

ALL INDIA MOCK TEST
TEST – 4 KEY WITH EXPLANATION

1. Answer C

Exceptions to Equality

The rule of equality before law is not absolute and there are constitutional and other exceptions to it. These are mentioned below:

1. The President of India and the Governor of States enjoy the following immunities (Article 361):

(i) The President or the Governor is not answerable to any court for the exercise and performance of the powers and duties of his office.

(ii) No criminal proceedings shall be instituted or continued against the President or the Governor in any court during his term of office.

(iii) No process for the arrest or imprisonment of the President or the Governor shall be issued from any court during his term of office.

(iv) No civil proceedings against the President or the Governor shall be instituted during his term of office in any court in respect of any act done by him in his personal capacity, whether before or after he entered upon his office, until the expiration of two months next after notice has been delivered to him.

2. No person shall be liable to any civil or criminal proceedings in any court in respect of the publication in a newspaper (or by radio or television) of a substantially true report of any proceedings of either House of Parliament or either House of the Legislature of a State (Article 361-A).

3. No member of Parliament shall be liable to any proceedings in any court in respect of anything said or any vote given by him in Parliament or any committee thereof (Article 105).

4. No member of the Legislature of a state shall be liable to any proceedings in any court in respect of anything said or any vote given by him in the Legislature or any committee thereof (Article 194).

5. Article 31-C is an exception to Article 14. It provides that the laws made by the state for implementing the Directive Principles contained in clause (b) or clause (c) of Article 39 cannot be challenged on the ground that they are violative of Article 14. The Supreme Court

held that “where Article 31-C comes in, Article 14 goes out”.

6. The foreign sovereigns (rulers), ambassadors and diplomats enjoy immunity from criminal and civil proceedings.

7. The UNO and its agencies enjoy the diplomatic immunity.

2. Answer :B

Article 51 in The Constitution Of India 1949

51. Promotion of international peace and security The State shall endeavour to

(a) promote international peace and security;

(b) maintain just and honourable relations between nations;

(c) foster respect for international law and treaty obligations in the dealings of organised peoples with one another; and encourage settlement of international disputes by arbitration PART IVA FUNDAMENTAL DUTIES

3. Answer :A

Explanation:

- The office of whip, on the other hand, is mentioned neither in the Constitution of India nor in the Rules of the House nor in a Parliamentary Statute.
- It is based on the conventions of the parliamentary government.
- Every political party, whether ruling or Opposition has its own whip in the Parliament

4. Answer :C

Explanation:

- The vice-president of India is the ex-officio Chairman of the Rajya Sabha. Unlike the Speaker (who is a member of the House), the Chairman is not a member of the House. The Deputy Chairman is also elected by the Rajya Sabha itself from amongst its members.
- Nominated members of the two Houses of the Parliament have no voting right in the presidential election, they have the right to vote in the election of the Vice President.

5. Answer :C

Explanation:

- All resolutions come in the category of substantive motions, that is to say, every resolution is a particular type of motion.
- All motions need not necessarily be substantive. Further, all motions are not necessarily put to vote of the House, whereas all the resolutions are required to be voted upon.

6. Answer :C

Explanation: Point of Order

- A member can raise a point of order when the proceedings of the House do not follow the normal rules of procedure.
- Usually raised by an opposition member in order to control the government.
- An extraordinary device as it suspends the proceedings before the House.
- No debate is allowed on a point of order.

7. Answer :D

Explanation:

- It should state the reasons for its adoption in the Lok Sabha.
- It can be moved against an individual minister or a group of ministers or the entire council of ministers.
- It is moved for censuring the council of ministers for specific policies and actions.
- If it is passed in the Lok Sabha, the council of ministers need not resign from the office.

8. Answer: D

Explanation : list of fundamental duties.

1. Abide by the Constitution and respect national flag & National Anthem
2. Follow ideals of the freedom struggle
3. Protect sovereignty & integrity of India
4. Defend the country and render national services when called upon
5. Sprit of common brotherhood
6. Preserve composite culture
7. Preserve natural environment
8. Develop scientific temper
9. Safeguard public property
10. Strive for excellence
11. Duty fo all parents/guardians to send their children in the age group of 6-14 years to school.

9. Answer :A

Explanation :

Save as otherwise provided in this Constitution, all questions at any sitting of a House of the Legislature of a State shall be determined by a majority of votes of the members present and voting, other than the Speaker or Chairman, or person acting as such. The Speaker or Chairman, or person acting as such, shall not vote in the

first instance, but shall have and exercise a casting vote in the case of an equality of votes.

10. Answer: C

Explanation:

For every state, there is a legislature, which consists of a Governor and either one or two houses. Andhra Pradesh, Bihar, Karnataka, Maharashtra, Telangana, Jammu and Uttar Pradesh have bicameral legislatures, with the remaining states having a unicameral one.

11. Answer :A

Explanation: Rules Committee: (LS- 15, RS- 16) only committee RS has more member than LS

12. Answer :D

13. Answer :A

14. Answer :B

15. Answer :B

In 1996, the Supreme Court upheld the constitutional validity of the National Awards—Bharat Ratna, Padma Vibhushan, Padma Bhushan and Padma Sri. It ruled that these awards do not amount to 'titles' within the meaning of Article 18 that prohibits only hereditary titles of nobility. Therefore, they are not violative of Article 18 as the theory of equality does not mandate that merit should not be recognised. However, it also ruled that they should not be used as suffixes or prefixes to the names of awardees. Otherwise, they should forfeit the awards.

16. Answer :B

Legal Tender Money is anything recognised by law as a means to settle a public or private debt or meet a financial obligation, including tax payments, contracts, and legal fines or damages, is considered legal tender. In almost every country, the national currency is legal tender. A creditor is required by law to accept legal tender as payment for a debt.

17. Answer :C

- A bank run is when a large number of customers of a bank or other financial institution withdraw their deposits at the same time over fears about the bank's solvency. As more people withdraw their funds, the probability of default increases, which, in turn, can cause more people to withdraw their deposits. In extreme cases, the bank's reserves may not be sufficient to cover the withdrawals.
- A bank run occurs when a large group of depositors withdraw their money from banks at the same time.

- Customers in bank runs typically withdraw money based on fears that the institution will become insolvent.
- With more people withdrawing money, banks will use up their cash reserves and can end up defaulting.
- Bank runs have occurred throughout history, including during the Great Depression and the 2008 financial crisis.

18. Answer :B

Exchange-traded funds are marketable securities that track one of the following:

- Index
- Commodity
- An amalgamation of assets like an index fund

Most commonly, ETFs are funds that track an index like the BSE Sensex or the CNX Nifty. Their NAV keeps fluctuating as per market movements. Willing individuals can invest in these funds via a registered stock exchange or a reputable broker.

Features of Exchange-traded Funds in India

Here are some features of ETFs in India:

1. One trades ETFs like common stock or shares on the market.
2. The sold price of an ETF changes every day, exactly like a stock.
3. ETFs have higher liquidity than mutual funds.
4. They also have lower fees than mutual funds.
5. One manages ETFs passively.

19. Answer :D

- Increased income or decreased expenditure will lead to saving in turn will result in capital formation.
- Institutionalising of saving will also increase saving

20. Answer :A

- Shadow banking is a term used to describe bank-like activities (mainly lending) that take place outside the traditional banking sector.
- It is also referred as non-bank financial intermediation or market-based finance.
- Generally, it is not regulated in the same way as traditional bank lending.
- The term 'shadow bank' was coined by Paul McCulley in 2007.
- Examples of shadow lenders include Special Purpose Entities, Non Banking Financial Companies (NBFCs), Hedge Funds etc.
- These institutions function as intermediaries between the investors and the borrowers, providing credit, thus, leading to financial inclusion and hence generate liquidity in the system.

- However, the 2008 financial crisis has shown that shadow banking can be a source of systemic risk to the banking system. The risks can be transmitted directly and through the interconnectedness of partially-regulated entities with the banking system.
- After the financial crisis, central banks including that of USA, Britain and the European Union (EU) have introduced many strong measures to control shadow banking.
- In India, the crisis of the NBFCs that was triggered by the [liquidity problems of IL&FS](#) in 2018, has brought back the attention to shadow banking sector.

21. Answer: B

Priority sector lending by banks in India constitutes the lending to

1. Agriculture
2. Micro, Small and Medium Enterprises
3. Export Credit
4. Education
5. Housing
6. Social Infrastructure

22. Answer : C

- Insolvency is a situation where individuals or companies are unable to repay their outstanding debt.
- The Insolvency and Bankruptcy Code, 2016 (IBC) was enacted in 2016, against the backdrop of mounting non-performing loans.
- The poor performance of older loan recovery mechanisms such as the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act (SARFAESI), Lok Adalats, and Debt Recovery Tribunals prompted the enactment of IBC.

Objectives

1. To save a business as a going concern, through restructuring, change in ownership, mergers and other methods (resolution)
2. To maximize the value of assets of the corporate debtor
3. To promote entrepreneurship, availability of credit, and balancing the interests
4. IBC aims to establish a consolidated framework for insolvency resolution of corporations, partnership firms and individuals in a time-bound manner.
5. Under IBC, the insolvency regime shifted from 'debtor-in-possession' to 'creditor-in-control' thus ensuring business continuance.

23. Answer : C

- Advanced Pricing Agreements (APAs) is an agreement determining the transfer pricing methodology between a taxpayer and the tax authority for pricing the taxpayer's international transactions for future years. It

ensures that the transactions of an international taxpayer have a certain certainty with respect to the tax outcome.

- Advanced Pricing Agreements (APAs) ensure that the transactions of an international taxpayer have a certain certainty with respect to the tax outcome.
- It helps in building a non-adversarial tax regime and addresses the transfer pricing issues in a transparent manner.
- An APA's purpose is to provide a taxpayer with clarity on tax risks and potential exposure associated with such risks.
- The purpose of the APA is to create a more regulated and fair business environment. Such agreements do not lay out future transactional concerns, but they do resolve present pricing disagreements in some circumstances.

24. Answer :C

- Contingency Fund of India established under Article 267(2) of the Indian Constitution. This fund is placed at the disposal of the president, and he can make advances out of it to meet unforeseen expenditure pending its authorisation by the Parliament, for example in case of emergencies, wars, natural disasters, riots, etc. The Finance Secretary manages the fund on behalf of the President.
- Contingency Fund is created as an imprest account to meet some urgent or unforeseen expenditure of the government.
- An imprest fund is a small amount of cash that is set aside for use in paying for incidental expenses.

25. Answer :D

Public Accounts of India

- This is constituted under Article 266(2) of the Constitution.
- All other public money (other than those covered under the Consolidated Fund of India) received by or on behalf of the Indian Government are credited to this account/fund.

This is made up of:

- Bank savings account of the various ministries/departments
- National small savings fund, defense fund
- National Investment Fund (money earned from disinvestment)
- National Calamity & Contingency Fund (NCCF) (for Disaster Management)
- Provident fund, Postal insurance, etc.
- Similar funds
- The government does not need permission to take advances from this account.
- Each state can have its own similar accounts.
- The audit of all the expenditure from the Public Account of India is taken up by the CAG

26. Answer :D

Tax base refers to the total income (including salary, income from investments, assets, etc.) that can be taxed by a taxing authority and is thus used to calculate tax liabilities owed by the individual or the corporation.

27. Answer :D

- Goods and Services Tax (GST) is a comprehensive indirect tax on the manufacture, sale, and consumption of goods and services throughout India. GST would replace respective taxes levied by the central and state governments.
- It is a destination-based taxation system.
- It has been established by the 101st Constitutional Amendment Act.
- It is an indirect tax for the whole country on the lines of “One Nation One Tax” to make India a unified market.
- It is a single tax on the supply of Goods and Services in its entire product cycle or life cycle i.e. from manufacturer to the consumer.
- It is calculated only in the “Value addition” at any stage of goods or services.
- The final consumer will pay only his part of the tax and not the entire supply chain which was the case earlier.
- There is a provision of the GST Council to decide upon any matter related to GST whose chairman is the finance minister of India.

28. Answer :B

Pump priming refers to the collective measures taken by the governments during recession to simulate the economy during recession. This is done usually by cutting the taxes and increased public spending.

29. Answer :A

- According to the [International Monetary Fund's \(IMF\)](#), “Annual Observance Report of the Special Data Dissemination Standard for 2018”, India failed to comply with multiple requirements prescribed in the Special Data Dissemination Standard (SDDS).
- The IMF launched the SDDS initiative in 1996 to guide members to enhance data transparency and help financial market participants with adequate information to assess the economic situations of individual countries.
- There are over 20 data categories which IMF considers for this report to capture a nation's economic health including national accounts (GDP, GNI), production indices, employment, and central government operations.
- India subscribed to the SDDS on December 27, 1996.
- India held that its non-compliance with IMF standards is one-off event due to technical glitches in the National Summary Data Page (NSDP) web page.
- National Summary Data Page (NSDP) provides quick access to a single comprehensive source of economic and financial data.

30. Answer :A

31. Answer: C

Anga- Champa

Kashi – Varanasi

Kosala – Shravasti

Vajji – Vaishali

Mallas – Kusinara and PavaVatsa – Kaushambi

Magadha – Rajgriha

32. Answer: B

- Fahien visited India during Chandragupta II period (382-412 AD)
- Huan-Zang visited India during Harshvardhan Period (606-647CE)
- I-Tsing visited India after the Harshvardhan death (671-695 AD)

33. Answer: B

Svapnavasavadatta was composed by Bhasa

Ratnavali and Priyadarshika were composed by Harsha

The epics refer to a tale of love between Udayana and Vasavadatta (Pradyota's daughter)

34. Answer: C

Sangeet Ratnakara was written by Sarangadeva

It defined ragas both from the North Indian and the Dravidian branches of music as well

35. Answer : A

Virupaksha Temple is located in Hampi in the Ballari district of Karnataka, India. It is part of the Group of Monuments at Hampi, designated as a UNESCO world Heritage Site. The temple is dedicated to Virupaksha, a form of Shiva. The temple was built by LakkanDandesha, a nayaka (chieftain) under the ruler Deva Raya II of the Vijayanagara Empire.

36. Answer: A

Tallapaka Annamacharya (or Annamayya) was a 15th century Hindu saint and is the earliest known composer in Carnatic music. Other composers like Purandaradasa came after him. Tyagaraja and his contemporaries, Shyama Shastri and Muthuswami Dikshitar, were regarded as the Trinity of Carnatic music.

37. Answer: B

Amir Khusrow Dehlavi was a Sufi musician, poet and scholar from India. He was an iconic figure in the cultural history of South Asia. He was a mystic and a spiritual disciple of Nizamuddin Auliya of Delhi. Khusrow is regarded as the "father of qawwali" (a devotional music form of the Sufis in the Indian subcontinent), and introduced the ghazal style of song into India.

38. Answer: B

Sufism was not against mysticism. Sufism was a liberal reform movement within Islam. Sufism stressed the elements of love and devotion as effective means of the realization of God. According to Sufis one must have the guidance of a Pir or Guru, without which spiritual development is impossible

39. Answer : B

Exp: Iltutmish was the first to introduce Arabic coinage in India. Alauddin Khalji introduced the system of paying salaries in cash to the soldiers and took measures to regulate prices of commodities by establishing four separate markets in Delhi; He was the first sultan of Delhi who ordered for the measurement of land

40. Answer: D

Gulbadan Begum (c.1523 – 7 February 1603) was a Mughal princess and the youngest daughter of Emperor Babur. She is best known as the author of Humayun-Nama, the account of the life of her half-brother, Emperor Humayun statement I is incorrect. After losing battle with Akbar, Maharana Rana Pratap built a new capital at Chavand. Therefore statement II is also incorrect.

41. Answer: C

- Digambara tradition holds that a woman lacks the body and rigid will necessary to attain moksha, i.e., liberation, hence she has to be reborn as a man before such an attainment is possible
- Shvetambaras acknowledge the possibility of women attaining Jina-hood and maintain that women are capable in the present lifetime of the same spiritual accomplishments as men.
- Partition of Bengal and Swadeshi movement: The social separation of the two communities was further politicized by the Swadeshi leaders freely using Hindu religions symbols and coercing Muslims peasants to observe boycott. They unwittingly allowed the movement to grow into the Hindu-Muslim question; instead of having a secular approach to the political issue. Not all the Muslims were separatists or loyalists at the beginning; but the Swadeshi movement soon put on then the unmistakable stamp of otherness.
- Morley's Budget speech, 1906; Morley's speech of 1906 indicated that representative government was going to be introduced in India. This alarmed Muslim leaders across the board, as they thought that in the new self-governing bodies they would be swayed by the Hindu majority who were now well organized under the congress. This provided the context for the Simla deputation of 1 October 1906 to the Governor General Lord Minto.
- In April 1915, Sarvadeshak (All India) Hindu Mahasabha was formed as an umbrella organization of regional Hindu Sabha's, at the Kumbh Mela in Haridwar. Hence, statement 4 is wrong.

42. Answer: B

Uposatha means a ceremony held on full moon and new moon.

Upasampada means an ordination ceremony when a novice becomes a full-fledged member of the monastic community. Nibbana is the annihilation of the ego.

43. Answer : C

The land revenue system of Akbar was called Zabti. It was further improved by Raja Todar Mal. It was known as Dashala system. By this system, Todar Mal introduced a uniform system of land measurement. The revenue was fixed on the average yield of land assessed on the basis of past ten years. In the DahsalaZabti system payment of revenue was made generally in cash

44. Answer: A

Dr. Ambedkar was not a part of interim government. He was the first law minister of independent India

45. Answer: C

Some very popular work of Bal Gangadhar Tilak. The GitaRahasya was written in 1915 while in prison at Mandalay, Burma.

The Arctic Home in the Vedas was written in 1898.

46. Answer: B

Indian National Social Conference was founded by M.G. Ranade and Raghunath Rao. It focused attention on the social issues of importance. INC did not want to include social reforms in its deliberations and decided to form a separate body for such a purpose. The conference advocate intercaste marriages and opposed kulinism and polygamy. It launched the famous pledge movement to inspire people to take an oath to prohibit child marriage.

47. Answer: B

1784-1785: Uprising of the Koli Mahadev tribes in Maharashtra. -1789: revolt of the Tamar of Chota Nagpur against British

-The Polygar Wars or Palaiyakkarar Wars were fought between the Polygars (Palaiyakkarars) of the former Trunelveli Kingdom in Tamil Nadu, India and the British East India Company forces between March 1799 to May 1802 or July 1805.

48. Answer: D

Surendranath Banerjee is a very important figure in the pre-Gandhian history of India. Each of his contributions are very important

49. Answer: A

Development in education during British are very important

Macauley proposed the Downward Filtration Policy. It implied education was to be provided to a small portion of the people. That small portion would further educate the rest of the masses and also 'refine; the vernacular dialects of the country.

Charles Wood's Education Dispatch moved away from the down ward filtration policy. It recommended for the establishment of Anglo-Vernacular Schools.

It was known as the Magna Carta of education reforms.

50. Answer: C

Second Anglo Maratha war (1802-1803)

Fourth Anglo Mysore war (1798)

Permanent settlement of Lord Cornwallis (1793)- Abolition of Sati (1828)

51. Answer: C

Lord Curzon had introduced the Punjab Land Alienation Act in 1900. In this act, it was laid down that non-peasant could buy lands from the peasants and neither could be attached their lands in case of non-payment of debts and nor keep the land in mortgage for more than 20 years. The result was the money lenders stopped lending money and Lord Curzon had to open banks and these societies. Thus, various Co-operative societies of the agriculturists and agricultural banks were established during the time of Lord Curzon, Hence Option (c) is the most significant outcome

52. Answer: B

It proposes all members of Viceroy's executive council will be Indians except commander in chief.

53. Answer: C

Both the statements are correct

54. Answer: A

Following events preceded formation of All India League: The Hindi Urdu controversy: In the united provinces (now Uttar Pradesh), petitions to the offices and the courts were submitted only in Urdu. As it was the court language. The Hindus for long demanded a change in this procedure. Finally on 8 April, 1900, the government gave instructions that petition written in Hindi in the Devanagiri script would also be accepted. The Muslims resented this directive and called for protest meetings all over the province. The Hindus held counter meetings and the controversy continued for months. As the rift between the communities widened.

55. Answer: D

Raj Kumar Shukla and dr. Rajendra Prasad are active member in Champaran satyagrah

Acharya Vinoba Bhave, J.I. Nehru and Brahmdatew the 1st, 2nd and 3rd Individuals satyagrah

The Kheda Satyagraha of 1918, in the Kheda district of Gujarat, India during the period of the British Raj, was the second Satyagraha movement inspired by Mohan das Gandhi and a major revolt in the Indian independence movement. It was the second Satyagraha movement after (Champaran Satyagraha)

Sardar Vallabhai Patel and a close coterie of devoted Gandhians, namely Shankarlal Banker, Mahadev Desai, Bargaru Parikh, Mohanlal Pandya and Ravi Shankar Vyas toured the countryside, organized the villagers and gave them political leadership and direction

56. Answer: C

The Aravalli Range is a mountain range in western India that stretches 692 kilometres northeast over Gujarat, Rajasthan, Haryana, and Delhi. It is one of the world's oldest mountain ranges.

- a) Mount Abu is the second highest peak in the Aravalli Range. Gurushikar is the highest peak..
- b) Aravallis that extends from Delhi to Haridwar creates a divide between the rivers of the Ganga and the Indus
- c) Goran Ghat pass which breaches Aravallis
- d) Aravallis is one of the oldest fold mountains of the world

The Aravalli Range is a significant ecological hotspot due to its rich geological history and diverse flora and fauna. It is home to various wildlife reserves, sanctuaries, and national parks, including the **Sariska Tiger Reserve and the Mount Abu Wildlife Sanctuary**. The Aravalli Range is also rich in marble, granite, and mica minerals. The range is also rich in minerals such as copper, zinc, and lead.

The government has also made initiatives to safeguard and conserve the range, such as establishing the **Asola Bhatti Wildlife Sanctuary** on the range's northern edge.

57. Answer: A

The **'Karakoram Anomaly'** is termed as the stability or anomalous growth of glaciers in the central Karakoram, in contrast to the retreat of glaciers in other nearby mountainous ranges of Himalayas and other mountainous ranges of the world.

- It is for the **first time that a study brought forth the importance that enhanced western Disturbance (WD)**-precipitation input during the accumulation period plays in modulating regional climatic anomalies.
 - Previous studies have **highlighted the role of temperature in establishing** and sustaining the anomaly over the years
- **Western Disturbances (WDs)** are the primary feeder of snowfall for the region during winters.
- The study suggests they **constitute about around 65% of the total seasonal snowfall volume and about 53% of the total seasonal precipitation**, easily making them the most important source of moisture.
- Further, the **precipitation intensity of WDs** impacting Karakoram has **increased by around 10% in the last two decades**, which only enhances their role in sustaining the regional anomaly.

58. Answer: D

- 1) West Bengal has suffered the worst due to coastal erosion
- 2) Indian National Centre for Ocean Information Services (INCOIS) has prepared and published an atlas of Coastal erosion maps of India
- 3) Integrated Coastal Zone Management Plan (ICZM) ensures optimum use of coastal natural resources
- 4) 34% of India's coastline is under erosion

About 34% is under varying degrees of erosion, while 26% of the coastline is of an accreting nature, and the remaining 40% is in a stable state.

West Bengal suffered erosion along about 60.5% of the coast (323.07 km) over the period from 1990 to 2018. This is followed by Kerala (46.4%) and Tamil Nadu (42.7%) respectively.

Earlier, the Indian National Centre for Ocean Information Services (INCOIS) had prepared and published an atlas of Coastal Vulnerability Index (CVI) maps for the entire coastline of India.

59. Answer: C

New Names of Ports

Ennore Port – Kamarajar Port.

Kandla Port – Deendayal Port Trust.

Kolkata Port – Dr.Syama Prasad Mukherjee Port.

Nhava Sheva – Jawaharlal Nehru Port.

Panambur Port – New Mangalore Port.

Tuticorin Port – V.O. Chidambaram Port.

60. Answer: D

Galathea Bay is an iconic nesting site in India of the enigmatic Giant Leatherback, the world's largest marine turtle

330 species of fauna are recorded in the island, while the same ZSI study puts the number at more than double at 695.

The EIA says in another place no migratory birds have been reported from Great Nicobar, whereas it is well known that these islands are located along two globally significant bird flyways and more than 40 species of migratory birds have been recorded from Great Nicobar.

Institutional Callousness:

The EIA report was expected to have details of the project proponent's (ANDICO) environmental policy such as its standard operating process, procedures for highlighting violation of environmental and forest norms and for ensuring compliance with environmental clearance conditions.

The undertaking, issued by the Directorate of Tribal Welfare, the agency tasked with the primary job of securing the rights of the indigenous people on the islands.

It first assures that "the right of the tribal shall be well protected and taken care of" and, then goes on to conclude that "whenever any exemption from the existing regulations/policies/law of the land are required to be provided for the execution of the project, this Directorate will seek required exemptions(s) from the competent authority to that effect".

Issues Raised by Environmentalists:

This project is likely to impact turtle and megapode nesting sites and coral reefs at the islands.

Many reserved areas are expected to be de-notified for the project including land under Great Nicobar Biosphere Reserve and a tribal reserve.

Close to 81.74% of the island is covered with national parks, reserves and forests.

The project will have a direct impact on the biodiversity and cascading effects on the indigenous Onge tribe. The Onge are one of the tribes of India's Andaman Islands.

Great Nicobar:

Great Nicobar is the southernmost island of the Nicobar Islands Archipelago. It covers 1,03,870 hectares of unique and threatened tropical evergreen forest ecosystems.

It is home to a very rich ecosystem, including 650 species of angiosperms, ferns, gymnosperms, bryophytes, among others.

In terms of fauna, there are over 1800 species, some of which are endemic to this area.

Ecological Characteristics:

The Great Nicobar Biosphere Reserve harbours a wide spectrum of ecosystems comprising tropical wet evergreen forests, mountain ranges reaching a height of 642 m (Mt. Thullier) above sea level, and coastal plains.

Tribe:

The Mongoloid Shompen Tribe, about 200 in number, live in the forests of the biosphere reserve particularly along the rivers and streams.

Another Mongoloid Tribe, Nicobarese, about 300 in number, used to live in settlements along the west coast.

After the tsunami in 2004, which devastated their settlement on the western coast, they were relocated to Afra Bay in the North Coast and Campbell Bay.

61. Answer: D

Recently, the Sakurajima Volcano erupted on Japan's major western island of Kyushu.

In 2021, the Fukutoku-Okanoba Submarine Volcano exploded in the Pacific Ocean, off Japan.

Sakurajima is one of Japan's most active volcanoes and eruptions of varying levels take place on a regular basis.

It is an active stratovolcano.

The largest historical eruptions of Sakurajima took place during 1471-76 and in 1914.

Its eruption has been recorded since the 8th Century.

Due to its frequent deposition of ash on Kagoshima, and due to its explosive potential, it is considered as one of the very dangerous volcanoes.

62. Answer: C

Falkland Islands, also called Malvinas Islands or Spanish *Islas Malvinas*, internally self-governing overseas territory of the United Kingdom in the South Atlantic Ocean.

It lies about 300 miles northeast of the southern tip of South America and a similar distance east of the Strait of Magellan.

The capital and major town is Stanley, on East Falkland, there are also several scattered small settlements as well as a Royal Air Force base that is located at Mount Pleasant.

Royal Air Force base is located at Mount Pleasant.

Patagonia shelf of this Island is rich in oil and natural gas
Capital and largest settlement of this Island is Stanley

63. Answer: C

Anji Khan Bridge - Udhampur Srinagar Baramulla Rail Link Project
Atal Bridge - Sabarmati River
Padma multipurpose bridge - Padma river , Bangladesh
MaitriSetu bridge - Feniriver, Tripura

64. Answer: A

The Strait of Hormuz is located between countries Oman and Iran.

65. Answer: A

India and France are collaborating on Kaziranga Project.
It is Declared as UNESCO World Heritage Site in 1985.
It is also Declared as a National Park in 1974 and is Declared a tiger reserve since 2007.

66. Answer B

The Animal Welfare Board of India is a statutory advisory body on Animal Welfare Laws and promotes animal welfare in the country. Established in 1962 under Section 4 of the Prevention of Cruelty to Animals Act, 1960. The Animal Welfare Board of India (AWBI), headquartered at Ballabgarh in Haryana state, is a statutory advisory body advising the Government of India's Ministry of Fisheries, Animal Husbandry and Dairying (Department of Animal Husbandry and Dairying). The AWBI headquarters were previously situated in Chennai.

The National Tiger Conservation Authority (NTCA) was established in December 2005, following a recommendation of the Tiger Task Force, constituted by the Prime Minister of India for reorganised management of Project Tiger and the many Tiger Reserves in India.

The National Ganga River Basin Authority (NGRBA), which is part of India's Jal Shakti ministry, is responsible for funding, planning, implementing, monitoring, and coordinating efforts related to the Ganges River

67. Answer B

Not all the global wetlands will permanently disappear. While some may disappear new wetlands will be formed

Areas of cultivation of cereals may be subjected to change but its cultivation will still be possible in the world

68. Answer C

It is an initiative of WWF. The event is held annually, encouraging individuals, communities, and businesses to turn off non-essential electric lights, for one hour

from 8:30 to 9:30 p.m., usually on the last Saturday of March, as a symbol of commitment to the planet.^[1] It was started as a lights-off event in Sydney, Australia, in 2007

69. Answer D

- While the 10-km rule is implemented as a general principle, the extent of its application can vary. Areas beyond 10 km can also be notified by the Union government as ESZs, if they hold larger ecologically important “sensitive corridors”.
- Prohibited Activities: Commercial mining, saw mills, industries causing pollution (air, water, soil, noise etc), establishment of major [hydroelectric projects \(HEP\)](#), commercial use of wood.
- Regulated Activities: Felling of trees, establishment of hotels and resorts, commercial use of natural water, erection of electrical cables, drastic change of agriculture system, e.g., adoption of heavy technology, pesticides etc, widening of roads.
- Permitted Activities: Ongoing agricultural or horticultural practices, rainwater harvesting, organic farming, use of renewable energy sources, adoption of green technology for all activities.

Significance of ESZs:

Minimise the Impact of Development Activities, impact of [urbanisation](#)

70. Answer C

- BirdLife International's priorities include preventing extinction of bird species, identifying and safeguarding important sites for birds, maintaining and restoring key bird habitats, and empowering conservationists worldwide.
- It has a membership of more than 2.5 million people across 116 country partner organizations, including the Royal Society for the Protection of Birds, the Wild Bird Society of Japan, the National Audubon Society and American Bird Conservancy
- BirdLife International has identified 13,000 Important Bird and Biodiversity Areas and is the official International Union for Conservation of Nature's Red List authority for birds
- Norman Myers wrote about the concept OF Biodiversity hotspots in two articles in The Environmentalist in 1988 and 1990

71. Answer B

IUCN is not an organ of the United Nations

72. Answer A

The United Nations Conference on Sustainable Development (UNCSD), also known as Rio 2012, Rio+20, or Earth Summit 2012 was the third international conference on sustainable development aimed at reconciling the economic and environmental goals of the global community. Hosted by Brazil in Rio de Janeiro in 2012, Rio+20

was a 20-year follow-up to the 1992 United Nations Conference on Environment and Development (UNCED) held in the same city, and the 10th anniversary of the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg.

73. Answer D

REDD+ is a financing model negotiated under the UNFCCC to reduce greenhouse gas emissions from deforestation and forest degradation in developing countries.

It is divided into three phases, which are roughly associated with readiness, implementation, and payment for results.

REDD+ is a voluntary climate mitigation path developed by Parties to the [United Nations Framework for Convention on Climate Change \(UNFCCC\)](#). The primary objective of REDD is to reduce emissions from deforestation and forest degradation

74. Answer A

Agenda 21

- Non-binding
- Voluntary
- It is an action plan of United Nations
- Related with sustainable development
- It is a product of Earth Summit (UN Conference on Environment and Development) held in Rio de Janeiro, Brazil, in 1992.
- It is an action agenda for the UN, other multilateral organizations, and individual governments around the world that can be executed at local, national, and global levels.
- The “21” in Agenda 21 refers to the 21st Century.

75. Answer B

- The Sustainable Development Goals are a set of seventeen pointer targets that all the countries which are members of the UN agreed to work upon for the better future of the country.
- The documentary screened at the Rio+20 conference – “Future We Want” presented the idea of a post-2015 development agenda. Sustainable Development Goals (SDGs) is an intergovernmental agreement formulated to act as post-2015 Development agenda, its predecessor being Millennium Development Goals

76. Answer A

It is an independent scientific analysis that tracks climate actions of governments. It then measures it against the Paris Agreement. It is a collaboration of two organisations, New Climate Institute and Climate Analytics. The Climate Action Tracker prior to the summit had predicted that the global temperatures are to increase by 2.6°C. According to the report, most of the countries are lagging behind

their stated climate targets. At this pace, the global temperature will increase by 2.9°C by 2100

77. Answer A

Biorock or Mineral Accretion Technology can be used to create strong artificial reefs that develop corals at a quick rate.

#Broken coral fragments are anchored to the bio rock structure, allowing them to develop at least four to six times quicker than their natural rate because they are not required to create their calcium carbonate skeletons.

#The technique also aids corals, particularly the very sensitive branching corals, in fending off global warming's hazards.

78. Answer C

79. Answer A

The Code acknowledges that polar waters may impose additional demands on ships beyond those normally encountered. It provides a mandatory framework for ships operating in polar waters. The main requirements are related to safety, protection of the environment, and seafarer competence, and it is implemented through amendments to International Maritime Conventions such as SOLAS, MARPOL, and the STCW.

80. Answer A

81. Answer A

82. Answer A

83. Answer: B

Cervical Cancer:

It is a type of cancer that occurs in the cells of the cervix - the lower part of the uterus that connects to the vagina.

Various strains of the Human papillomavirus (HPV) play a role in causing most cervical cancer.

When exposed to HPV, the body's immune system typically prevents the virus from doing harm. In a small percentage of people, however, the virus survives for years, contributing to the process that causes some cervical cells to become cancer cells.

CERVAVAC is the first indigenously developed vaccine to prevent cervical cancer in India. Human papillomavirus:

Human papillomavirus (HPV) is the most common viral infection of the reproductive tract.

84. Answer: D

Bisphenol A can indirectly aid in the spread of vector-borne diseases in humans and animals.

- The research establishes that the human-made chemical Bisphenol A can significantly shorten the breeding time of southern house mosquitoes (*Culex quinquefasciatus*).
- This mosquito is a major carrier of the West Nile virus, Rift Valley fever virus and avian pox in tropical and subtropical countries, and thereby aids in its quick multiplication.

Bisphenol A:

- Bisphenol A (BPA) is a chemical that is mainly used in combination with other chemicals to manufacture plastics and resins.
- It is produced by the condensation of phenol and acetone.
- This type of plastic is used to make some types of beverage containers, compact disks, plastic dinnerware, impact-resistant safety equipment, automobile parts, and toys.
- Generally, BPA acts on the hormonal level by distorting hormonal balance and inducing estrogenic effects through binding with estrogen-related receptors (ERR).

85. Answer: C

The **Indian Space Research Organisation (ISRO)** is planning the **200th successful launch** of the **Rohini RH-200** sounding rocket in a row.

- RH-200 of the Rohini sounding rocket family has completed **198 consecutive successful flights**.
- The 199th launch will happen in October 2022 during the **World Space Week (4th-10th October) celebrations**. The 200th will take place either towards the end of October or the beginning of November 2022.

What are the Sounding Rockets?

- Sounding rockets are **one or two stage solid propellant rockets** used for probing the upper atmospheric regions and for space research.
- Sounding rockets take their name from the nautical term "to sound," which means to take measurements.
- They also serve as **easily affordable platforms to test or prove prototypes** of new components or subsystems intended for use in launch vehicles and satellites.
- **History:**
- The Thumba Equatorial Rocket Launching Station (TERLS) was established on 21st November 1963. Its southern tip is close **to earth's magnetic equator**.
- The launch of the first sounding rocket (American Nike-Apache) from Thumba in 1963, **marked the beginning of the Indian Space Programme** and was the bedrock of all the vehicles built.
- ISRO began with the launch of **indigenously built sounding rockets from 1965**. The ISRO launched its own version - **Rohini RH-75 - in 1967**.
- The series of sounding rockets are called **Rohini series with RH 200, RH 300 and RH 560 being the most important** among them.
- **RH-200:**
- RH-200 is a **two-stage rocket capable of climbing to a height of 70 km** bearing scientific payloads.

- The first and second stages of RH-200 are powered by solid motors.
- For years, the RH-200 rocket had used a **polyvinyl chloride (PVC)-based propellant**.
- The first RH-200 to use a new propellant based on hydroxyl-terminated Polybutadiene (HTPB) was successfully flown from the TERLS in September 2020.
- As compared to PVC based propellants, HTPB based propellant is more energetic, higher mechanical & interface properties and has less defects due to lower processing temperature.
- The '200' in the name **denotes the diameter of the rocket in mm**. Other operational Rohini variants are **RH-300 Mk-II and RH-560 Mk-III**.

86. Answer: B

A recent study says that the inner core of Earth seems to have stopped spinning in the same direction as the rest of the planet.

- Inner core of the Earth is the innermost layer of the Earth.
- It is a solid metallic ball made mainly of iron.
- The **inner core is solid due to the pressure** caused by the weight put on it by the Earth's other top layers.
- It is distinct from the outer core, which is a liquid metal.
- **The inner core has an average radius of 1220 km.**
- The boundary between the inner and outer cores is located at approximately 5150 km below the surface of the Earth.
- This boundary is called the Lehman Seismic Discontinuity
- Inner core temperatures reach extraordinary levels, estimated to be between 7,200–8,500°F (4,000–4,700°C).
- It is predicted to have very high thermal and electrical conductivity.
- **Inner core is now rotating slower than the surface**

87. Answer:A

- The World Health Organization recently said that Equatorial Guinea had confirmed its first-ever outbreak of Marburg disease.
- Marburg virus disease (MVD) earlier known as Marburg hemorrhagic fever, is a rare but severe hemorrhagic fever that affects both people and non-human primates.
- MVD is caused by the Marburg virus, a genetically unique zoonotic (animal-borne) RNA virus. Marburg and Ebola viruses are both members of the Filoviridae family (filovirus).
- Marburg virus was first recognized in 1967, when outbreaks of hemorrhagic fever occurred simultaneously in laboratories in Marburg and Frankfurt, Germany and in Belgrade, Yugoslavia (now Serbia).
- The reservoir host of the Marburg virus is the African fruit bat, *Rousettus aegyptiacus*.

- The Marburg virus is transmitted to people from fruit bats and spreads among humans through human-to-human transmission.
 - The average MVD case fatality rate is around 50%.
 - There is no specific treatment for Marburg virus disease.
- Supportive therapy, such as intravenous fluids, electrolyte replacement, supplemental oxygen, as well as blood and blood products replacement, improves survival.

88. Answer:C

Recently, the Visible Line Emission Coronagraph (VLEC), the primary payload on board Aditya-L1, was handed over to Indian Space Research Organisation (ISRO) by the Indian Institute of Astrophysics (IIA).

ISRO is planning to launch the Aditya-L1 mission, first Indian space mission to observe the Sun by June or July 2023 to observe the Sun and the solar corona.

What is Aditya-L1 Mission?

- Launch Vehicle: Aditya L1 will be launched using the Polar Satellite Launch Vehicle (PSLV) with 7 payloads (instruments) on board.
- The 7 payloads include:
 - VELC
 - Solar Ultraviolet Imaging Telescope (SUIT)
 - Solar Low Energy X-ray Spectrometer (SoLEXS)
 - Aditya Solar wind Particle Experiment (ASPEX)
 - High Energy L1 Orbiting X-ray Spectrometer (HEL1OS)
 - Plasma Analyser Package for Aditya (PAPA)
 - Advanced Tri-axial High Resolution Digital Magnetometers

Objective:

- Aditya L1 will study the Sun's corona, Sun's photosphere, chromosphere, solar emissions, solar winds and flares, and Coronal Mass Ejections (CMEs), and will carry out round-the-clock imaging of the Sun.
- The mission will be launched by ISRO to the **L1 orbit** which is about 1.5 million km from the Earth. The orbit allows Aditya-L1 to look at the Sun continuously.

What is L1?

- L1 refers to Lagrangian/Lagrange Point 1, one of 5 points in the orbital plane of the Earth-Sun system. Lagrange Points are positions in space where the gravitational forces of a two-body system like the Sun and Earth produce enhanced regions of attraction and repulsion.
- These can be used by spacecraft to reduce fuel consumption needed to remain in position.
- A Satellite placed in the halo orbit around the L1 has the major advantage of continuously viewing the Sun without any occultation/ eclipses.
- The L1 point is home to the Solar and Heliospheric Observatory Satellite (SOHO), an international collaboration project of National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA).
- What are the Features and Significance of VELC Payload?

- VELC will be the main payload among seven designed to study various aspects of the sun and is one of the most precise instruments made in India.
- It was conceptualised and designed in 15 years which will help in solving mysteries related to solar astrophysics.
- Significance:
- It will help in studying the temperature, velocity and density of the corona, understand the processes that result in heating of the corona and acceleration of the solar wind, aid studies on drivers of space weather, measure the magnetic field of corona and study the development and origin of coronal mass ejection.

89. Answer: C

Europe discovers the biggest rare earths deposit in **Sweden at Kiruna.**

90. Answer: C

What is Amorphous Ice? Amorphous ice consists of water molecules arranged in a disordered state, with no large-scale regularity to their orientations or positions. This kind of ice is most often found in space.

Almost all ice in the universe is amorphous and in a form called low-density amorphous ice. This forms when water condenses onto dust grains in space. Comets are amorphous ice as well.

How is Amorphous Ice different from Ordinary Ice?

Ordinary ice is crystalline in nature, with water molecules – two hydrogen atoms and one oxygen atom, or H₂O – arranged in a regular pattern. Amorphous ice's water molecules are in a disorganized form resembling a liquid.

Amorphous ice – With frigid innovation, scientists make a new form of ice-**medium-density amorphous ice** created?

Researchers employed a process called ball milling to vigorously shake ordinary ice together with steel balls in a container cooled to minus-328 degrees Fahrenheit (**minus-200 degrees Celsius**).

This yielded what they called “medium-density amorphous ice,” or MDA, which looked like a fine white powder.

Significance of this discovery: The key significance of the discovery of a new form of ice with a density similar to liquid water is that it could serve as an ideal model for understanding the properties of water without the complexities introduced by its fluid motion.

91. Answer: D

VainuBappu Observatory

Recently, discoveries of the 40-inch telescope at the VainuBappu Observatory were highlighted at its **50-year celebration.**

About VainuBappu Observatory:

VainuBappu Observatory is considered one of the most renowned observatories in India it is Located on Javadi Hills at Kavalur, Tamilnadu

The 40-inch telescope was installed in 1972 and started producing important astronomical discoveries soon after. More than a generation of astronomers were trained at this telescope as well.

The telescope in the observatory is under the Indian Institute of Astrophysics (IIA), an institute of the Department of Science and Technology (DST)

Who is VainuBappu?

He was an Indian astronomer who helped to establish several astronomical institutions in India including the VainuBappu Observatory which is named after him.

He has played a significant role in astronomy with major discoveries like the presence of rings around the planet Uranus, a new satellite of Uranus, and the presence of an atmosphere around Ganymede which is a satellite of Jupiter.

92. Answer: A

Recently, the **Genetic Engineering Appraisal Committee (GEAC)** that functions under the Union Ministry of Environment, Forest and Climate Change has approved seed production prior to commercial release of **genetically modified (GM) mustard**.

What are Genetically Modified (GM) Crops?

- GM crops are **derived from plants whose genes are artificially modified**, usually by **inserting genetic material from another organism**, in order to give it new properties, such as **increased yield, tolerance to a herbicide, resistance to disease or drought, or improved nutritional value**.
- Probably the **best-known variety of GM rice is golden rice**.
- Golden rice involves the insertion of genes from a plant - both daffodils and maize have been used - and a soil bacterium to create a grain that is enriched with Vitamin A.
- **Earlier, India approved** the commercial cultivation of **only one GM crop, Bt cotton**, but GEAC has recommended GM Mustard for commercial use.
- **Advantages:**
 - **Increased Yield:** Genetically modified seeds dramatically increase the yield of the plant. This means that with the same plot of land, a farmer can now produce noticeably more crops.
 - **Beneficial in Specific Climates:** Genetically modified seeds can also be **produced for specific conditions or climates**. For example, drought-resistant seeds can be used in places with little water to ensure healthy crop growth.
- **Disadvantages:**
 - **Manipulation of Seeds Cost:** Only a few companies are in charge of creating and selling modified seeds. With a near monopoly, this means that there are few choices available to those buying seeds.
 - **Seeds can't be Replanted:** Genetically modified seeds do not create viable seed offspring by design. This means that every time you want to plant a new crop, you have to go to the company you originally bought the seeds from.
 - **Environmental Concern:** They can decrease species diversity. For example, insect-resistant plants might harm insects that are not their intended target and destroy that particular insect species.

- **Ethical Concern:** GM crop is the violation of natural organisms' intrinsic values by mixing among species.
- There have also been concerns of mixing animal genes in plants.
What is GM Mustard?
- **Dhara Mustard Hybrid (DMH-11)** is an indigenously developed transgenic mustard. It is a **genetically modified variant of Herbicide Tolerant (HT) mustard**.
- It contains **two alien genes** ('barnase' and 'barstar') isolated from a soil bacterium called *Bacillus amyloliquefaciens* that enable breeding of high-yielding commercial mustard hybrids.
- It has been developed by the **Centre for Genetic Manipulation of Crop Plants (CGMCP) at Delhi University**.
- In 2017, the GEAC recommended the commercial approval of the HT Mustard crop. However, the Supreme Court stayed its release and asked the central government to seek public opinion.
- **Significance:** India produces only 8.5-9 million tonnes (mt) of edible oil annually while it imports 14-14.5 mt which entailed a record foreign exchange outgo of USD 18.99 billion in the fiscal year ended March 31, 2022. Further, GM mustard would make **India self-reliant in oil production and help in saving forex**.
- Mustard varieties in India have a narrow genetic base. The barnase-barstar system enables breeding of hybrids from a wider range of mustards, including those of **East European origin such as 'Heera' and 'Donskaja'**.
What is the Status of other GM Crops in India?
- **BT Cotton:**
- In order to tackle the bollworm attack that had devastated cotton crops in the past, Bt cotton was introduced which was **jointly developed by the Maharashtra Hybrid Seeds Company (Mahyco) and the US seed company Monsanto**.
- In 2002, the GEAC approved Bt Cotton for commercial cultivation in 6 states such as Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, and Tamil Nadu. It has to be noted that, Bt cotton is the first and only transgenic crop approved by the GEAC.

93. Answer: A

The cost of Kalasa-Banduri Nala project on the Mahadayi basin has risen from about ₹94 crores (2000) to ₹1,677.30 crores (2020) due to the ongoing inter-State river water dispute.

Mahadayi River (Mandovi)

- Mahadayi or Mhadei, the west-flowing river, originates in Bhimgad Wildlife Sanctuary (Western Ghats), Belagavi district of Karnataka.
- It is joined by a number of streams to form the Mandovi which is one of two major rivers (the other one is Zuaririver) that flows through Goa.
- The river travels 35 km in Karnataka; 82 km in Goa before joining the Arabian Sea.

Kalasa-BanduriNala Project

- It is undertaken by the Government of Karnataka to improve drinking water supply to the three districts of Belagavi, Dharwad, and Gadag.
- It involves building across Kalasa and Banduri, two tributaries of the Mahadayi river to divert water to the Malaprabha river (a tributary of Krishna river).
- The [Mahadayi Water Disputes Tribunal](#) was set up in 2010. Goa, Karnataka and Maharashtra are parties to the tribunal.



94. Answer :C

Global Methane, Climate and Clean Air (GMCCA) Forum 2022 is being held in Washington, DC, USA to discuss opportunities to protect the climate and improve air quality with a special focus on [methane](#) by adhering to the [Global Methane Pledge](#).

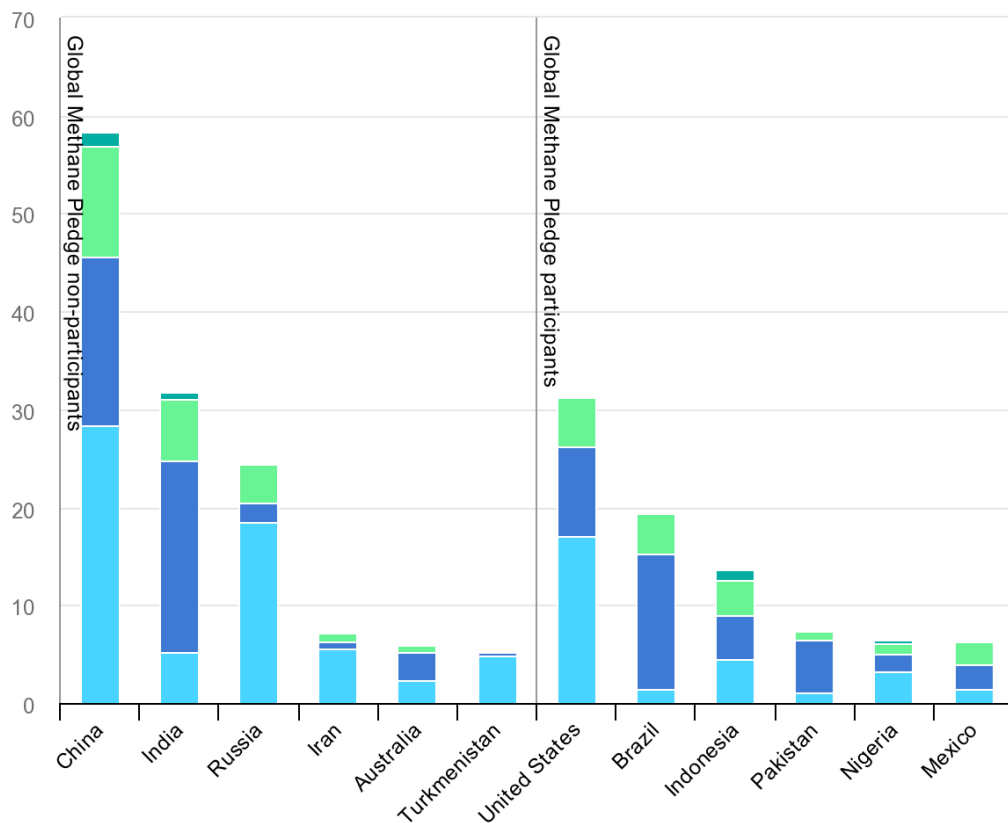
.What is the Global Methane Pledge?

- The Global Methane Pledge was launched at [COP \(Conference of Parties\) 26](#) in November 2021 to catalyse action to reduce methane emissions.
- It was led by the United States and the European Union.
- It has 111 country participants who together are responsible for 45% of global human-caused methane emissions.
- India, which is not a part of the Global Methane Pledge, is among the top five methane emitters globally. Most emissions can be traced back to agriculture.
- By joining the Pledge, countries commit to work together in order to collectively reduce methane emissions by at least 30% below 2020 levels by 2030.

Concern:

- Methane has contributed to about one-third of the current anthropogenic greenhouse gas-driven warming.
- Methane enters the atmosphere due to leaks in oil and gas industries, rearing livestock and the decomposition of waste in landfills.
- Currently, only 2 % of global climate finance goes to methane.
- If the Global Methane Pledge is not adhered to, Methane emissions will likely increase by 13 % by 2030.

Top twelve emitters of methane with breakdown by sector, 2021:



What is Methane?

About:

- Methane is a gas that is found in small quantities in Earth's atmosphere. Methane is the simplest hydrocarbon, consisting of one carbon atom and four hydrogen atoms (CH₄). Methane is powerful [greenhouse gas](#). It is flammable, and is used as a fuel worldwide.
- Methane is produced by the breakdown or decay of organic material and can be introduced into the atmosphere by either natural processes – such as the decay of plant material in wetlands, the seepage of gas from underground deposits or the digestion of food by cattle – or human activities – such as oil and gas production, rice farming or waste management.

Impact:

- Methane is 84 times more potent than carbon and doesn't last as long in the atmosphere before it breaks down..
- It is responsible for creating ground-level ozone, a dangerous air pollutant.

95. Answer :A

- UNESCO recently released a list of 50 exclusive and iconic heritage textile crafts of the country. According to UNESCO, one of the major challenges to the safeguarding of Intangible Cultural Heritage in the South Asia is lack of proper inventory and documentation.
- The publication, which aims to bridge this gap, brings together years of research on the 50 selected textiles

Some of the textile are mentioned in the below given table

Textile	State/Region
1. Toda embroidery and Sungadi	-Tamil Nadu
2. Himroo weaves	-Hyderabad
3. Bandha tie and dye weaving	-Sambalpur in Odisha
4. Khes	-Panipat,Haryana
5. Chambarumals	- Himachal Pradesh
6. Thigma or wool tie and dye -	-Ladakh
7. AwadhJamdani	- Varanasi
8. Ilkal and Lambadi or Banjara embroidery	-Karnataka
9. SikalnayakanpetKalamkari	-Thanjavur
10.Kunbi weaves	-Goa
11.Mashru weaves and Patola	- Gujarat
12.Himroo	-Maharashtra
13.Garad-Koirial	-West Bengal

96. Answer :D

Pillar coral is found throughout the Caribbean from the Yucatan Peninsula and Florida to Trinidad and Tobago, has turned into Critically Endangered, after its population shrunk by over 80%.which one of the following is not the reason for this bleaching

- Stony Coral Tissue Loss Disease
- increased sea surface temperatures
- excess antibiotics, fertilisers and sewage.

97. Answer :B

98. Answer :A

Regarding the recently developed remote voting machine prototype by the Election Commission (EC)

1. It can handle up to 72 constituencies from a single remote polling booth.

2. It is a modified version of the existing Electronic Voting Machine (EVM).
3. The remote voter will have to pre-register for the facility.

99. Answer :C

PradhanMantri Jan ArogyaYojana (PMJAY):

- PM-JAY is the world's largest health insurance/ assurance scheme fully financed by the government.
- Launched in February 2018, it offers a sum insured of Rs.5 lakh per family for secondary care (which doesn't involve a super specialist) as well as tertiary care (which involves a super specialist).
- Under PMJAY, cashless and paperless access to services is provided to the beneficiaries at the point of service, that is, hospital.
- Health Benefit Packages covers surgery, medical and day care treatments, cost of medicines and diagnostics.
- Packaged rates (Rates that include everything so that each product or service is not charged for separately).These are flexible but the hospitals can't charge the beneficiary more once fixed.

Beneficiaries:

- It is an entitlement-based scheme that targets the beneficiaries as identified by latest Socio-Economic Caste Census (SECC) data.
- Once identified by the database, the beneficiary is considered insured and can walk into any empaneled hospital.

Funding:

The funding for the scheme is shared – 60:40 for all states and UTs with their own legislature, 90:10 in Northeast states and Jammu and Kashmir, Himachal and Uttarakhand and 100% Central funding for UTs without legislature.8.Consider the following statements regarding significance of Fundamental Duties:

100. Answer :D