion of no-confidence against the Council of Ministers.
- 2. If the motion is supported by the required number in the House, speaker must grant leave for discussion.

3. The first no-confidence motion that led to the falling of a government was moved against the government headed by Prime Minister Jawaharlal Nehru.

How many of the above statements is/are correct?

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

Solution: a

Explanation:

### First and third are incorrect.

Any Lok Sabha MP, who can garner the support of **50 colleagues**, can, at any point of time, introduce a motion of no-confidence against the Council of Ministers. Hence, statement 1 is not correct.

She is duty bound to verify whether there are 50 members in the House who support its introduction. If there are 50 members, she must grant leave. SHE CAN'T SAY NO.

order, the Speaker is of opinion that the motion is in order, the Speaker shall read the motion to the House and shall request those members who are in favour of leave being granted to rise in their places, and if not less than fifty members rise accordingly, the Speaker shall declare that leave is granted and that the motion will be taken up on such day, not being more than ten days from the date on which the leave is asked for as the Speaker may appoint. If less than fifty members rise, the Speaker shall inform that the member has not the leave of the House.

It was during the third Lok Sabha in 1963 that the first one was moved by Acharya J B Kripalani against the government headed by Prime Minister Jawaharlal Nehru.

The first no-confidence motion that led to the falling of a government was moved by Y B Chavan in 1979 against the government of Prime Minister Morarji Desai. After a nine-hour debate spread over two days, Desai resigned before the motion could be put to vote.

Q70. Consider the following statements regarding **Model Code of Conduct.** 

- 1. The MCC is operational from the date that the election schedule is announced till the date that results are announced.
- 2. The MCC contains guidelines to regulate election manifestos by political parties.
- 3. MCC was first introduced throughout country since first general elections in 1952.

How many of the above statements is/are correct?

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

Solution: b

Explanation:

#### First statement is correct:

The MCC is a set of guidelines issued by the Election Commission to regulate political parties and candidates prior to elections, to ensure free and fair elections. This is in keeping with Article 324 of the Constitution, which gives the Election Commission the power to supervise elections to the Parliament and state legislatures.

The MCC is operational from the date that the election schedule is announced till the date that results are announced.

#### Second statement is correct:

The MCC contains eight provisions dealing with general conduct, meetings, processions, polling day, polling booths, observers, the party in power, and election manifestos.

- 3. The Constitution under Article 324 mandates the Election Commission, to conduct elections inter alia to the Parliament and the State Legislatures Having due regard to the above directions of the Supreme Court and after consultation with the Political Parties, the Commission, in the interest of free and fair elections, hereby directs that Political Parties and Candidates while releasing election manifestor for any election to the Parliament or State Legislatures, shall adhere to the following guidelines:
  - (i) The election manifesto shall not contain anything repugnant to the ideals and principles enshrined in the Constitution and further that it shall be consistent with the letter and spirit of other provisions of Model Code of Conduct.
  - (ii) The Directive Principles of State Policy enshrined in the Constitution enjoin upon the State to frame various welfare measures for the citizens and therefore there can be no objection to the promise of such welfare measures in election manifestos. However, political parties should avoid making those promises which are likely to vitiate the

**The MCC is not enforceable by law.** However, certain provisions of the MCC may be enforced through invoking corresponding provisions in other statutes such as the Indian Penal Code, 1860, Code of Criminal Procedure, 1973, and Representation of the People Act, 1951.

#### Third statement is incorrect:

#### How has the Model Code of Conduct evolved over time?

According to a Press Information Bureau release, a form of the MCC was first introduced in the state assembly elections in Kerala in 1960. It was a set of instructions to political parties regarding election meetings, speeches, slogans, etc. In the 1962 general elections to the Lok Sabha, the MCC was circulated to recognised parties, and state governments sought feedback from the parties. The MCC was largely followed by all parties in the 1962 elections and continued to be followed in subsequent general elections. In 1979, the Election Commission added a section to regulate the 'party in power' and prevent it from gaining an unfair advantage at the time of elections. In 2013, the Supreme Court directed the Election Commission to include guidelines regarding election manifestos, which it had included in the MCC for the 2014 general elections.

#### Q71. Consider the following statements:

- 1. The President determines the date and duration of parliamentary sessions.
- The Constitution specifies that six months should not elapse between two
  parliamentary sessions and it has been borrowed from the Government of India Act of
  1935.

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

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

Solution: b

#### Explanation:

The government determines the date and duration of parliamentary sessions. The Cabinet Committee on Parliamentary Affairs takes this decision.

The fixation of dates of summoning and prorogation of the two Houses of Parliament is one of the functions assigned to the Ministry of Parliamentary Affairs under the Government of India (Allocation of Business) Rules made by the President. After assessing the time likely to be required for transaction of Government business and for discussion on topics of public interest as may be demanded from time to time by Members of Parliament, the Ministry of Parliamentary Affairs places a note before the Cabinet Committee on Parliamentary Affairs for making a recommendation as to the date of the commencement of a session of Parliament and its likely duration. The recommendation, if agreed to by the Prime Minister, is submitted by the Ministry of Parliamentary Affairs to the President for approval of the date(s) of the commencement of a session. Thereafter,

India does not have a fixed parliamentary calendar. By convention, Parliament meets for three sessions in a year. The longest, the Budget Session, starts towards the end of January.

The summoning of Parliament is specified in Article 85 of the Constitution. Like many other articles, it is based on a provision of The Government of India Act, 1935.

Q72. Which of the following electors are eligible to be chosen to fill a seat in the Lok Sabha that is reserved for the Scheduled Castes in a State?

- a. Only those who are members of the Scheduled Castes of that State
- b. Only those who are members of the Scheduled Castes of any State
- c. Either members of the Scheduled Castes or the Scheduled Tribes of that State
- d. Either members of the Scheduled Castes or the Scheduled Tribes of any State Solution: b

Explanation:

## **Central Government Act**

# Section 4(a) in The Representation of the People Act, 1951

(a) in the case of a seat reserved for the Scheduled Castes in any State, he is a member of any of the Scheduled Castes, whether of that State or of any other State, and is an elector for any Parliamentary constituency;

Q73. Consider the following statements regarding Private member bill.

- 1. Private Members' Bills cannot be money bills.
- 2. As per the rules of the House, the motion for introduction of a Private Members' Bills cannot be opposed.
- 3. Private member cannot introduce bill which requires the recommendation of the President.

How many of the above statements is/are correct?

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

Solution: d

**Explanation:** 

#### Only second is correct.

Private Member's Bills can be money bills. If a question arises as to whether a Private Member's Bill is a Money Bill or not, the matter is referred to the Speaker, Lok Sabha, whose decision on the matter is final.

#### The bill can be opposed:

5.4. By convention, the motion for introduction of a Bill is not opposed. But there are instances where motions for introduction of Private Members' Bills had been opposed and were withdrawn or negatived by the House. The Bills were opposed either by the Government due to the involvement of governmental policy or other reasons or by some Members or by the Council on very sensitive issues involving religion or the basic character of the Constitution itself. When a motion for leave to introduce a Bill is opposed, the

#### Third statement is also incorrect:

#### 7. Recommendation of President

7.1. In a case where a Bill proposed by a private Member requires the recommendation of the President, for introduction under articles 3 and 274(1) or for consideration under article 117(3) of the Constitution, the Member concerned has to apply to the President through the concerned Minister for such recommendation. When a request is received by the Secretariat from the Member for obtaining the recommendation of the President, the letter of the Member is forwarded to the Ministry concerned for necessary action. The

Q74. Consider the following countries.

- 1. Poland
- 2. Slovakia
- 3. Romania
- 4. Moldova
- 5. Sea of Azov

How many of the above share boundary with Ukraine?

- a. Only two
- b. Only three
- c. Only four
- d. All five

Solution: d

Explanation:

Ukraine shares the border with seven other countries: **Poland, Slovakia, Hungary, Romania, Moldova, Russia, and Belarus.** 

Ukraine also has a coastline along the **Black Sea and the Sea of Azov**.





Q75. Consider the following statements.

- 1. Abyei region is a conflict region between Sudan and South Sudan.
- 2. M23 rebel group have captured several key cities and towns in Democratic Republic of Congo.
- 3. Greenland is an autonomous Danish dependent territory with self-government and its own parliament.

Which of the above statements is/are correct?

a. 1 and 2 only

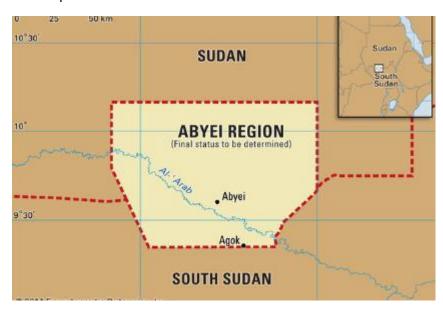
- b. 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Solution: d

Explanation:

#### All statements are correct.

#### See map:



## What is happening at the moment?

After a rapid advance in the east, fighters from the M23 rebel group have captured a number of key cities and towns.

Their first major coup was at the end of January with the taking of Goma – a city in the North Kivu province that is home to more than a million people.





Q76. How many of the following list of activities were finalized in India for trading of carbon credits in India under Article 6.4 mechanism of Paris Agreement?

- 1. Green Hydrogen Production
- 2. Offshore Wind Energy
- 3. Green Ammonia Production
- 4. Clean cooking solutions using renewable
- 5. Sustainable Aviation Fuel

Select the correct code.

- a. Only two
- b. Only three
- c. Only four
- d. All five

Solution: d

Explanation:

News:

Date: 07 .06.2024

#### **OFFICE MEMORANDUM**

Subject: List of activities finalized in India under Article 6.4 mechanism of Paris Agreement - reg.

This is in reference to the list of activities for trading of carbon credits in India under Article 6.4 mechanism of Paris Agreement.

- 2. The list was deliberated in the 4<sup>th</sup> meeting of National Designated Authority for the Implementation of the Paris Agreement (NDAIAPA) held on 10.04.24 under the chairpersonship of Secretary, MoEFCC.
- Upon recommendation of NDAIAPA, the list has been finalized and enclosed at Annexure I.
- 4. These activities will facilitate adoption/transfer of emerging technologies. The list of activities will initially be for first 03 years and may be updated/revised by NADAIPA.

India has finalized a list of 14 activities eligible for trading carbon credits under the Article 6.4 mechanism of the Paris Agreement.

- 1. Renewable energy with storage (only stored component)
- 2. Solar thermal power plant
- 3. Off- shore wind
- 4. Green Hydrogen
- 5. Compressed bio-gas
- 6. Emerging mobility solutions like fuel cells
- 7. High end technology for energy efficiency
- 8. Sustainable Aviation Fuel
- 9. Best available technologies for process improvement in hard to abate sectors
- 10. Tidal energy, Ocean Thermal Energy, Ocean Salt Gradient Energy, Ocean Wave Energy and Ocean Current Energy
- 11. High Voltage Direct Current Transmission in conjunction with the renewal energy projects
- 12. Clean cooking using renewable energy at scale (Government or Public-Private Partnership project only)

#### II. Alternate Materials:



#### III. Removal Activities:

14. Carbon Capture, Utilization and Storage

Q77. Consider the following statements.

- As per international carbon trading frameworks, one carbon credit is equivalent to 100 kg of carbon dioxide (CO<sub>2</sub>).
- 2. Energy Conservation Act, 2001 empowers the Central Government, in consultation with the Bureau of Energy Efficiency (Bureau) to specify the carbon credit trading scheme.

Which of the above statements is/are correct?

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

Solution: b

#### Explanation:

One carbon credit is equivalent to the reduction, avoidance, or removal of 1 metric ton (1,000 kg) of carbon dioxide ( $CO_2$ ) or its equivalent in other greenhouse gases (GHGs).

To develop the carbon market, the necessary amendments were proposed in the Energy Conservation Act, 2001 in the year 2022. Thus, the regulatory framework for the Indian Carbon Market is established under the Energy Conservation Amendment Act, 2022, where clause (w) of section 14 of the EC Act empowers the Central Government, in consultation with the Bureau of Energy Efficiency (Bureau) to specify the carbon credit trading scheme.

Based on the above, the Central Government has notified the Carbon Credit Trading Scheme vide notification S.O. 2825(E), dated 28th June 2023.

The Carbon Credit Trading Scheme (CCTS) is expected to contribute to achieving India's climate goals in line with the commitments under UNFCCC and its Paris Agreement.

Q78. With reference to 'Distributed Denial-of-Service (DDoS) attacks', consider the following statements:

- 1. A DDoS attack disrupts a target server or network by flooding it with high traffic from multiple sources.
- 2. The primary aim of a DDoS attack is to steal sensitive information from a targeted system.

Which of the above statements is/are correct?

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

Solution: a

**Explanation:** 

A DDoS attack, or Distributed Denial-of-Service attack, is a cybercrime that involves flooding a target with internet traffic to make it inaccessible. DDoS attacks are a type of denial-of-service (DoS) attack, but they are far more powerful than traditional DoS because they **use multiple sources** to generate exponentially more traffic.

Unlike a Denial of Service (DoS) attack, which typically involves a single source, a DDoS attack leverages multiple compromised systems, often infected with malware, to generate the traffic. These compromised systems are collectively known as a botnet.

The goal of a DDoS attack is to dissrupt a system's resources or bandwidth, making it difficult or impossible for legitimate traffic to reach its destination. DDoS attacks can have a number of consequences, including lost business, reputation damage, and a drop in legitimate traffic.

Q79. Consider the following statements regarding difference between RNA and DNA editing.

- 1. RNA editing makes permanent changes to a person's genome whereas DNA editing makes temporary changes.
- 2. DNA editing uses bacterial proteins that may trigger immune reactions, while RNA editing uses natural enzymes in the body, making it safer.

Which of the above statements is/are correct?

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

Solution: b

Explanation:

#### Read:

## KNA v. DNA editing

RNA editing has some advantages over DNA editing, especially on safety and flexibility. DNA editing makes permanent changes to a person's genome and sometimes this can lead to irreversible errors. On the other hand, RNA editing makes temporary changes, allowing the effects of the edits to fade over time. In a clinic, this means a doctor can stop the therapy if a problem arises and mitigate long-term risk.

Second, CRISPR-Cas9 and other DNA editing tools require proteins acquired from certain bacteria to perform the cutting function, but these proteins can elicit undesirable immune reactions in some cases. RNA editing relies on ADAR enzymes, which already occur in the human body and thus present a lower risk of allergic reactions. This is useful for people who require repeated treatment and/or who have immune sensitivities.

Q80. Consider the following statements.

- 1. In computer parlance, a cookie is a malicious computer virus that are used to identify your computer as you use a network.
- 2. Due to international laws including India, many websites are now required to ask for permission to use certain cookies with your browser.
- 3. Cookies help websites remember user interactions and settings during future visits.
- 4. Once created, cookies cannot be deleted or modified by the user.

Which of the above statements is/are correct?

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

Solution: b

Explanation:

#### First and fourth are incorrect.

Cookies (often known as internet cookies) are text files with small pieces of data — like a username and password — that are used to identify your computer as you use a network. NOT VIRUS.

Due to international laws, such as the EU's General **Data Protection Regulation (GDPR), Digital Personal Data Protection Act (DPDPA), 2023** (India), many websites are now required to ask for permission to use certain cookies with your browser and provide you with information on how their cookies will be used if you accept.

Cookies store information about a user's interaction with a website, such as:

- 1. **User Preferences**: Language, theme, layout, or region settings selected by the user.
- 2. **Session Information**: Login details, shopping cart items, or pages visited during a session.

Cookies remember your choices and activity on a website so that when you return, the site behaves the way you prefer.

Users can delete or modify cookies through browser settings at any time.

Q81. Consider the following statements:

Statement-I: The European Union has adopted Nature Restoration Regulation recently.

Statement-II: The regulation provides for binding restoration targets for all ecosystems in need of restoration by 2050.

Which one of the following is correct in respect of the above statements?

- a. Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- b. Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement
- c. Statement-I is correct, but Statement-II is incorrect
- d. Statement-I is incorrect, but Statement-II is correct

Solution: a

**Explanation:** 

Read:





The regulation combines an overarching restoration objective for the long-term recovery of nature in the EU's land and sea areas with binding restoration targets for specific habitats and species.

These measures should cover at least 20% of the EU's land and sea areas by 2030, and ultimately all ecosystems in need of restoration by 2050.

Q82. Consider the following statements:

Statement-I: India's solar mission Aditya-L1 has been placed in halo orbit around Sun-Earth Lagrange point 1.

Statement-II: The two points - L4, and L3 are dynamically unstable and lie on the line through the centres of the two large bodies.

Statement III: Multiple missions cannot be placed at the same Lagrange point, such as L1.

Which one of the following is correct in respect of the above statements?

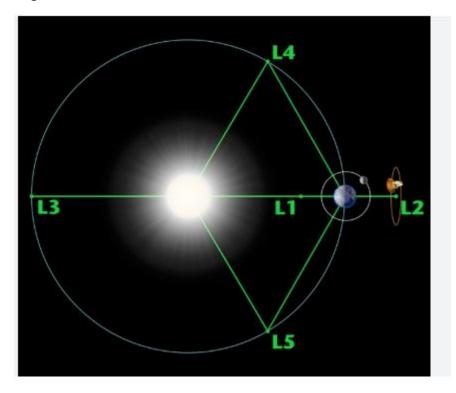
a. Both Statement-II and Statement-III are correct and both of them explain Statement-I

- b. Both Statement-II and Statement-III are correct, but only one of them explains Statement-I
- c. Only one of the Statements II and III is correct and that explains Statement-I
- d. Neither Statement-II nor Statement-III is correct

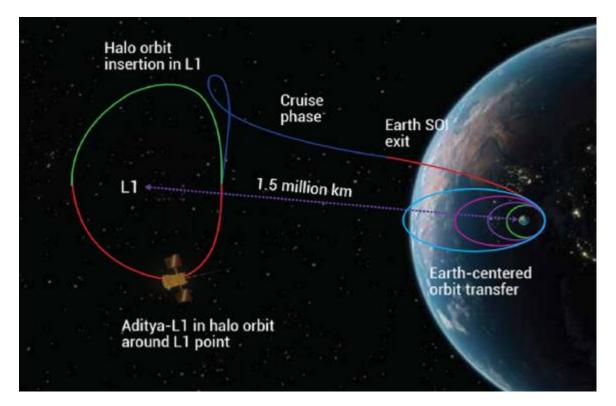
Solution: d

#### Explanation:

Of the five Lagrange points, three are unstable and two are stable. The unstable Lagrange points - labeled L1, L2 and L3 - lie along the line connecting the two large masses. The stable Lagrange points - labeled L4 and L5 - form the apex of two equilateral triangles that have the large masses at their vertices.



L1, L2, and L3 are considered unstable because even a small disturbance from these points causes the object to drift away from its position, making it difficult to maintain equilibrium.



Lagrange points are positions where the gravitational forces of two large bodies (such as the Sun and Earth) balance the centripetal force felt by a smaller object.

Yes, multiple missions can be placed at the same Lagrange point, such as L1. Spacecrafts at L1 do not occupy a single fixed point but follow halo orbits around the Lagrange point. These orbits allow multiple spacecraft to operate simultaneously without interfering with each other.

Q83. Consider the following statements.

- 1. SpaceX's Falcon 9 is a reusable, three-stage rocket.
- 2. Falcon 9 Can Support Both Low Earth Orbit (LEO) and Geostationary Transfer Orbit (GTO) Missions.
- 3. India used Falcon 9 for its GSAT-N2 mission which was launched from Second Launch Pad (SLP) at Satish Dhawan Space Centre.

How many of the above statements is/are correct?

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

Solution: a

Explanation:

Only second is correct.

Read:

Falcon 9 is a reusable, two-stage rocket designed and manufactured by SpaceX for the reliable and safe transport of people and payloads into Earth orbit and beyond. Falcon 9 is the world's first orbital class reusable rocket. Reusability allows SpaceX to refly the most expensive parts of the rocket, which in turn drives down the cost of space access.

OVERVIEW	
HEIGHT	<b>70 m</b> / 229.6 ft
IAMETER	<b>3.7 m</b> / 12 ft
MASS	<b>549,054 kg</b> / 1,207,920 lb
AYLOAD TO LEO	<b>22,800 kg</b> / 50,265 lb
AYLOAD TO GTO	<b>8,300 kg</b> / 18,300 lb
AYLOAD TO MARS	<b>4,020 kg</b> / 8,860 lb

Falcon 9's first stage incorporates nine Merlin engines and aluminum-lithium alloy tanks containing liquid oxygen and rocket-grade kerosene (RP-1) propellant.

The second stage engine ignites a few seconds after stage separation, and can be restarted multiple times to place multiple payloads into different orbits.

Elon Musk-owned SpaceX launched India's communication satellite GSAT-N2 from Canaveral Space Force Station in Florida. NOT INDIA.

Falcon 9 Can Support Both Low Earth Orbit (LEO) and Geostationary Transfer Orbit (GTO) Missions.

Q84. As per the **Indian state of Forest Report 2023**, maximum increase in forest and tree cover has been observed in the state of:

- a. Odisha
- b. Rajasthan
- c. Madhya Pradesh
- d. Chhattisgarh

Solution: d

#### Explanation:

The maximum increase in forest and tree cover has been observed in the States of Chhattisgarh (683.62 km2) followed by Uttar Pradesh (559.19 km2), Odisha (558.57 km2) and Rajasthan (394.46 km2).

Q85. India is India is **self-sufficient or near to self-sufficient** in which of the following minerals?

- 1. Bauxite
- 2. Kyanite
- 3. Iron ore
- 4. Manganese ore
- 5. Limestone

How many of the above options is/are correct?

- a. Only two
- b. Only three
- c. Only four
- d. All five

Solution: c

Explanation:

#### As per the Annual Report 2023-24 of Indian Bureau of Mines:

SI. No.	Commodity	Demand/Domestic Consumption ('000 tonnes)	Supply/Domestic supply ('000 tonnes)	Order of self-sufficiency (%)		
Minerals*						
1	Bauxite	25124	22495	90		
2	Chromite /	4028	3785	94		
3	Iron ore	234000	254000	100		
4	Kyanite	9	10	100		
5	Limestone	408182	392760a	96		
6	Magnesite	618	113	18		
7	Manganese ore	8734	2347	27		
8	Rock phosphate (including apatite)	11053	1395	13		
9	Sillimanite	3	5	100		

#### Manganese ore is incorrect.

Q86. Consider the following statements regarding Extrachromosomal DNA (ecDNA).

- 1. The ecDNA is present in both prokaryotic and eukaryotic cells
- 2. In cancer cells, ecDNA contributes to drug resistance and tumor progression.

3. While chromosomal DNA is fixed within specific regions in the cell, ecDNA moves freely and can interact with other ecDNA to form hubs.

How many of the above statements is/are correct?

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

Solution: c

Explanation:

News:

## ecDNA challenges law of genetics, groundbreaking new studies find •••••••

Three papers in Nature have reported how extrachromosomal DNA contributes to the progression of cancer and drug resistance; the findings also challenge a law of genetics

All statements are correct. No need for explanation. Aapko aise bhi samjh ni aayega.

Q87. India has recently decided to waive local clinical trials for drugs approved in countries like the U.S., U.K., Japan, and the European Union.

#### How many of the following drugs falls under this category?

- 1. Drugs for children less than 2 years
- 2. Orphan drugs for rare diseases
- 3. Gene and cellular therapies
- 4. Pandemic-related drugs

Select the correct code.

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

Solution: c

**Explanation:** 

Rule 101 of the New Drugs and Clinical Trials Rules (NDCTR), 2019, allows the Central Licensing Authority (CLA) to specify countries for considering waivers of local clinical trials for new drug approvals and clinical trial permissions, aiming to expedite approvals and ensure access to treatments.

#### The decision applies to five categories of drugs:

- a. orphan drugs for rare diseases,
- b. gene and cellular therapies,
- c. pandemic-related drugs,

- d. defense-specific treatments, and
- e. drugs with significant therapeutic advancements.

Q88. Consider the following statements.

- 1. Vijayanagar state never fought any war against Hindu Kingdom as they emphasised on principle of strict adherence to dharma.
- 2. Under Vijayanagar, Brahmans were not only spiritual leaders, they hold important administrative potions and jobs.
- 3. The nayankara system was an important characteristic of the Vijaynagar political Organisation.

Which of the above statements is/are correct?

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

Solution: C

Explanation:

First statement is incorrect:

### 27.3.1 Ritual Kingship

It is generally emphasised that the principle of strict adherence to dharma was the chief constituent and distinguishing feature of the Vijaynagar state. But very often it were the Hindu rulers against whom the Vijaynagar rulers had to fight, e.g. the Gajapatis of Orissa. The most strategically placed contingents of the Vijaynagar army were under the charge of Muslim commanders. The Muslim archers were

Second statement is correct:

#### 27.3.2 Political Role of the Brahmans

A distinct feature of the Vijaynagar state was the importance of the Brahmans as political and secular personnel rather than ritual leaders. Most of the durga dannaiks (incharge of forts) were Brahmans. Literary sources substantiate the theory that fortresses were significant during this period and were placed under the control of the Brahmans, especially of Telugu origins.

During this period, the majority of educated Brahmans desired to become government servants as administrators and accountants which offered them good career prospects. The Imperial Secretariat was totally manned by the Brahmans. These Brahmans were different from the other Brahmans: they belonged to a subcaste called the Telugu niyogis. They were not very orthodox in performing religious rites. They also worked as potential legitimizers. The Brahman Vidyaranya and his kinsmen were the ministers of the Sangama brothers: they provided legitimacy to their rule by accepting them back into the Hindu fold.

The Brahmans also played an important role as military commanders in the Vijaynagar army. For example, under Krishnadeva Raya Brahman Timma received economic support as he was an integral part of the political system. Thus Brahmans

#### Third statement is correct:

#### 27.4.1 The Nayankara System

The nayankara system was an important characteristic of the Vijaynagar political organisation. The military chiefs or warriors held the title of nayaka or amaranayaka. It is difficult to classify these warriors on the basis of definite office, othnic identity, set of duties or rights and privileges.

Q89. Individual Satyagraha 1940-41 was started soon after:

- a. Desai Liaquat Pact
- b. Quit India movement,
- c. August Offer
- d. Gandhi Irwin Pact

Solution: c

#### Explanation:

Viceroy Linlithgow made a set of proposals called the 'August offer'. For the first time, the right of Indians to frame their own constitution was acknowledged.

The INC rejected this offer at its meeting at Wardha in August 1940. It demanded complete freedom from colonial rule. Jawaharlal Nehru remarked that the dominion status concept was as dead as a doornail. The League also rejected the offer saying that nothing short of partitioning the country would be acceptable to them.

After this, Mahatma **Gandhi initiated the Individual Satyagraha** to affirm the right to free speech. He avoided a mass satyagraha because he did not want violence.

Q90. The Indian National Army (INA) was created by Netaji Subhash Chandra Bose near the

- a. Swadeshi Movement
- b. First World War
- c. Second World War
- d. Civil Disobedience Movement

Solution: c

#### Explanation:

The Indian National Army was an armed force formed by Indian nationalists in 1942 in Southeast Asia during World War II.

Its aim was to secure Indian independence from British rule. It formed an alliance with Imperial Japan in the latter's campaign in the Southeast Asian theatre of WWII.

The army was first formed in 1942 under Mohan Singh, by Indian Prisoners of Wars of the British-Indian Army captured by Japan in the Malayan campaign and in Singapore.

This first INA collapsed and was disbanded in December that year after differences between the INA leadership and the Japanese military over its role in Japan's war in Asia.

It was revived under the leadership of Subhas Chandra Bose after his arrival in Southeast Asia in 1943.

The creation of the INA by Netaji Subhash Chandra Bose during the Second World War was the clearest manifestation of the linkages established between India and overseas Indians during the freedom struggle.

Q91. Consider the following statements.

- 1. All species of jellyfish contain collagen, which can be harvested for pharmaceutical purposes.
- 2. Some species of jellyfish are edible.
- 3. Most of the jellyfish species are found in the aphotic zone (dark depths of the ocean).

How many of the above statements is/are correct?

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

Solution: c

**Explanation:** 

#### Third is incorrect:

While some jellyfish species are found in the aphotic zone (dark depths of the ocean), it's not their primary habitat, and they are more commonly found in the sunlit, shallower regions (euphotic zone).

After the aphotic zone, there's complete darkness. From 1,000 meters below the surface, all the way to the sea floor, no sunlight penetrates the darkness; and because photosynthesis can't take place, there are no plants, either.

#### First and second are correct.



中文 العربية

#### Jellyfish potential

Jellyfish play a critical role in ocean ecosystems. They are both predators and prey, as well as a potential resource. All species of jellyfish contain collagen, which can be harvested for pharmaceutical purposes or reconstructive surgery Jellyfish skin polysaccharides can be applied to wounds, while venoms are being trialled as potential anti-cancer drugs.

Some species are also edible. Rich in protein and low in carbohydrates, they have been a source of food in the Asia Pacific region for centuries.

But there are environmental and economic concerns about jellyfish. In some parts of the world, their numbers are increasing substantially and that can have negative implications for fishers' livelihoods. Large numbers of jellyfish can clog fishing nets and contaminate fish catches.

Q92. **BioE3** was recently introduced by India government that aims to promote high-performance biomanufacturing in India. E3 stands for:

- a. Electric Vehicles, Energy, Employment
- b. Energy, Environment, Employment
- c. Ecology, Energy and Economy.
- d. Environment, Economy, Employment

Solution: d

Explanation:

News:

BioE3 is an acronym for Biotechnology for Economy, Environment, and Employment, a policy that aims to promote high-performance biomanufacturing in India.

Q93. Which of the following species are often related as "dancing girls"?

- a. Butterfly
- b. Ginger
- c. Lizard
- d. Gecko

Solution: b

**Explanation:** 

News:

# Three new 'Dancing Girls' ginger species discovered in Meghalaya, Mizoram

By The Assam Tribune - 8 Sept 2024 3:56 PM

These plants, named "dancing girls" for their unique flower shapes.

Two scientists from the Indian Institute of Science Education and Research (IISER) in Bhopal recorded six new species in the genus Globba belonging to the ginger (Zingiberaceae) family from the Eastern Himalayas and two northeastern States. The common name for this genus is dancing girl or dancing lady ginger.

Q94. Which of the following bodies are constituted under Environment Protection Act, 1986?

- 1. Central Ground Water Authority
- 2. Central Pollution Control Board
- 3. Central Water Commission

Select the correct code.

- a. 1 and 2 only
- b. 3 only
- c. 1 and 3 only

d. 1 only

Solution: d

Explanation:

#### **Central Water Commission**

Central Water Commission is a premier Technical Organization of India in the field of Water Resources and is presently functioning as an attached office of the Ministry of Jal Shakti.

The Commission is entrusted with the general responsibilities of initiating, coordinating and furthering in consultation of the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Water Power Development.

Central Water Commission CWC is headed by a chairman, with the status of Ex-Officio Secretary to the Government of India.

#### **Central Ground Water Authority**

Central Ground Water Authority has been constituted under Section 3 (3) of the Environment (Protection) Act, 1986 to regulate and control development and management of ground water resources in the country.

(3) The Central Government may, if it considers it necessary or expedient so to do for the purposes of this act, by order, published in the Official Gazette, constitute an authority or authorities by such name or names as may be specified in the order for the purpose of exercising and performing such of the powers and functions (including the power to issue directions under section 5) of the Central Government under this Act and for taking measures with respect to such of the matters referred to in sub-section (2) as may be mentioned in the order and subject to the supervision and control of the Central Government and the provisions of such order, such authority or authorities may exercise the powers or perform the functions or take the measures so mentioned in the order as if such authority or authorities had been empowered by this Act to exercise those powers or perform those functions or take such measures.

#### **Central Pollution Control Board**

The Central Pollution Control Board (CPCB), statutory organization, was constituted in September 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Further, CPCB was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.

Q95. Consider the following statements regarding United Nations (UN) budget.

- 1. The UN budget is approved by the UN Security Council.
- 2. United Nations (UN) maintains a separate budget for peacekeeping operations.
- 3. The amount a member state contributes to the United Nations (UN) regular budget is voluntary.

How many of the above statements is/are correct?

- a. Only one
- b. Only two
- c. All three

d. None

Solution: a

Explanation:

Only second is correct.

News:



**UN News**Global perspective Human stories

## General Assembly approves \$3.72 billion UN budget for 2025

As per the Article 17 of UN Charter:

Article 17

#### **Charter of the United Nations**

"We the Peoples of the United Nations... United for a Better World."

Article 17:

The General Assembly shall consider and approve the budget of the Organization.

The expenses of the Organization shall be borne by the Members as apportioned by the General Assembly.

The UN peacekeeping budget is assessed separately from the regular budget and contributions are based on a different scale.

The amount a member state contributes to the United Nations (UN) regular budget is not voluntary.

The contributions of member states to the United Nations (UN) budget are determined using a formula that reflects their "capacity to pay." The criteria used to decide the amount each member will contribute are as follows:

#### Gross National Income (GNI):

- A country's GNI is the primary factor used to assess its economic capacity. Higher GNI generally results in a higher contribution.
- Adjustments are made to reflect variations in exchange rates and to ensure fairness.

#### Debt Burden:

 The assessment considers the debt burden of a country. Economies with significant debt levels receive some relief in their contribution rates.

#### Per Capita Income:

 A low per capita income is factored in as a concession for developing countries. The "low per capita income adjustment" reduces the burden on nations with large populations and low income.

#### Minimum and Maximum Contribution Levels:

- Floor Rate: There is a minimum contribution rate of 0.001% of the total budget for the smallest economies.
- Ceiling Rate: The maximum rate is capped at 22%, which currently applies only to the
  United States. This ensures that no single country bears a disproportionate share of the UN
  budget.

#### Q96. Consider the following statements.

- 1. National Panchayat Awards are given to implement the objective of SDGs in rural India.
- 2. These awards are given to Panchayati Raj Institutions for effective implementation of provisions of 73rd Constitutional Amendment Act, 1992.
- 3. The National Panchayati Raj Day is celebrated every year to commemorate the enactment of the 73rd CAA, 1992.

#### Which of the above statements is/are correct?

- a. 1 and 3 only
- b. 2 and 3 only
- c. 3 only
- d. None

Solution: a

Explanation:

#### Why National Awards?

As a signatory to the 2030 Agenda for Sustainable Development, India is committed towards the achievement of 17 Sustainable Development Goals. The Government of India is strongly committed to the 2030 Agenda and national development goals and its inclusive development moto of "Sabka Saath, Sabka Vikas" or "development with all, and for all".

To materialize this objective in rural India, a significant step of localization of Sustainable Development Goals (LSDGs) has been taken by the Ministry of Panchayati Raj to involve the Panchayati Raj Institutions (PRIs) for which National Panchayat Awards to the PRIs have been aligned to the LSDGs. This is the Award Year when the PRIs have been awarded and recognized for their outstanding work on localization of SDGs.

Under this updated framework, Panchayats were ranked and recognized based on their performance across 9 thematic areas of sustainable development:

- 1. Poverty free and enhanced livelihoods Panchayat
- 3. Child Friendly Panchayat
- 5. Clean and Green Panchayat
- 7. Socially Just and Socially secured Panchayat
- 9. Women-Friendly Panchayat

- 2. Healthy Panchayat
- 4. Water Sufficient Panchayat
- 6. Self-sufficient infrastructure in Panchayat
- 8. Panchayat with Good Governance

The National Panchayat Awards are usually celebrated on April 24th every year, in conjunction with National Panchayati Raj Day. This day commemorates the enactment of the 73rd Constitutional Amendment Act, 1992, which came into effect in 1993 and granted Panchayats constitutional status as institutions of local self-governance.

Q97. Consider the following statements regarding **Navodaya Vidyalayas** set up under Navodaya Vidyalaya Scheme in India.

- 1. Navodaya Vidyalayas provide free residential quality education to talented children from Class-VI to XII.
- 2. Navodaya Vidyalayas' students are selected based on a merit test conducted by the NCERT.
- 3. There is reservation for SC/ST and OBCs students in Navodaya Vidyalayas.

Which of the above statement is/are correct?

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

Solution: c

Explanation:

Read:

## Salient Features of Navodaya Vidyalayas

#### JNVST: Entrance on the basis of merit

Navodaya Vidyalayas draw their students strength from talented children, selected on the basis of a merit test, called the Jawahar Navodaya Vidyalaya Selection Test, designed, developed and conducted initially by NCERT and now by CBSE. The test is held annually on an All India basis and at block and district levels. The

#### Reservation of Seats

Admission in Jawahar Navodaya Vidyalayas is primarily for children from the rural areas, with provision of at least 75% seats for rural children. Seats are reserved for children from SC& ST communities in proportion to their population in the district but not less than the national average. 27% reservation is provided to the OBC students over and above reservation of SCs& STs. 1/3 of the seats are filled by girl students. 3% of the seats are reserved for disabled children.

#### Co-educational Residential Schools with Free Education

Navodaya Vidyalayas are affiliated to CBSE and provide free residential quality education to talented children from Class-VI to XII. Entry into Navodaya Vidyalayas is made in Class-VI with lateral entry in Classes- IX & XI. Each Navodaya Vidyalaya is a coeducational residential institution providing free boarding and lodging, free school uniforms, text books, stationery and to and fro

#### And,

The Scheme of Navodaya Vidyalayas provides for implementation of the Three Language Formula. The third language taught in Hindi speaking districts is linked to the migration of

students. All Navodaya Vidyalayas follow the Three Language Formula i.e. **regional language, English and Hindi**.

Q98. "Gender Strategy 2024–2030: Accelerate Gender Equality to End Poverty on a Livable Planet" is a strategy of:

- a. UNICEF
- b. World Bank
- c. World Economic Forum
- d. UNESCO

Solution: b

Explanation:

Read:

Ending all forms of gender-based violence (GBV) is a key pillar of the World Bank Group (WBG)

Gender Strategy 2024 - 2030: Accelerating Gender Equality to End Poverty on a Livable Planet.

The strategy advances a bold ambition to accelerate gender equality for all to end poverty on a livable planet.

Q99. What are the indicators used by RBI to identify **Domestically-Systemically Important Banks (DSIBs)?** 

- 1. Cross jurisdictional activity
- 2. Size
- 3. Interconnectedness
- 4. Substitutability
- 5. Complexity

Select the correct code.

- a. 1, 2, 3 and 4 only
- b. 1, 3, 4 and 5 only
- c. 2, 3, 4 and 5 only
- d. All the above

Solution: c

Explanation:

The Reserve Bank of India (RBI) identifies Domestic Systemically Important Banks (D-SIBs) based on a framework derived from the Basel Committee on Banking Supervision (BCBS) guidelines.

Key Indicators Used by RBI to Identify D-SIBs:

S. No.	Point of difference	BCBS G-SIB identification methodology	RBI D-SIB identification methodology
1	Sample of banks	75 largest global banks based on financial year end Basel III leverage ratio exposure measure. National supervisors have the discretion to add any bank in the sample apart from 75 largest banks.	Banks having size (Basel III leverage ratio exposure measure) as a percentage of GDP equal to or more than 2%. Additionally five largest foreign banks, based on their size, will also be added in the sample.
2	Indicators	Five broad indicators:  1. Cross jurisdictional activity  2. Size  3. Interconnectedness  4. Substitutability and  5. Complexity	Four broad indicators as mentioned in BCBS's framework for D-SIBs will be used:  1. Size 2.Interconnectedness 3. Substitutability and 4. Complexity
3.	Indicator weights	All indicators given equal weight with a cap to substitutability category weight	Size will be given a weight of 40% and other three indicators will be given a weight of 20% each
4.	Sub-indicators	Three sub-indicators for Complexity indicator: 1. Notional amount of OTC derivatives 2. Level 3 assets and 3. Trading and Available For Sales Securities	Level 3 assets for complexity indicator dropped and instead cross jurisdictional liabilities added.

Q100. Consider the following pairs. (places in news: location)

Sidon: Lebanon
 Neft Daslari: Iran

3. Sudzha: Iraq

4. Luhansk region: Syria

How many of the above pairs is/are correct?

A. Only one

B. Only two

C. Only three

D. All four

Solution: A

Explanation:

See news:



# Why A Soviet-Era Oil Rig City Is Floating On Earth's Largest Lake

Neft Daslari ies deep in the Caspian Sea, around 100 kilometres off the coast of Azerbaijan's capital Baku.

## Kyiv's unprecedented fightback

Ukraine's incursion into Russia, which entered a fifth day on Saturday, appears to be an unprecedented assault which experts say could aim to draw Russian resources away from other areas or to undermine morale

#### **DEEP INCURSION**

The Institute for the Study of War, a Washington-based think-tank, said Ukrainian forces have managed to push up to 35 kilometers deep into the region. The advance has centred on the logistical hub of Sudzha, a town of around 5,000 inhabitants about eight kilometres from the Ukraine border



#### WHAT'S ZELENSKYY THINKING

- Some said the incursion may seek to draw Russian reserves away from the nearby Kharkiv front in Ukraine, where Russia launched an offensive three months ago
- Some argue that if Ukraine could hold the territory, it would gain leverage against Russia in peace negotiations
- The assault could also have a psychological effect boosting the morale of Ukrainians

