

ANSWER KEY

General Studies-I

Aanklan-1-24

Answer Key

| | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|------|-----|------|-----|------|-----|
| 1. | (c) | 26. | (d) | 51. | (d) | 76. | (c) | 101. | (b) | 126. | (b) |
| 2. | (b) | 27. | (c) | 52. | (c) | 77. | (d) | 102. | (c) | 127. | (b) |
| 3. | (d) | 28. | (a) | 53. | (c) | 78. | (d) | 103. | (b) | 128. | (a) |
| 4. | (d) | 29. | (c) | 54. | (b) | 79. | (a) | 104. | (c) | 129. | (a) |
| 5. | (a) | 30. | (b) | 55. | (c) | 80. | (c) | 105. | (b) | 130. | (a) |
| 6. | (c) | 31. | (c) | 56. | (b) | 81. | (b) | 106. | (d) | 131. | (c) |
| 7. | (c) | 32. | (b) | 57. | (d) | 82. | (b) | 107. | (c) | 132. | (c) |
| 8. | (c) | 33. | (b) | 58. | (d) | 83. | (d) | 108. | (a) | 133. | (d) |
| 9. | (b) | 34. | (b) | 59. | (a) | 84. | (b) | 109. | (b) | 134. | (c) |
| 10. | (d) | 35. | (c) | 60. | (d) | 85. | (a) | 110. | (a) | 135. | (a) |
| 11. | (c) | 36. | (c) | 61. | (b) | 86. | (b) | 111. | (b) | 136. | (c) |
| 12. | (d) | 37. | (b) | 62. | (b) | 87. | (c) | 112. | (a) | 137. | (c) |
| 13. | (c) | 38. | (d) | 63. | (a) | 88. | (c) | 113. | (c) | 138. | (a) |
| 14. | (b) | 39. | (a) | 64. | (b) | 89. | (d) | 114. | (b) | 139. | (b) |
| 15. | (c) | 40. | (a) | 65. | (c) | 90. | (d) | 115. | (a) | 140. | (d) |
| 16. | (a) | 41. | (c) | 66. | (c) | 91. | (d) | 116. | (c) | 141. | (d) |
| 17. | (c) | 42. | (c) | 67. | (a) | 92. | (b) | 117. | (b) | 142. | (d) |
| 18. | (c) | 43. | (a) | 68. | (b) | 93. | (c) | 118. | (a) | 143. | (d) |
| 19. | (c) | 44. | (d) | 69. | (a) | 94. | (c) | 119. | (a) | 144. | (d) |
| 20. | (d) | 45. | (c) | 70. | (c) | 95. | (a) | 120. | (a) | 145. | (a) |
| 21. | (c) | 46. | (c) | 71. | (b) | 96. | (c) | 121. | (c) | 146. | (a) |
| 22. | (d) | 47. | (c) | 72. | (c) | 97. | (a) | 122. | (a) | 147. | (c) |
| 23. | (b) | 48. | (c) | 73. | (c) | 98. | (b) | 123. | (a) | 148. | (d) |
| 24. | (a) | 49. | (a) | 74. | (b) | 99. | (b) | 124. | (a) | 149. | (b) |
| 25. | (c) | 50. | (c) | 75. | (d) | 100. | (b) | 125. | (c) | 150. | (d) |



General Studies-I

Aanklan-1-24

1. Match List-I with List-II:

| List-I (Sustainable Development Goals) | List-II (Subject matter) |
|--|--------------------------------|
| A. SDG - 1 | 1. Zero Hunger |
| B. SDG - 2 | 2. Gender equality |
| C. SDG - 5 | 3. Affordable and clean energy |
| D. SDG - 7 | 4. No poverty |

Which of the above is/are correctly matched?

- (a) A-3, B-1, C-2, D-4
- (b) A-3, B-2, C-1, D-4
- (c) A-4, B-1, C-2, D-3
- (d) A-4, B-2, C-1, D-3

1. **Answer: (c)**

Sustainable Development Goals agenda was accepted by all members of the United Nations in 2012 at the Rio De Janeiro Council Meet with an aim to promote a healthy and developed future of the planet and its people. It was in 2015 when the Sustainable Development Goals were implemented after a successful fifteen-year plan of development called the Millennium Development Goals.

About 17 Sustainable Development Goals (17 SDGs):-

1. No **poverty**
2. **Zero Hunger**
3. Good Health and well-being
4. Quality education
5. **Gender equality**
6. Clean water and sanitation
7. **Affordable and clean energy**

Additional knowledge:

8. Decent work and economic growth
9. Development of industry, innovation and infrastructure
10. Reduced inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Protection of aquatic life (life below water)
15. Protection of terrestrial organisms (life on land)
16. Peace, justice and strong institutions
17. Partnerships for the Goals



2. Which of the following women were participant of the ‘Constituent Assembly’?

1. Dakshayani Velayudhan
2. Ammu Swaminathan
3. Usha Mehta
4. Leela Roy

Code:

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

2. **Answer: (b)**

- After partition, **the Constituent Assembly of India had 299 representatives.**
- These included **229 members from provinces and 70 members** from princely states. **There were a total of 15 women members.**

Names of 15 women that were members of the Constituent Assembly are:

- Durgabhai Deshmukh
- Rajkumari Amrit Kaur
- Hansa Mehta
- Begum Ejaz Rasool
- Ammu Swaminathan
- Sucheta Kriplani
- Dakshayani Velayudhan
- Renuka Rai
- Poornima Banerjee
- Anni Mascarin
- Kamla Chowdhary
- Leela Roy
- Malti Chowdhary
- Sarojini Naidu
- Vijaya Lakshmi Pandit
- **Usha Mehta**, a 22-year-old student of **Wilson College, Mumbai**, started a secret radio station during Quit India Movement.



Her first announcement was- ‘We are speaking from Congress Radio on 42.34 meters from an unknown place in India.’ Messages of national leaders were broadcast through ‘**Congress Radio**’.

3. Match List-I with List-II:

| List-I (Subject Matter) | List-II (Important Articles) |
|------------------------------------|------------------------------|
| 1. Right to freedom | (Articles 23-24) |
| 2. Right to freedom of religion | (Articles 19-22) |
| 3. Cultural and educational rights | (Articles 29-30) |
| 4. Right against exploitation | Articles (23-24) |

Which of the above is/are correctly matched?

- (a) Only 2
- (b) 2 and 3 only
- (c) 1 and 4 only
- (d) 3 and 4 only



3. Answer: (d)

Fundamental Rights refer to a set of essential liberties and entitlements guaranteed to every citizen by the constitution of a country. These rights serve as the bedrock of individual freedom, protecting citizens from arbitrary state actions and ensuring basic human rights and freedoms.

Articles 12 to 35 in Part III of the Indian Constitution provide for six Fundamental Rights. These rights are mentioned below:

- Right to Equality (Articles 14-18)
- Right to freedom (Articles 19-22)
- Right against exploitation (Articles 23-24)
- Right to freedom of religion (Articles 25-28)
- Cultural and educational rights (Articles 29-30)
- Right to Constitutional Remedies (Article 32)
- Originally the Constitution also included the right to property (Article 31).
- However, it was removed from the list of **fundamental rights by the 44th Constitutional Act, 1978**.
- It has been made a legal right under **Article 300 (A) in Part XII of the Constitution**.

4. Consider the following statements with reference to 'Money Bill':

1. Money Bill can be introduced only in the Lok Sabha.
2. Speaker of Lok Sabha is the final authority to decide whether a bill is a money bill or not.
3. Any Money Bill passed by the Lok Sabha must be returned by the Rajya Sabha within 14 days.

Which of the statements given above is/are correct?

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

4. Answer: (d)

- Money Bill is a type of legislation under Article 110 of the Indian Constitution that relates to the appropriation of money from the Consolidated Fund of India, which is the main fund of the government.
- Money Bills are typically related to financial matters such as taxation, public expenditure, and public debt.

Constitutional Provisions:

- Articles **109 and 198** deal with **Special procedures** in respect of Money Bills.
- Articles **110 and 199** deal with the **definition of Money Bill**.

Money Bill Definition:

- A bill is deemed to be a money bill if it contains 'only' provisions dealing with following matters:
- Imposition, abolition, remission, alteration or regulation of any tax;
- **Regulation of the borrowing of money** by the Union government;
- Appropriation of Money, payments and withdrawals from the **Consolidated Fund of India or the contingency fund of India**,
- **Receipt, custody, audit of money on account of the Consolidated Fund of India or the public account of India**.
- Any matter incidental to any of the matters specified above.



What is not a Money Bill?

- A bill is not to be deemed to be a money bill by reason only that it provides for
- **Imposition of fines or other pecuniary penalties, or**
- **Demand for payment of fees for licences or fees for services rendered; or**
- **Imposition, abolition, remission, alteration or regulation of any tax** by any local authority or body for local purposes.

All statements are correct.

Some more facts:

- Money bill is introduced on the prior recommendation of President.
- There can be no suspensive veto exercised by President on money bill

Top 5 States by Number of Members in Lok Sabha**Major States - Number of Members in Lok Sabha**

- Uttar Pradesh - 80
- Maharashtra - 48
- West Bengal - 42
- Bihar - 40
- Tamil Nadu - 39

5. Given below are two statements, one is Assertion (A) and the other is Reason (R).

Assertion (A): The Constitution of India is quasi-federal.

Reason (R): The Indian Constitution is neither federal nor unitary.

Select the correct answer from the code given below:

- (a) Both A and R are correct and (R) is the correct explanation of (A).
- (b) Both A and R are correct but (R) is not the correct explanation of (A).
- (c) A is true, but R is false.
- (d) A is false, but R is true.

5. **Answer: (a)**

- **Quasi-federalism refers to a form of state which is intermediate between a unitary state and a federation.**
- It brings together **the features of a federal government and a unitary government.**
- **K C WHEARE has called India as Quasi Federal**
- The Constitution of India forms a **federal form of government as it contains all the common features of a republic, viz concurrent governance, separation of powers, written constitution, legislative sovereignty, judicial rigidity, separate judiciary and bicameralism**
- However, the Indian Constitution also has **many unitary or non-federal provisions.**

Furthermore, Article 1 of the Constitution of India defines **India as a 'union of states'**.

6. Consider the following states and arrange them in chronological order according to the year of their formation:
- I. Jharkhand
 - II. Chhattisgarh
 - III. Telangana
 - IV. Uttarakhand



Select the correct answer using the code given below:

- (a) I, II, III, IV
- (b) IV, II, I, III
- (c) II, IV, I, III
- (d) I, IV, II, III

6. Answer: (c)

The demand for state reorganisation started with protest in south India eventually leading to death of Potty Sriramalu. The resultant protest led to formation of first state on linguistic basis as Andhra Pradesh in 1953. Subsequently State Reorganization Commission, established in 1953, submitted its report in 1955, proposing the reorganization of states into 16 states and 3 union territories. In November 1956, the Government enacted the State Reorganization Act, which led to the division of the country into 14 states and 6 union territories

State - year of formation

- Andhra Pradesh - **October 1, 1953**
- Gujarat - **May 1, 1960**
- Nagaland - **1 December, 1963**
- Haryana - **1 November, 1966**
- Himachal Pradesh - **January 25, 1971**
- Meghalaya, Manipur, Tripura- **January 21, 1972** Sikkim - **May 16, 1975**
- Mizoram, Arunachal Pradesh - **February 20, 1987**
- Goa - **May 30, 1987**
- Chhattisgarh - **November 1, 2000**
- Uttarakhand - **9 November, 2000**
- Jharkhand - **15 November, 2000**
- Telangana - **June 2, 2014**

7. By which of the following constitutional amendments Konkani, Manipuri and Nepali languages were added?
- (a) 96th Constitutional Amendment 2011
 - (b) 21st Constitutional Amendment 1967
 - (c) 71st Constitutional Amendment 1992
 - (d) 91st Constitutional Amendment 2003

7. Answer: (c)

96th Constitutional Amendment 2011-

- The name of Oriya language was changed to Odia by the 96th Constitutional Amendment of the Indian Constitution in the year 2011.

21st Constitutional Amendment 1967-

- Sindhi language was added to the Indian Constitution in 1967 by the 21st Amendment of the Constitution.
- Sindhi language was the 15th language to be added to the Indian Constitution.

71st Constitutional Amendment 1992-

- Three languages were added to the Indian Constitution in the year 1992 by the 71st Constitutional Amendment.
- Konkani, Manipuri and Nepali languages were added in the 71st Amendment of the Indian Constitution.



91st Constitutional Amendment 2003-

- In the year 2003, four new languages were added to the Indian Constitution by the 91st Constitutional Amendment.
- Bodo, Dogri, Maithili and Santhali languages were added in the 91st Constitutional Amendment of the Indian Constitution.

8. Which of the following political parties of India were stripped of the status of ‘National Party’?

1. Trinamool Congress (TMC)
2. National People’s Party(NPP)
3. Aam Aadmi Party (AAP)
4. Communist Party of India (CPI)

Code:

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

8. **Answer: (c)**

National party would be one that has a presence ‘nationally’, as opposed to a regional party whose presence is restricted to only a particular state or region.

Criterion for recognition

- The ECI has laid down the technical criterion for a party to be recognised as a national party.
- A party may gain or lose national party status from time to time, depending on the fulfilment of these laid-down conditions.
- As per the ECI’s Political Parties and Election Symbols, 2019 handbook,
- A political party would be considered a national party if:
 - It is ‘recognised’ in four or more states; or
 - If its candidates polled at least 6% of total valid votes in any four or more states in the last Lok Sabha or Assembly elections and has at least four MPs in the last Lok Sabha polls; or
 - If it has won at least 2% of the total seats in the Lok Sabha from not less than three states.

List of all National Parties in India**Name - Date of Establishment**

- Bharatiya Janata Party(BJP) - **6 April 1980**
- Indian National Congress(Congress) - **28 December 1885**
- Communist Party of India (Marxist) - CPI(M) - **7 November 1964**
- Aam Aadmi Party(AAP) - **26 November 2012**
- Bahujan Samaj Party(BSP) - **14 April 1984**
- National People’s Party(NPP) - **6 January 2013**

Election Commission of India: On 10 April 2023, Election Commission of India (ECI) cancelled the national party status of three former national parties – Trinamool Congress (TMC), Nationalist Congress Party (NCP) and Communist Party of India (CPI).

Following this, **the ECI recognised Arvind Kejriwal’s Aam Aadmi Party (AAP) as a national party.**

9. In which of the following cases Supreme Court of India held Preamble not to be a part of the Indian Constitution?

- (a) Kesavananda Bharati case
- (b) Berubari case



- (c) Sajjan Singh case
- (d) Golaknath case

9. **Answer: (b)**

In Berubari case 1960 the Supreme Court of India declared Preamble as not a part of **the Indian Constitution**. Therefore it is **not enforceable in the court**.

However in **the Kesavananda Bharati case 1973**, the **Supreme Court** has considered the Preamble as a part of the Indian Constitution.

In Sajjan Singh v. State of Rajasthan (1965) dealt Supreme Court agreed with its judgment in the Shankari Prasad case 1951 and held that under Article 368, Parliament could amend any part of the constitution

In the **Golaknath case (1967)**, the Supreme Court overturned Shankari Prasad judgment and ruled that Article 368 only lays down the procedure to amend the constitution and does not give absolute powers to the Parliament to amend any part of the constitution.

10. Which one of the following is not a Fundamental Duty?

- (a) To respect the national anthem
- (b) To protect and enhance the natural environment
- (c) To protect public property
- (d) To protect monuments and places of national importance

10. **Answer: (d)**

- On the basis of the report of **Swaran Singh Committee**, **10 fundamental duties** were included in **Article 51A of Part 4A of the Indian Constitution** by **42nd Constitutional Amendment in the year 1976**, whereas the **Swaran Singh Committee** had suggested to include only 8 fundamental duties.
- **11th Fundamental Duty** (the duty of every parents to provide education to their children between the ages of 6 and 14 years) was added to the Constitution by **86th Constitutional Amendment in the year 2002**.
- At present there are a total of **11 fundamental duties**.

Article 51A in Part IV-A provides eleven Fundamental Duties of Indian Constitution. These fundamental duties are mentioned below:

- To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem,
- To cherish and follow the noble ideals that inspired the national struggle for freedom,
- To uphold and protect the sovereignty, unity, and integrity of India,
- To defend the country and render national service when called upon to do so,
- To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic, and regional or sectional diversities and to renounce practices derogatory to the dignity of women,
- To value and preserve the rich heritage of the country's composite culture,
- To protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures,
- To develop a scientific temper, humanism, and the spirit of inquiry and reform,
- To safeguard public property and to abjure violence,
- To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavor and achievement, and
- To provide opportunities for education to his child or ward between the age of six and fourteen years (added by the 86th Constitutional Amendment Act of 2002).



- **Protection of monuments and places of national importance** is given in the **Directive Principles of State Policy in Article 49 of the Constitution.**
- The concept of fundamental duties in the Indian Constitution is inspired by the Constitution of the erstwhile Soviet Union (USSR).

11. Arrange the following committees in chronological order according to their formation year:

1. G. V. K. Rao Committee
2. Balwant Rai Mehta Committee
3. Ashok Mehta Committee
4. L.M.Singhvi Committee

Code:

- | | |
|----------------|----------------|
| (a) 1, 2, 3, 4 | (b) 1, 3, 2, 4 |
| (c) 2, 3, 1, 4 | (d) 2, 1, 3, 4 |

11. Answer: (c)

Various Committees Related to Panchayati Raj are:

| Committee | Year | Recommendation |
|-----------------------------|------|---|
| Balwant Rai Mehta Committee | 1957 | The three-tier system of Panchayati Raj Institutions (Gram Panchayat, Panchayat Samiti and Zila Parishad). |
| Ashok Mehta Committee | 1977 | Two-tier system of Panchayati Raj Institutions (Mandal Panchayat and Zila Parishad). |
| G.V.K Rao Committee | 1985 | The Zila Parishad should be the principal body in the Panchayati Raj System of India. |
| L.M Singhvi Committee | 1986 | Constitutional recognition of local self- government. Formation of Gram Sabha |
| Gadgil Committee | 1988 | The Committee on Policy and Programmes was constituted in 1988 by the Congress party under the chairmanship of V.N. Gadgil. This committee was made to consider the question of “how best Panchayati Raj institutions could be made effective” |

12. Which of the following words was not included in the Preamble of the Indian Constitution during its commencement?

- (a) Fraternity
- (b) Sovereign
- (c) Equality
- (d) Integrity

12. Answer: (d)

Preamble to the Indian Constitution refers to the introduction or preface to the Indian Constitution. As a text containing the essence of the Constitution, it is a reflection of the nation’s identity, its democratic ethos, and its foundational principles.

TEXT OF PREAMBLE:

We, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens:

JUSTICE, Social, Economic and Political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity and to promote among them all;



FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

In Our Constituent Assembly, this 26th day of November 1949, do HEREBY ADOPT, ENACT, and GIVE TO OURSELVES THIS CONSTITUTION

- The Preamble was amended by the 42nd Constitution (Amendment) Act, 1976 and the words 'socialist', 'secular' and 'integrity' were added to it.
- The ideals of liberty, equality and fraternity in our Preamble have been taken from the French Revolution (1789-1799 AD).
- The elements of social, economic and political justice have been taken from the Russian Revolution of 1917.
- On the basis of the behaviour of the state towards religion, three types of states can be imagined:
 - Atheistic state, a state which opposes all religions.
 - A peaceful state, like that of Sri Lanka. A state which has its own special religion
 - Secular state A state which remains neutral in matters of religion meaning which does not have any special religion, like India.

13. According to Article 3 of the Constitution of India, Parliament by law can declare which of the following?
1. Can declare aggression against any country.
 2. Can alter the boundaries of any state.
 3. Can increase the area of any state.

Which of the statements given above is/are correct?

- (a) Only 2
- (b) 1, 2 and 3
- (c) Only 2 and 3
- (d) Only 3



13. Answer: (c)

Powers of Parliament to reorganise States

- **Article 3:** Creation of new States and alteration of areas, boundaries or names of existing States
 - Can create a new State by separating its territory from any State, by uniting two or more States or parts of States or by combining any territory with a part of any State.
 - Can increase the area of any State.
 - Can decrease the area of any State.
 - Can alter the boundaries of any State.
 - Can alter the name of any State.
- The provisions of this Article in the original Constitution were almost the same.
- Further Later, some things were added to it through the 5th and 18th Constitutional Amendments.
- Through the 5th Constitutional Amendment, 1955, a provision was added to seek the opinion of the states affected in the process of state formation.

Under this, two arrangements were made-

- Legislation related to the formation, name or boundary change of a state cannot be introduced in the Parliament without the recommendation of the President;
- The President will send such legislations to the Prime Ministers of the affected states and give them a fixed time to give their opinion on them.
- The 18th Constitutional Amendment took place in 1966 when Haryana state and Chandigarh union territory were to be created by dividing Punjab.



- Two clarifications were added to Article 3 through this amendment.
- The essence of these clarifications is that the Parliament can also create Union Territories under its power to form states, but if a matter of change in the boundaries of any union territory arises, then the President will not be compelled to send that law to any institution of the union territory to be affected.
- It is clear from the provisions of Article 3 that the power of the Indian Parliament is much greater than that of the states because the very existence of the states is dependent on the will of the Parliament.
- The special thing is that the Parliament does not even need a special majority to change the boundaries of the states or to change their names; it can do so with a simple majority.

14. Consider the following statements:

1. Parliament can expand and reduce the jurisdiction of Supreme Court.
2. The officers and servants of the Supreme Court and High Court are appointed by respective Chief Justice.

Which of the following statements are correct?

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

14. Answer: (b)

- Parliament of India is not authorized to curtail the jurisdiction of the Supreme Court. The Constitution guarantees the Supreme Court various types of jurisdiction, and no Act of Parliament can limit the court's inherent jurisdiction. However, Parliament can extend the Supreme Court's jurisdiction and powers.
- Chief Justice of India and respective Chief Justice of High Courts can appoint officers and servants of the Supreme Court and High Court respectively and may also direct other judges or officers to make appointments.
- The Chief Justice or other authorized judges or officers also prescribe the conditions of service for these officers and servants. These rules must include approval from the President for salaries, allowances, leave, and pensions.

15. "The Directive Principles of State Policy have educational importance for the State authorities." This statement was made by whom?

- (a) Dr. Ambedkar
- (b) Grenville Austin
- (c) B.N. Rao
- (d) K.T. Shah

15. Answer: (c)

Opinions of different thinkers regarding the Directive Principles of State Policy:-

- **Dr. Ambedkar** - "Directive Principles have great value. They determine the goal of Indian polity, 'economic democracy' as manifested in 'political democracy'."
- **Grenville Austin** - "Directive Principles are the means of achieving the objectives of social revolution."
- **B.N. Rao** - "Directive Principles have educational importance for the state authorities."

Criticism of Directive Principles

- In the words of K.T. Shah, "The Directive Principles of State Policy are a cheque which is paid as per the convenience of the bank."
- Directive Principles are not enforceable by the court.
- The Indian Constitution has declared the Directive Principles as fundamental but does not specify the means of implementing them.



- Directive Principles often become the cause of dispute/conflict between the Legislature and Judiciary.
- Many provisions included in the Directive Principles have not been implemented even today, such as Civil Code.
- The importance of Directive Principles is like moral education for the state, which guides it but does not constrain it.

16. Consider the following statements regarding the NITI Aayog:

1. It is a non-statutory body.
2. It is the Government's policy-making think tank.
3. Financial Intelligence Unit is an attached organisation under it.

Which of the statements is/are correct?

- (a) Only 1 and 2
- (b) Only 2 and 3
- (c) Only 1 and 3
- (d) 1, 2, and 3

16. Answer: (a)

About NITI Aayog:

- The National Institution for Transforming India (NITI Aayog) came into existence on January 1, 2015.
- It replaced the Planning Commission.
- It serves as the government's policy-making think tank.
- Its purpose is to involve all states and union territories in the formulation of economic policies.
- It provides strategic and technical advice to the central and state governments.
- It is neither a constitutional body nor a statutory body rather it is an executive body.
- Financial Intelligence Unit is independent body under Economic Intelligence Council headed by Finance Minister.

National Institution for Transforming India (NITI Aayog) is made up of several groups of people, including:

- **Chairperson:** The Prime Minister of India
- **Vice Chairperson:** Suman Bery
- **Ex-officio Members:** Four members from the Union Council of Ministers, such as the Minister of Defence, Minister of Home Affairs, and Minister of Agriculture and Farmers Welfare
- **Special Invitees:** Ministers from other departments, such as the Minister of Road Transport and Highways and the Minister of Health and Family
- **Full-time Members:** Experts in various fields, such as agriculture, public health, and economics
- **Governing Council:** Chief Ministers of all states and union territories with legislatures, and Lieutenant Governors of other union territories

17. Consider the following statements regarding Public Accounts Committee:

1. It is constituted annually under the Rules of Procedure and Conduct of Business of Lok Sabha.
2. Chairperson of the committee is appointed by Finance Minister.
3. It includes 15 members from the Lok Sabha and 7 members from Rajya Sabha.

Which of the statements is/are correct?

- (a) Only 1 and 2
- (b) Only 2 and 3
- (c) Only 1 and 3
- (d) 1, 2, and 3



17. Answer: (c)

Public Accounts Committee

- The Public Accounts Committee was established in 1921 through the Government of India Act, 1919, also known as the ‘Montagu-Chelmsford Reforms’.
- It is constituted annually under Rule 308 of the ‘Rules of Procedure and Conduct of Business of Lok Sabha’.
- The chairperson of the committee is appointed by the Speaker of Lok Sabha.
- Currently, it comprises 22 members (15 members chosen by the Speaker of the Lok Sabha and 7 members chosen by the Chairman of the Rajya Sabha), with a tenure of one year.
- The committee is responsible for examining the annual financial statements and the appropriation of funds granted by the house to meet the government’s expenditure.

18. Which part of the Indian Constitution deals with the Union Territories?

- (a) Part VI
- (b) Part VII
- (c) Part VIII
- (d) Part IX

18. Answer: (c)

The Constitution of India contains 395 articles in 22 parts. Additional **articles and parts** are inserted later through various amendments. There are also **12 schedules in the Indian Constitution.**

| Parts of the Indian Constitution | Subject Mentioned in the Part |
|---|---|
| Part I | Union & Its Territory |
| Part II | Citizenship |
| Part III | Fundamental Rights |
| Part IV | Directive Principles |
| Part IV A | Fundamental Duties |
| Part V | The Union |
| Part VI | The States |
| Part VII | The States in Part B of First Schedule Note: 7th Amendment Act, 1956 repealed Part 7 |
| Part VIII | The Union Territories |
| Part IX | The Panchayats |
| Part IX A | The Municipalities |
| Part IX B | Co-operative Societies |
| Part X | Scheduled and Tribal Areas |
| Part XI | Relation between Union & States |
| Part XII | Finance, Property, Contracts and Suits |
| Part XIII | Trade, Commerce and Intercourse within the territory of India |
| Part XIV | Services under the Union and States |
| Part XIV A | Tribunals |
| Part XV | Elections |



| | |
|------------|--|
| Part XVI | Special Provisions relating to certain classes |
| Part XVII | Official Languages |
| Part XVIII | Emergency Provisions |
| Part XIX | Miscellaneous |
| Part XX | Amendment of the Constitution |
| Part XXI | Temporary, Transitional and Special Provisions |
| Part XXII | Short title, Commencement, Authoritative Text in Hindi and Repeals |

19. Which of the following is not a federal feature of the Indian Constitution?

- (a) A written constitution
- (b) Rigidity of Constitution
- (c) Integration of Judiciary
- (d) A bicameral legislature

19. **Answer: (c)**

The federal features of the Constitution of India are given below:

- **Written Constitution:** Features of the Indian Constitution is not only a written document but also the longest Constitution in the world. It specifies the structure, organisation, powers and functions of both the central and state governments and prescribes the limits within which they must operate. Thus, it avoids misunderstandings and disagreements between the two.
- **Dual Polity:** The Constitution establishes a dual polity that includes the union at the centre and states at the periphery. Each is endowed with sovereign powers to be exercised in the field assigned to them respectively by the Constitution.
- **Bicameralism:** The Constitution provides for a bicameral legislature in which an upper house (Rajya Sabha) and a lower house (Lok Sabha). Rajya Sabha represents the states of the Indian Union, whereas The Lok Sabha represents the people of India as a whole.
- **Division of Powers:** The Constitution divided the powers between the Center and the states in terms of the Union List, State List, and Concurrent List in the Seventh Schedule.
- **Supremacy of the Constitution:** The Constitution is the supreme law of the country. The laws made by the Center and the states should be in conformity with Provision. Otherwise, they may be declared invalid by the Supreme or High Court through its power of judicial review.
- **Rigid Constitution:** The division of powers established by the Constitution as well as supremacy of the Constitution can be maintained only if the method of its amendment is rigid. It is necessary for both houses to agree to amend the Constitution. Federal provisions can be amended only by special majority of the parliament along with the approval of half of the state legislatures.
- **Independent judiciary:** The Constitution establishes an independent judiciary headed by the Supreme Court for two purposes: one, to protect the supremacy of the Constitution, and two, to settle the disputes between the Centre and states or between the states.

Besides the above federal features, the Indian Constitution also possesses the following unitary features:

- **Strong Centre:** The division of powers is in favor of the center and unequal from a federal point of view. Firstly, the Union list contains more subjects than the state list, secondly, the more important subjects have been included in the union list and the Centre has overriding authority over the concurrent list.
- **Single Constitution:** The Constitution of India embodies not only the constitution of the Centre but also those of the states. Both the Centre and the States must operate within this single frame.



- **States not indestructible:** Unlike in other federations, the states in India have no right to territorial integrity. The parliament can change the area, boundaries, or name of any state.
 - **Emergency provisions:** The emergency provisions are contained in Part XVIII of the Constitution of India, from Articles 352 to 360. In the emergency provisions, the central government becomes all-powerful and the states go into total control of the Centre.
 - **Single citizenship:** Single citizenship means one person is a citizen of the whole country. The constitution deals with citizenship from Articles 5 and 11 in Part 2.
 - **All India services:** In India, there are all India services [IAS, IPS and IFS] which are common to both the Centre and the states. These services violate the principle of federalism under the Constitution. The members of these services are recruited and trained by the Centre which also possess ultimate control over them.
 - **Appointment of governor:** The governor is appointed by the president. He also acts as an agent of the Centre. Through him, the Centre exercises control over the states.
 - **Integrated election machinery:** The election commission conducts elections for central and state legislatures. But the Election Commission is constituted by the president and the states have no say in this matter.
 - **No equality of state representation:** The states are given representation in the upper house on the basis of population. Hence, the membership varies from 1 to 31.
 - **Integrated Judiciary:** The term Integrated Judiciary refers to the fact that rulings made by higher courts bind lower courts. The Supreme Court of India incorporates all lower courts, from the Gram Nyayalayas to the High Courts. The Supreme Court is at the very top.
 - **Integrated Audit Machinery:** The Comptroller and Auditor-General of India has an organization that is run by officials from the Indian Audit and Account Services, a central service that is responsible for not just the Union Government's accounts and auditing, but also the accounts and auditing of the States. CAG's appointment and removal is done by President without consulting the states.
20. Which committee was formed to review the working of Constitution of India?
- (a) Sarkaria Commission
 - (b) Kargil Review Committee
 - (c) Rajmannar Commission
 - (d) Venkatachaliah Commission

20. **Answer: (d)**

NDA Government of India, headed by Atal Bihari Vajpayee, established the National Commission to Review the Working of the Constitution (NCRWC), also known as the Justice Manepalli Narayana Rao Venkatachaliah Commission, on February 22, 2000, to propose potential constitutional amendments.

The following are a few of the novel NCRWC recommendations:

- According to Article 307, a statutory organization known as the Inter-State Trade and Commerce Commission should be created.
- A committee made up of the Prime Minister, the Home Minister, the Speaker of the Lok Sabha, and the Chief Minister of the relevant state should nominate the Governor.
- The issues to be covered during the meetings should be specifically stated in the 1990 Inter-State Council guideline.
- The Concurrent List of the Seventh Schedule should cover the management of crises and disasters.

Sarkaria Commission set up in 1983 was charged with examining the dynamic and distribution of power between the nation's central and state administrations and making reforms within the restrictions of the Indian Constitution.



Rajmanner Committee was set up by the then DMK Government of Tamil Nadu in 1969 under the Chairmanship of Dr. P.V. Rajamanar. It was appointed to examine all aspects of Centre-State relations and to investigate and identify the causes of unitary tendencies in Central-State relations.

Kargil Review Committee (KRC) was set up by the Government of India on 29 July 1999, three days after the end of the Kargil War. The committee was set up “to examine the sequence of events and make recommendations for the future”.

21. The advisory jurisdiction of the Supreme Court of India pertains to:
- Matters related to inter-state disputes
 - Matters related to disputes between the Centre and states
 - Matters in which the President of India seeks the opinion of Supreme Court
 - Matters involving constitutional amendments

21. Answer (c)

The original jurisdiction of the Supreme Court refers to cases that can originate directly in the Supreme Court, without first being heard by any lower court. These include:

- Disputes between the Government of India and one or more states: The Supreme Court is the first and final court to hear disputes between the central government and one or several states, or between two or more states.
- Disputes involving any question of law or fact on which the existence or extent of a legal right depends: This pertains to questions of constitutional law or significant legal interpretations that have wide implications.
- Cases involving the enforcement of fundamental rights: The Supreme Court directly handles cases involving the violation or interpretation of fundamental rights listed in Part III of the Constitution.
- Other matters referred to it by the Constitution: This can include cases the Constitution expressly vests in the jurisdiction of the Supreme Court.

Advisory Jurisdiction of the Supreme Court:

Under Article 143 of the Indian Constitution, the President of India has the power to seek advice from the Supreme Court on two types of questions:

- On any question of law or fact of public importance which has arisen or which is likely to arise: The President can refer questions that he or she believes to be of significant public importance for the opinion of the Supreme Court. This often involves substantial legal questions or interpretation of the Constitution.
- On any dispute arising out of any pre-constitutional treaty, agreement, covenant, engagement, sanad, or other similar instruments: This refers to disputes related to historical agreements or legal documents that were created before the adoption of the Constitution of India. These disputes typically relate to agreements made during the British colonial period.

The advisory opinions given by the Supreme Court under its advisory jurisdiction are not binding on the government, unlike its rulings in cases that fall under its original and appellate jurisdictions. This advisory role allows the government to obtain authoritative legal opinions on complex issues without engaging in contentious litigation.

22. Which combination does not correctly identifies special provisions and the regions they are associated with?
- Article 371 - Special provisions for Maharashtra and Gujarat
 - Article 371A - Nagaland
 - Article 371F – Sikkim
 - Article 371D - Assam



22. Answer: (d)

- **Article 370:** Granted special autonomy to Jammu and Kashmir (now abrogated).
- **Article 371:** Provides special provisions to various states including Maharashtra and Gujarat for establishing separate development boards.
- **371A:** Special provision with respect to the state of Nagaland
- **371B:** Special provision with respect to the state of Assam
- **371C:** Special provision with respect to the state of Manipur
- **371D:** Special provisions with respect to the state of Andhra Pradesh or the state of Telangana
- **371E:** Establishment of Central University in Andhra Pradesh
- **371F:** Special provisions with respect to the state of Sikkim
- **371G:** Special provision with respect to the state of Mizoram
- **371H:** Special provision with respect to the state of Arunachal Pradesh
- **371-I:** Special provision with respect to the state of Goa
- **371J:** Special provisions with respect to the state of Karnataka

23. Doctrine of 'Pith and Substance' relates to:

- (a) Fundamental Rights
- (b) Distribution of powers between Centre and States
- (c) Preamble
- (d) Directive Principles

23. Answer: (b)

the doctrine of pith and substance is a legal principle used in constitutional law to determine the true nature and purpose of a law when its validity is challenged. This doctrine is particularly relevant in federal systems where there is a division of powers between different levels of government.

24. Who was the first woman to become a Chief Election Commissioner of India?

- (a) V. S. Ramadevi
- (b) G. D. Das
- (c) S.K. Bedi
- (d) R.M. Nikam

24. Answer: (a)

V.S. Ramadevi was the first woman to become a Chief Election Commissioner, and she occupied the office from 26 November 1990 to 11 December 1990.

25. Match List-I with List-II :

| List-I (Major Committee) | List-II (Related) |
|--------------------------|-----------------------------|
| A. Swaminathan Committee | 1. Centre-State Relations |
| B. Janakiraman Committee | 2. Population policy |
| C. Dantewala Committee | 3. Securities scam |
| D. Sarkaria Committee | 4. Unemployment projections |

Select the correct answer from the code given below:

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 2 | 1 | 4 | 3 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 4 | 3 | 2 | 1 |



25. Answer: (c)

Major Committee - Related to which area

- **Swaminathan Committee** - Population Policy
- **Janakiraman Committee** - Securities Scam
- **Dantewala Committee** - Unemployment Estimates
- **Rekhi Committee** - Indirect Tax
- **Sarkaria Committee** - Centre-State Relations
- **Goswami Committee** - Industrial Sickness Mahalanobis Committee - National Income
- **Rangarajan Committee** - Balance of Payments
- **Raja Chelliah Committee** - Tax Reforms
- **Malhotra Committee** - Insurance Sector Reforms

26. Who among the following was a pioneer of Bhakti movement in Maharashtra?

- (a) Kabir
- (b) Ramanuja
- (c) Tulsidas
- (d) Sant Gyaneshwar

26. Answer: (d)

Sant Gyaneshwar

- Sant Gyaneshwar, also known as Gyandev or Mauli, was a 13th-century Marathi saint, poet, philosopher, and yogi of the Nath tradition whose writings Gyaneshwari and Amrutanubhav are considered seminal texts in the Marathi Bhakti movement.
 - Tulsidas primarily preached in the northern parts of India, especially in the cities of Varanasi and Ayodhya. He lived and preached during the late 15th century to early 16th century, specifically around 1532 to 1623 AD.
 - Ramanuja's teachings were predominantly spread in South India, particularly in the Tamil Nadu region.
 - Kabir was active in North India, especially around the region of Varanasi. He lived during the late 15th century, approximately between 1440 and 1518 AD. He is celebrated for his dohas (couplets) that focus on realizing God through the self. He preached during the early 12th century, around 1017 to 1137 AD.
27. What architectural innovation is credited to Kakatiya dynasty which significantly influenced the later South Indian temple architecture?
- (a) Introduction of monolithic Kalyana Mandapa
 - (b) Development of circular Vimana
 - (c) Creation of thousand-pillared hall
 - (d) Use of soapstone as a primary building material

27. Answer: (c)

Creation of the thousand-pillared hall

- Kakatiya dynasty was a South Indian dynasty that ruled most of eastern Deccan region comprising present day Telangana and Andhra Pradesh, and parts of eastern Karnataka and southern Odisha between 12th and 14th centuries.
- Their capital was Orugallu, now known as Warangal.
- Early Kakatiya rulers served as feudatories to Rashtrakutas and Western Chalukyas for more than two centuries. They assumed sovereignty under Prataparudra I in 1163 CE.
- Kakatiya dynasty, ruling from Warangal, is credited with the architectural innovation of creating a thousand-pillared hall, a feature that became prominent in later South Indian temple architecture. This



style was used in their capital for temples like the Ramappa Temple, showcasing intricate carvings and detailed craftsmanship.

28. When did Aurangzeb annexed Golconda ?

- (a) 1687
- (b) 1688
- (c) 1689
- (d) 1690

28. Answer: (a)

In 1687 AD, the Mughal emperor Aurangzeb annexed Golconda and Bijapur in 1686 AD. Though, the annexations of Bijapur and Golconda did not benefit the Mughal empire because it was difficult to administer them as they were too far away from Delhi (capital of Mughal empire).

29. Which of the following tax was called 'Rajju' in Gupta period?

- (a) Tax on irrigation
- (b) Toll tax
- (c) Tax on measurement of land
- (d) Tax on navigation

29. Answer: (c)

Some taxes levied during gupta period are:

| | |
|--------------------|--------------------------------------|
| Chat | Security Tax |
| Charasana | Grazing Tax |
| Hiranya | Tax on special produce taken in cash |
| Udakabhag | Water Tax |
| Uparikar | Tax collected from all subjects |
| Taradaya | Tax on navigation |
| Rajju | Tax for measurement of land |
| Sarvarishti | Forced Tax |
| Bedakbhog | Irrigation Tax |
| Uparnik | Tax taken from border area |

30. Which enzyme is responsible for unzipping the DNA double helix during DNA replication?

- (a) DNA polymerase
- (b) Helicase
- (c) Ligase
- (d) Topoisomerase

30. Answer: (b)

- **DNA Polymerase** is a crucial enzyme in DNA replication, responsible for catalyzing the addition of nucleotide substrates to a DNA strand. It reads the existing DNA strand as a template and adds new complementary nucleotides to form a new strand, thus ensuring the genetic information is accurately copied.
- **Helicase** is the enzyme responsible for unzipping the DNA double helix during DNA replication. It breaks the hydrogen bonds between the nucleotide base pairs, allowing the two strands of the DNA molecule to separate and serve as templates for the synthesis of new DNA strands.
- **Ligase** is an enzyme that plays a critical role in DNA replication and repair. It acts like a biological glue, facilitating the joining of DNA strands together by catalyzing the formation of a phosphodiester bond between contiguous nucleotides.



- **Topoisomerase** is an enzyme that helps in managing DNA supercoiling and untangling that occur during DNA replication and transcription. It cuts the phosphate backbone of the DNA strands to allow the DNA helix to be untwisted and relieved of built-up tension caused by unwinding.

31. Which of the following organic compounds is used as a cleaning agent in ‘dry cleaning’?
- Gelatin
 - Copper sulphate
 - Perchloroethylene
 - Ammonium nitrate

31. Answer: (c)

- **Ammonium nitrate** is Chemicals commonly used in explosive devices as well as fertilizers
- **Gelatin** is a substance used in the pharmaceutical industry to make capsule shells.
- This substance is also used in cooking as a gelling agent.
- **Copper sulphate** is used as Fungicide and Herbicide in both agricultural and non-agricultural settings.
- **Tetrachloroethylene (Perchloroethylene)** is an organic compound widely used as a cleaning agent in dry cleaning.

32. Which of the following vitamins is not fat soluble?
- Vitamin E
 - Vitamin B
 - Vitamin D
 - Vitamin A

32. Answer: (b)

About fat soluble vitamins:

- These are those vitamins that are soluble in **fats and oils**
- **Example - Vitamin A, Vitamin D, Vitamin E and Vitamin K**

About Water soluble vitamins:

- These are those vitamins which are soluble in water and the vitamins of this class are insoluble in fat and oil.
- **Example – Vitamin B complex and Vitamin C** are vitamins of this class.

33. Match List-I with List-II:

| List-I (Names of Crops) | List-II(Occurring Diseases) |
|-------------------------|-----------------------------|
| A. Cereal crop | 1. Rolly disease |
| B. Oilseed crop | 2. Tikka disease |
| C. Legume crop | 3. Kandwa disease |
| D. Plantation crop | 4. Yellow mosaic disease |

Select the correct answer from the code given below:

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 4 | 3 | 2 | 1 |

33. Answer: (b)

About diseases occurring in crops: -

- **Diseases of cereals: Like – Roli disease of wheat, Kandwa disease of barley etc.**



- **Diseases of oilseed crops:** Like - white rot disease of mustard, tikka disease of peanut etc.
- **Diseases of pulses:** like - wilt disease of gram, yellow mosaic disease of green gram etc.
- **Diseases of vegetables:** like - late blight disease of potato, leaf curl disease of tomato etc.
- **Diseases of fruit crops:** like - lemon canker disease, mango blight disease, etc.
- **Diseases of plantation crops:** e.g. red roly disease of tea (by algae), roly disease of coffee etc.
- **Diseases of medicinal crops:** like stem rot disease of aloe vera, wilt disease of basil, etc.

34. Match List-I with List-II :

| List-I (Physical Quantity) | List-II (Unit of Measurement) |
|------------------------------|-------------------------------|
| A. Length | 1. Kelvin |
| B. Mass | 2. Kilogram |
| C. Electric current | 3. Meter |
| D. Thermodynamic temperature | 4. Ampere |

Select the correct answer from the code given below:

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 4 | 3 | 2 | 1 |

34. Answer: (b)

Physical quantities - units of measurement

- Length - Meters
- Mass - kilograms
- Electric Current - Ampere
- Thermodynamic Temperature – Kelvin

Some other important units are

- Charge – Coulomb
- Temperature - Kelvin, Celsius
- Amount of substance – Mole
- Luminous intensity – Candela

35. Which of the following metals is most malleable and ductile?

- (a) Manganese
- (b) Platinum
- (c) Gold
- (d) Lithium

35. Answer: (c)

Malleability: The property by virtue of which metals can be beaten into thin sheets is called malleability. For example- Gold

Ductility: The property by virtue of which metals can be drawn into thin wires. For example- Copper wire

Out of the four options Gold is most malleable and ductile.

Some other imp facts

- The metal with the lowest electrical conductivity is manganese.
- The metal with the highest density is Osmium.



- The metal with the lowest density is Lithium.
- The most malleable and ductile metal is gold.
- The least reactive metal is platinum.

36. “Syzygium aromaticum” is the scientific name for which of the following spices?
- (a) Ginger
 - (b) Garlic
 - (c) Clove
 - (d) Black pepper

36. Answer: (c)

Scientific name - Common name

- Zingiber officinale - ginger
- Allium sativum - Garlic
- Piper nigrum - black pepper
- Syzygium aromaticum – clove
- Curcuma longa - turmeric

37. Match List-I with List-II :

| List-I(Characteristics/Qualities) | List-II(Cause) |
|-----------------------------------|---------------------------------------|
| A. Astringency in Amla | 1. Carica Xanthin Pigment |
| B. Bitterness in vines | 2. Marmelotsin |
| C. Bitterness in almonds | 3. Tannins/ellagic/gallic/polyphenols |
| D. Yellow colour in papaya | 4. Amyladin |

Select the correct answer from the code given below:

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 4 | 3 | 2 | 1 |

37. Answer: (b)

Symptoms/Qualities - Causes (Presence)

- Astringency in Amla – Tannin/ Ellogic/ Gallic/ Polyphenol
- Bitterness in the vine - Marmelotsin
- Bitterness in almonds - amyadin
- Bitterness in Pepper - Oleomersin
- Yellow colour in Papaya - Carica xanthin pigment

38. Consider the following statements with reference to Vitamin B12:

1. It is a water soluble vitamin.
2. It synthesizes proteins necessary for the maturation of red blood cells (RBC).
3. Its deficiency in the human body causes anaemia.

Which of the statements given above is/are correct?

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



38. Answer: (d)

- Vitamins are organic compounds that are required in small amounts in our diet but their deficiency causes specific diseases.
- Most of the vitamins cannot be synthesized in our body but plants can synthesize almost all of them, so they are considered as essential food factors.
- However, the bacteria of the gut can produce some of the vitamins required by us.
- All the vitamins are generally available in our diet. Different vitamins belong to various chemical classes and it is difficult to define them on the basis of structure.
- They are generally regarded as organic compounds required in the diet in small amounts to perform specific biological functions for normal maintenance of optimum growth and health of the organism.
- Vitamins are designated by alphabets A, B, C, D, etc. Some of them are further named as sub-groups e.g. B1, B2, B6, B12, etc.

Vitamin B12 (Cyanocobalamin):

- The chemical name of this vitamin is **cyanocobalamin** .
- It is a **water** soluble **vitamin**.
- **Cobalt metal** is present in this vitamin.
- This vitamin helps in the formation of blood.
- It synthesizes proteins necessary for the maturation of **red blood cells (RBC)**.
- **Its deficiency in the human body** causes anaemia.
- In case of its severe deficiency, neurological defects occur in the body.
- **Meat, liver, milk** etc. are the main sources of this vitamin.

39. Which of the following quantities are included in the category of ‘scalar quantities’?

1. Velocity
2. Distance
3. Force
4. Volume

Code:

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

39. Answer: (a)

Scalar Quantities

- Those physical quantities which require only magnitude to be expressed are called scalar quantities. These quantities do not have any direction. Scalar quantities can be added using the usual algebraic method.
- They do not follow the triangle rule of addition.
- Example: mass, distance, speed, volume, work, power etc.

Vector Quantities:

- Those physical quantities, which require magnitude as well as direction to be expressed, are called vector quantities.
- In mathematical operations, it is necessary to keep in mind both the magnitude and direction of vector quantities.



- Vector quantities follow the triangle rule of addition.
- Example: velocity, displacement, force, momentum etc.

40. Which of the following is/are examples of chemical change?

1. Rusting
2. Melting
3. Freezing

Code:

- (a) Only 1
- (b) 1 Only 3
- (c) Only 3
- (d) 1, 2 and 3

40. Answer: (a)

Chemical changes

- When a substance changes into a different substance, the chemical properties and chemical composition of the substance change.
- Examples of chemical changes are burning, ripening, rusting, and rotting.

Physical changes

- These usually refer to changes in the physical state of an object. Chemical changes occur at the molecular level when two or more molecules interact.

Examples of physical changes are boiling, melting, freezing and breaking into pieces.

41. Match List-I with List-II :

| List-I(Acids) | List-II (Source) |
|----------------|---------------------|
| A. Acetic acid | 1. In sting of ants |
| B. Formic acid | 2. In citrus fruits |
| C. Citric acid | 3. In spinach |
| D. Oxalic acid | 4. In vinegar |

Which of the above is/are correctly matched?

- (a) A-3, B-1, C-2, D-4
- (b) A-3, B-2, C-1, D-4
- (c) A-4, B-1, C-2, D-3
- (d) A-4, B-2, C-1, D-3

41. Answer: (c)

About some natural acids and their sources:-

- Acetic acid - in vinegar
- Formic acid - in ant stings, hornet stings.
- Citric acid - In citrus fruits
- Lactic acid - in curd
- Oxalic acid - in spinach
- Ascorbic acid (vitamin C) - in amla, citrus fruits
- Tartaric acid - in tamarind, grapes, raw mangoes etc.

42. Consider the following statements with reference to 'fat':

1. The metabolism of fat per gram yields less energy than carbohydrates and proteins.
2. Fat accumulates under the skin and prevents the body heat from escaping.



Which of the above statements is/are correct?

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

42. Answer: (c)

About fats:-

- Fat is the main food substance that provides energy to the body.
- The metabolism of fat per gram gives more energy than carbohydrates and proteins.
- Fat gets deposited under the skin and prevents the body heat from escaping.
- It is obtained from animal sources such as milk, cheese, egg, fish and vegetable sources such as vegetable oil.
- The cells of the human body cannot synthesize essential fatty acids.

43. Consider the following statements:

1. The image formed in a plane mirror is virtual.
2. The image formed in a plane mirror is smaller than the size of the object.

Which of the statements given above is/are correct?

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

43. Answer: (a)

Characteristics of reflections made by plane mirror:-

- The reflection made in a plane mirror is virtual.
- It cannot be obtained on the screen.
- The reflection made in a plane mirror is straight.
- Like the object, its same side also remains upwards.
- The reflection in the plane mirror is of the shape of the object ie. it is same as size of object.
- The reflection made by a plane mirror is at the same distance behind the mirror as the object is in front of the mirror.
- The reflection made in plane mirrors is the lateral form copy (or refracted in the lateral manner).

44. Ethylene is used in which of the following?

- I. In making mustard gas
- II. In making rubber and polythene
- III. In ripening raw fruits
- IV. As an anesthetic.

Code:

- (a) Only I, III and IV
- (b) Only I and IV
- (c) Only II
- (d) All of the above

44. Answer: (d)

Ethylene is an important industrial organic chemical. It is produced by heating either natural gas, especially its ethane and propane components, or petroleum to 800–900 °C (1,470–1,650 °F), giving a mixture of gases from which the ethylene is separated



Ethylene uses -

- Mustard gas making
- In making rubber and polythene
- Cook raw fruits
- Used in other form like ethylene glycol as antifreezing agent
- In making plastic

45. Which of the following pairs is not correctly matched?

| | Discovery | - | Discoverer |
|-----|------------------|---|-------------------|
| (a) | Electron | - | Thomson |
| (b) | Neutron | - | James Chadwick |
| (c) | Proton | - | Goldstein |
| (d) | Positron | - | Carl Anderson |

45 Answer: (c)

| | Discovery | - | Discoverer |
|---|------------------|---|-------------------|
| • | Electron | - | Thomson |
| • | Neutron | - | James Chadwick |
| • | Positron | - | Carl Anderson |
| • | Atomic number | - | Moseley |
| • | Proton | - | Rutherford |
| • | Nucleus | - | Rutherford |
| • | Dimetry | - | Mandliff |

46. Which of the following instruments is used to measure the height of a flying object?

- (a) Accumulator
- (b) Aerometer
- (c) Altimeter
- (d) Anemometer

46. Answer: (c)

Names of scientific instruments - Uses

- **Altimeter:** It is used to measure the height of a flying object.
- **Accumulator:** This instrument stores electrical energy, this electric energy is used when required.
- **Aerometer:** This instrument is used to find the weight and density of air and gases.
- **Ammeter:** It is used to measure electric current.
- **Anemometer:** This instrument measures the strength and speed of the wind.
- **Audiometer:** This instrument measures the intensity of sound
- **Ballistic Galvanometer:** It is used to measure microamperes.
- **Audio phone:** People use it to put it in their ears to help them hear.

47. Which of the following statements correctly describes capillary action?

1. Oil rises up the wick of a lantern or lamp.
2. Water and necessary salts reach the branches, stems, and leaves of the plants.
3. Coffee powder dissolving very quickly in water.

How many of the above statements are correct?

- (a) Only one
- (b) Only two



- (c) All three
- (d) None

47. Answer: (c)

Capillarity:

- A capillary tube is a hollow tube with a very small and uniform radius. The phenomenon of a liquid rising or being pushed down in a capillary tube is called capillarity. The rise or fall of the liquid in the capillary tube is due to the surface tension of the liquid.
- How far a liquid rises or falls in a capillary tube depends on the radius of the tube. The narrower the tube, the higher the liquid rises; the wider the tube, the less the liquid rises.

Examples of Capillarity:

- Blotting paper quickly absorbs ink because the small pores in it act like capillary tubes.
- In a lantern or lamp, oil rises up the wick due to capillarity.
- In trees and plants, water and necessary salts reach the branches, stems, and leaves through capillarity.
- Inside an artificial satellite (in a state of weightlessness), if a capillary tube is placed in water, the water column climbing the tube will reach the other end of the tube regardless of the length of the tube due to the effective weight of the water column being zero.
- After rainfall, farmers plow their fields so that the capillaries in the soil break, preventing water from rising and keeping the soil moist.
- The nib of a pen is split in the middle, creating a tiny capillary that allows ink to rise to the tip of the nib.
- Coffee powder dissolves very quickly in water due to the action of capillarity.

48. What is the device called that converts mechanical energy into electrical energy?

- (a) Electric Cell
- (b) Electric Motor
- (c) Dynamo
- (d) Solar Cell

48. Answer: (c)

Law of Energy Conservation :

- Energy can neither be created nor destroyed.
- Energy can only be transformed from one form to another. Whenever energy in one form disappears, an equivalent amount of energy appears in other forms.
- Therefore, the total amount of energy in the universe remains constant. This is known as the law of energy conservation.

Some Devices that Transform Energy

Device - Energy Transformation

- **Dynamo** - Converts mechanical energy into electrical energy
- **Microphone** - Converts sound energy into electrical energy
- **Loudspeaker** - Converts electrical energy into sound energy
- **Solar Cell** - Converts solar energy into electrical energy
- **Tube Light** - Converts electrical energy into light energy
- **Electric Motor** - Converts electrical energy into mechanical energy
- **Electric Bulb** - Converts electrical energy into light and heat energy



- **Electric Cell** - Converts chemical energy into electrical energy
- **Sitar** - Converts mechanical energy into sound energy

49. What principle explains why a ship made of steel can float on water?
- (a) Archimedes' Principle
 - (b) Pascal's Law
 - (c) Newton's First Law of Motion
 - (d) Bernoulli's Principle

49. Answer: (a)

Archimedes' Principle

Archimedes' Principle states that an object submerged in a fluid experiences a buoyant force equal to the weight of the fluid it displaces. This principle applies to ships regardless of their material. A steel ship can float because it is shaped in such a way that it displaces a volume of water weighing more than the ship itself. The design of the ship involves creating a hull that encloses a volume of air (increasing overall volume without a significant increase in mass), which makes the average density of the ship less than that of water, allowing it to float.

50. What is the primary function of the enzyme amylase?
- (a) To break down proteins
 - (b) To break down fats
 - (c) To break down starches into sugars
 - (d) To synthesize DNA molecules



50. Answer: (c)

Amylase is an enzyme that helps digest carbohydrates by breaking down starches into simpler sugars such as maltose and glucose, thus facilitating their absorption by the body. It is primarily found in saliva and pancreatic fluid.

51. Consider the following statements about lenses and their optical properties:
1. A convex lens converges light and can produce a real image when the object is placed beyond the focal point.
 2. A concave lens always produces a virtual image because it diverges light rays.
 3. The focal length of a convex lens is positive, while it is negative for a concave lens.
 4. Chromatic aberration occurs when a lens fails to focus all colors of light to the same convergence point, typically because different wavelengths of light have different refractive indices.

Which combination of the statements is correct regarding typical behaviors and characteristics of lenses in optical systems?

- (a) 1, 2, and 3 only
- (b) 2, 3, and 4 only
- (c) 1, 3, and 4 only
- (d) All of the above

51. Answer: (d)

All of the above

- **Statement 1:** A convex lens, or converging lens, does indeed converge light. When an object is placed beyond the focal point of a convex lens, the lens can produce a real, inverted image. This is a fundamental principle used in cameras, eyeglasses, and other optical devices.



- **Statement 2:** A concave lens, or diverging lens, always diverges light rays that pass through it, which means it cannot produce a real image. The image formed by a concave lens is always virtual, upright, and reduced in size compared to the object. This property is utilized in devices like peepholes and some types of eyeglasses designed to correct for myopia (nearsightedness).
- **Statement 3:** The focal length of a lens is defined as positive if it is converging (convex lens) and negative if it is diverging (concave lens). This sign convention is essential for accurately describing and predicting the behavior of lens systems in optical equations and ray diagrams.
- **Statement 4:** Chromatic aberration is a common lens aberration that occurs because lenses have different refractive indices for different wavelengths of light. This causes light of different colors to be focused at slightly different distances from the lens, leading to an image with colored fringes or a blurred appearance. This effect is particularly noticeable in simple lenses and is often corrected in high-quality optical systems by using compound lenses or special types of glass that minimize the dispersion of different wavelengths.

52. What is the primary function of a buffer solution?
- (a) To maintain a constant temperature in chemical reactions
 - (b) To speed up chemical reactions
 - (c) To maintain a stable pH
 - (d) To increase the solubility of solutes

52. Answer: (c)

- A buffer solution is a water-based solution consisting of a mixture of a weak acid and its conjugate base, or a weak base and its conjugate acid. Its primary function is to maintain a stable pH when small amounts of acids or bases are added. This is crucial in many biological and chemical processes where a stable pH is necessary to ensure the proper functioning of enzymes and other biochemical substances.

53. Which process describes the spontaneous emission of particles or radiation from an unstable nucleus?
- (a) Fusion
 - (b) Fission
 - (c) Radioactivity
 - (d) Ionization

53. Answer: (c)

- **Radioactivity** is the process by which unstable atomic nuclei lose energy by emitting radiation or particles spontaneously. This includes the emission of alpha particles, beta particles, and gamma rays, fundamental to understanding nuclear chemistry and its applications.
- **Fusion** is a nuclear reaction in which two or more atomic nuclei come close enough to form one or more different atomic nuclei and subatomic particles (neutrons or protons). The mass of the new nucleus is slightly less than the sum of its components, with the missing mass being released as energy. This process powers the energy produced by the sun and other stars.
- **Fission** is a nuclear reaction in which the nucleus of an atom splits into two or more smaller nuclei, along with a few neutrons and a large amount of energy. Fission can occur spontaneously, but it is more often induced by the absorption of a neutron by an atomic nucleus. It is the principle behind nuclear reactors and atomic bombs, where heavy isotopes like uranium-235 or plutonium-239 split to release energy.
- **Ionization** refers to the process by which an atom or a molecule acquires a negative or positive charge by gaining or losing electrons, typically in response to the input of energy such as heat, light, or



electrical energy. This process creates ions, which are atoms or molecules that have a net electric charge. Ionization is crucial in various fields, including chemistry, physics, and astronomy, for processes like forming plasma, conducting electricity, and spectroscopic analysis.

54. Consider the following statements with reference to ‘Samkhya Philosophy’:
1. The founder of this philosophy is Kapil and it believes in non-dualism.
 2. It is considered to be the oldest philosophy of India.

Which of the statements given above is/are correct?

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

54. Answer: (b)

Samkhya Philosophy:

- This philosophy was propagated by **Kapil Muni** and is considered to be **the oldest philosophy of India**. It adhere to dualism which holds that the soul and matter are two different beings.
- His composition includes - **Tattva Samas**.
- In this, along with **Satkaryavad, Evolution and Materialism, number based spirituality and scientificity** are famous ideologies.

Yoga Philosophy:

- The **originator of this school of thought is Patanjali** who composed the book named ‘**Yoga Sutra** ‘.
- **Control of the sense organs and organs of action** is the foundation of the path of Yoga.
- The importance of this philosophy of India is such that in the present times, **21st June** has been declared as International Yoga Day by the UNO.

55. Match List-I with List-II :

| List-I (Buddhist Council) | List-II(Presided by) |
|----------------------------|----------------------|
| A. First Buddhist Council | 1. Vasumitra |
| B. Second Buddhist Council | 2. Mahakassap |
| C. Third Buddhist Council | 3. Sabakami |
| D. Fourth Buddhist Council | 4. Moggaliputtatissa |

Select the correct answer from the code given below:

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 4 | 3 | 2 | 1 |

55. Answer: (c)

First Buddhist Council:

- **Location** - Rajgir (Saptaparni Caves)
- **Time**- 483 BC
- **President** - Mahakassap
- **Reign** - Ajatashatru (Haryanka dynasty)
- **Purpose** - Buddha’s teachings were compiled in two pitakas, Vinaya Pitaka and Sutta Pitaka.



Second Buddhist Council:

- **Location** - Vaishali
- **Time**- 383 BC
- **Chairman** – Sabakami (Sarvakamani)
- **Reign** - Kalashoka (Shishunaga dynasty)
- **Objective** - To resolve the differences regarding discipline, Buddhism was divided into two parts - Sthavira and Mahasanghika.

Third Buddhist Council:

- **Location** - Pataliputra
- **Time**- 251 BC
- **President** - Moggaliputtatissa
- **Reign** - Ashoka (Mauryan Dynasty)
- **Objective** - Attempt was made to provide stability to Buddhism by propounding strict rules against Sangha differences. The religious texts were edited in final form and the third Pitaka Abhidhammapitaka was added.

Fourth Buddhist Council:

- **Location** - Kundalvan of Kashmir
- **Time** - around first century AD
- **President** - Vasumitra and Ashwaghosh Vice President
- **Reign** - Kanishka Kushan Dynasty
- **Objective**- Division of Buddhism into two sects, Hinayana and Mahayana.

56. Arrange the following kings of ‘Sangam Dynasty’ in chronological order of their rule:

1. Bukka I
2. Devaraya II
3. Virupaksha I
4. Mallikarjuna

Code:

- (a) 1, 2, 3, 4
- (b) 1, 3, 2, 4
- (d) 2, 3, 1, 4
- (d) 2, 1, 3, 4

56. Answer: (b)

Sangama Dynasty:

- **‘Harihara’ and ‘Bukka’ of the Vijayanagara Empire founded the Sangama Dynasty (1336-1485 AD) in the name of their father “Sangam”.**

The names of the kings who ruled in this dynasty and their reign period are as follows-

- Harihar I - (1336 - 1356 A.D.)
- Bukka I - (1356 - 1377 A.D.)
- Harihar II - (1377 -1404 A.D.)
- Virupaksha I - (1404 A.D.)
- Bukka II - (1404 - 1406 A.D.)
- Devaraya I - (1406 - 1410 AD)
- Vijayaray - (1410 -1419 A.D.)



- Devaraya II - (1419 - 1444 A.D.)
- Mallikarjuna - (1447 - 1465 A.D.)
- Virupaksha II - (1465 - 1485 A.D.)

57. During civil disobedience movement at which places did people show their protest by breaking the salt law?

1. Maharashtra
2. Karnataka
3. Assam
4. Central India

Choose the correct answer from the code given below:

- (a) Only 1 and 2
- (b) Only 2, 3 and 4
- (c) Only 2 and 3
- (d) All of the above

57. Answer (d)

- Gandhi took the decision to start the movement. On **12 March 1930** Gandhi started the Historic **Salt March** from his Sabarmati Ashram to Dandi beach accompanied by his 78 selected followers.
- There Gandhi and his followers broke the law by manufacturing salt from the sea. The Programme of the movement was as follows:
 - Salt law should be violated everywhere.
 - Students should leave colleges and government servants should resign from service.
 - Foreign clothes should be burnt.
 - No taxes should be paid to the government.
 - Women should stage a Dharna at liquor shops, etc.
- Thus, the historic march, marking the launch of the Civil Disobedience Movement, began on March 12, and Gandhi broke the salt law by picking up a lump of salt at Dandi on April 6

Response at Different Places:

- **Tamil Nadu**
 - In April 1930, C. Rajagopalachari organised a march from Thiruchirapalli to Vedaranniyam on the Tanjore (or Thanjavur) coast to break the salt law.
 - The event was followed by widespread picketing of foreign cloth shops and anti-liquor campaign
- **Malabar:**
 - Kelappan, a Nair Congress leader famed for the Vaikom Satyagraha, organised salt marches
- **Andhra Region**
 - District salt marches were organised in east and west Godavari, Krishna and Guntur. A number of sibirams (military style camps) were set up to serve as the headquarters of the Salt Satyagraha.
- **Peshawar**
 - Here, **Khan Abdul Gaffar Khan's** educational and social reform work among the Pathans had politicised them. Gaffar Khan, also called Badshah Khan and Frontier Gandhi, had started the first Pushto political monthly **Pukhtoon** and had organised a volunteer brigade '**Khudai Khidmatgars**', popularly known as the 'Red-Shirts', who were pledged to the freedom struggle and non-violence
- **Dharasana**
 - On May 21, 1930, Sarojini Naidu, Imam Sahib and Manilal (Gandhi's son) took up the unfinished task of leading a raid on the Dharasana Salt Works.
 - The unarmed and peaceful crowd was met with a brutal lathicharge



- **United Provinces**
 - A no-revenue campaign was organised; a call was given to zamindars to refuse to pay revenue to the government. Under a no-rent campaign, a call was given to tenants against zamindars
- Other places include **Maharashtra, Karnataka Central India and Gola Ghat in Assam.**

58. Which of the following is mentioned in the Jain literature 'Bhagwati Sutra'?
- (a) Mention of the events of the reign of Chandragupta Maurya
 - (b) Mention of the rules of conduct and legal prohibitions of Jain monks.
 - (c) Mention of the teachings of Mahavira
 - (d) Mention of Mahavira's life and the 16 Mahajanapadas

58. **Answer: (d)**

Jain Literature:

- **Early Jain literature** Written in **Ardha-Magadhi language.**
- They were generally found in **Prakrit and Sanskrit languages.**
- **'Bhagwati Sutra'** - mentions Mahavira's life and 16 Mahajanapadas
- **'Nyayadhammakahasutta'** - a collection of Mahavira's teachings
- **'Uvasagadasaon'** - in Huna ruler Toraman
- **'Bhadrabahucharita'** - Related to the events of the reign of Chandragupta Maurya.

Later, Jains **also wrote literature in Shauraseni, Sanskrit and Kannada languages.**

59. Where was the word 'gotra' used for the first time?
- (a) Rigveda
 - (b) Atharvaveda
 - (c) Yajurveda
 - (d) Samaveda

59. **Answer: (a)**

- In Rigveda, the word gotra, which denotes family, is rarely used.
- The word gotra means- children born with the son's son.
- The concept of gotra first came in the Uttarvedic period.
- It is based on some original person which used to be Rishis in vedic time.

Basically, seven gotras are considered, they are Kashyap, Vashishtha, Bhrigu, Gautam, Bharadwaj, Atri and Vishwamitra.

60. Consider the following statements:
- I. Todarmal established Dahsala settlement, which was a new form of land revenue system.
 - II. Todarmal was born in Hamirpur district of Uttar Pradesh.

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

- (a) Both I and II
- (b) Only I
- (c) Neither I nor II
- (d) Only II

60. **Answer: (d)**

About Todarmal :-

- **Todarmal** , born in **Laharpur village** of **Sitapur** district, achieved greatness in **Mughal history** .
- He established the Dahsala settlement, which was a new form of land revenue system.



He proved to be **an able finance minister as well as a skilled military commander**. He **initially** served under Sher Shah Suri, but later became one of **the nine jewels** of **the Mughal emperor Akbar** and he subsequently acquired the post of revenue minister.

61. Match List-I with List-II with reference to the major cities of Sangam period :

| List-I(Major Cities) | List-II(Related) |
|----------------------|---|
| A. Uraiyur | 1. It was the capital of Cheras. |
| B. Korkai | 2. It was the coastal capital of the Pandyas. |
| C. Vaji or Karaiyar | 3. It was the capital of the Cholas and a major centre for cotton textiles. |
| D. Muziris | 4. It was a famous port during the Cherak period. |

Select the correct answer from the code given below:

- (a) A-3, B-1, C-2, D-4
- (b) A-3, B-2, C-1, D-4
- (c) A-4, B-1, C-2, D-3
- (d) A-4, B-2, C-1, D-3

61. Answer:(b)

Major cities of Sangam period:

- **Uraiyur** - It was the capital of the Cholas and a major centre for cotton textiles.
- **Korkai** –it was the coastal capital of the Pandyas.
- **Vaji or Karaiyar** – was the capital of the Cheras.
- **Mushiri or Muziris** - was a famous port during the Chera period.
- **Puhar** - It was the coastal capital of the Cholas. It was also a famous port.
- **Madurai** – it was the capital of the Pandya rulers.

62. Consider the following statements:

1. In the year 1564, Akbar had banned the practice of enslaving prisoners of war.
2. Akbar’s religious policy was based on the policy of ‘Sulh-e-Kul’, which talks about universal tolerance or universal coordination.

Which of the statements given above is/are correct?

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

62. Answer: (b)

Religious policy of Akbar:

- **Akbar’s religious policy** was based on the policy of ‘**Sulh-e-Kul**’, which talks about **universal tolerance or universal coordination**.
- **Akbar** had learnt this principle from his **guru Abdul Latif**.
- **1562 A.D.** When he became an independent ruler, he introduced some reforms which reflected his **social and religious liberalism**.
- **1562** – Ban on enslaving prisoners of war.
- **1563** – Abolition of pilgrimage tax.
- **1564** – Jaziya banned.



63. Consider the following statements:
1. The Vaishnav temple of Vrindavan, has Gopuram been built on Vesara style.
 2. The trend of vesara style of temple architecture was started by the Chalukyas of Badami in 10th century AD

Which of the statements given above is/are correct?

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

63. Answer: (a)

Vesara Style:

- It has mixture of element from **Nagar and Dravidian styles and hence is called Vesara style.**
- Extension - from Vindhyachal mountain to Krishna river
- The trend of vesara style of temple architecture was started by the **Chalukyas of Badami in 500-753AD.**

Size of Vesara style temples

- Circular or hemispherical from base to top

Example of Vesara Style

- **Vaishnav temple of Vrindavan** with gopuram built.
- **Hoyleswara Temple** - Halebidu, Mysore

64. With reference to Srimukhalingam Temple, consider the following statements:

1. This is a temple developed under Kalinga architectural style.
2. It was constructed by Pala king Dharmapala.
3. It is located on the banks of the Vamsadhara River.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

64. Answer: (b)

Srimukhalingam Temple:

- **The Archaeological Survey of India** assured to send a note to UNESCO for inclusion of **Srimukhalingam Temple in Andhra Pradesh in the list of World Heritage structures.**
- This temple is built in **the Kalinga architectural style.**
- It is Situated on **the banks of the Vamsadhara River and dedicated to Lord Srimukha Lingeswara** (a form of Shiva).
- It is believed that **visiting this temple and** taking a dip in the river liberates one from the cycle of rebirth.
- **It has 3 ancient temples** at one place.
- It was constructed by **Kamarnava II, the ruler of the Eastern Ganga Dynasty in 9th century AD.**

65. Consider the following statements with reference to 'Sanyasi Rebellion':

1. Anandamath, a historical novel by Bankim Chandra Chatterjee, is based on Sannyasi Rebellion.
2. Hindus and Muslims had unequal participation in this movement.
3. it is also known as Fakir Rebellion.



Which of the statements given above is/are correct?

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

65. Answer: (c)

Sanyasi Rebellion:

- The devastating famine of 1770 in Bengal and the harsh economic orders of the British forced a group of Sanyasis in eastern India to fight the British which is called as sanyasi rebellion.
- **Participation** - Peasants, dispossessed peasants, a large number of small landholders, displaced soldiers and poor villagers were also involved in the Sanyasi Revolt.
- **Devi Chaudhurani's** participation recognised the role of **women in the initial revolt against the British.**
- This **movement** is sometimes also known as **Fakir Rebellion due to equal representation of both hindus and muslims.**
- **Anandamath**, a historical novel by **Bankim Chandra Chatterjee** , is based on the Sannyasi Rebellion.

66. Match List-I with List-II :

| List - (State) | List-II(Year of Annexation by the British) |
|----------------|--|
| A. Sambalpur | 1. 1853 AD |
| B. Satara | 2. 1849 AD |
| C. Jhansi | 3. 1848 AD |
| D. Nagpur | 4. 1854 AD |

Select the correct answer from the code given below:

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 4 | 3 | 2 | 1 |

66. Answer: (c)

- The **Doctrine of Lapse** was an annexation policy followed widely by **Lord Dalhousie**.
- The chronological order of the states that were annexed under the Doctrine of Lapse are:
 - **Satara** was annexed in **1848**.
 - **Sambalpur** was annexed to the British Empire In **1850**.
 - **Udaipur** was annexed in **1852**.
 - **Nagpur** was annexed in **1853**.
 - **Jhansi** was annexed in **1854**.
 - **Last** to be annexed was **Awadh** in **1856**.

67. Consider the following statements with reference to ‘Mahalwari System’:

1. 15 percent of the land of British India was included under this system.
2. This system was implemented in the parts of Central Province, Uttar Pradesh and Punjab.

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

- (a) Only 1
- (b) Only 2



- (c) Both 1 and 2
- (d) Neither 1 nor

67. Answer: (a)

About Mahalwari System:-

- Under this system, there was an agreement between the government and the village headmen of the cluster of village for revenue collection, which was called '**Mahalwari Settlement**'.
- '**Holt Mackenzie**' is considered to be the father of this system.
- This system was implemented in **Central Province, Uttar Pradesh and Punjab**
- **30 percent of the land of British India** was included under this system .
- Under this **system, land revenue** was determined on the basis of the production of the entire village and **the land revenue of all the landowners of the Mahal** was determined jointly.

68. Consider the following statements with reference to 'Theosophical Society':

1. Its headquarters was shifted to Adyar (Madras) in the year 1885 AD.
2. It was inspired by the ideas of the Upanishads, Sankhya, Yoga and Vedanta.
3. Its main objective was to establish universal brotherhood.

Which of the statements given above is/are correct?

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

68. Answer: (b)

About Theosophical Society (1875) (New York):-

- It was started by Madame H.P. Blavatsky (Russia) and **Colonel M.S. Arcot (America) in New York, United States of America.**
- The headquarters were shifted to **Adyar (Madras) in 1882 AD.**
- It was inspired by **the ideas of the Upanishads, Sankhya, Yoga and Vedanta .**
- **Objective-** To establish universal brotherhood.
- Prominent leader - **Annie Besant (1847-1933 AD)**
- It reached India in **1893 AD.**

69. "We were told that the British belong to the imperialist race and it is their God-given right to rule us, if we oppose them, they will start showing the lion-like qualities of their imperialist race." Who said this?

- (a) Jawaharlal Nehru
- (b) F.G. Hutchins
- (c) Anil Seal
- (d) Sir Charles Wood

69. Answer: (a)

About the statements given by important thinkers:-

Sir Charles Wood (Secretary of India from 1859-66)

- All experience teaches us that wherever a dominant race rules over another race, the earliest form of government is despotism.

Anil Seal:

- Systems like nomination, representation and elections are meant to enlist the Indians to end imperialist rule.



Jawaharlal Nehru:

- We were told that the British were an imperialist race and it was their God-given right to rule over us and if we opposed them, they would start showing their lion-like qualities of an imperialist race.

F. G. Hutchins:

- The British needed the Indian princely states and the princely states needed the British, but India as a nation needed neither the British nor the princely states.

70. Consider the following statement in the context of 'Chauri-Chauri incident':

1. 22 policemen were killed in this violent incident.
2. This incident took place in February 1922 in a small village named Chauri-Chauri in Gorakhpur district (U.P.).
3. After this incident, Gandhiji's much-awaited Civil Disobedience Movement was also postponed for 4 years.

How many of the above statements are correct?

- (a) Only 2
- (b) 1, 2 and 3
- (c) Only 1 and 2
- (d) Only 3

70. Answer: (c)

About Chauri-Chaura scandal:-

- On 5 February 1922, an incident in a small village called Chauri-Chaura of Gorakhpur district (U.P.) lodged the name of this village in the pages of Indian history forever.
- 22 policemen were killed in this violent incident.
- The police had beaten up some leaders of volunteer parties here badly, as these people were leading the protesters to oppose the sale of liquor and the increase in the values of Khudyanan.
- As a result, a group of protesters attacked the police.
- The police fired and as a result all the people got furated and attacked the police.
- When the police men escaped and entered the police station, the mob also set fire to the police station. Those who tried to come out in an attempt to escape were killed by the mob and thrown into the fire again.
- Gandhiji was very sad about the news of this incident and announced to withdraw the movement immediately.

71. Consider the following statements with reference to 'Karachi Session of Indian Congress':

1. Vallabhbhai Patel was the president of this session.
2. Six days before this session, Bhagat Singh, Rajguru and Sukhdev were hanged.
3. This session was organised to endorse the Gandhi-Irwin Pact or Delhi Pact.

Which of the statements given above is/are correct?

- (a) Only 2
- (b) 1, 2 and 3
- (c) Only 1 and 3
- (d) Only 3

71. Answer: (b)

About Karachi Session of Congress, (1931):-

- A session of the Congress was held in Karachi on 29 March 1931 with Vallabhbhai Patel as its president.



- Six days before this, Bhagat Singh, Rajguru and Sukhdev were hanged. This session endorsed Gandhi Irwin pact.
- Although Gandhiji had tried to save them, Indians were extremely angry with Gandhiji. It was expected from Gandhiji that he would not sign the pact.
- Gandhiji had to face intense public anger during his Karachi visit.
- Protests were held against him and he was shown black flags.
- The Punjab Naujawan Sabha strongly criticized Gandhiji for not being able to save Bhagat Singh and his comrades from the death sentence.

However the Karachi session endorsed Gandhi Irwin pact.

72. Arrange the following events in sequence:

1. Ancient Monuments Preservation Act
2. Calcutta Corporation Act
3. Establishment of University Commission
4. Partition of Bengal

Code:

- (a) 1, 2, 3, 4
- (b) 1, 3, 2, 4
- (c) 2, 3, 1, 4
- (d) 2, 1, 3, 4

72. Answer: (c)

Major works done in India during the time of Lord Curzon (1899-1905)-

- Calcutta Corporation Act (1899)
- Establishment of University Commission (1902)
- Ancient Monuments Preservation Act (1904)
- Partition of Bengal (1905)
- Police Commission headed by Andrew Fraser formed to improve police administration (1902)
- Indian Universities Act passed (1904)
- Establishment of Railway Board (1905)
- Young husband Mission to Tibet (1904)

73. Match List-I with List-II :

| List-I (place) | List-II (Prominent leaders) |
|----------------|-----------------------------|
| A. Gwalior | 1. Devi singh |
| B. Mathura | 2. Begum Hazrat Mahal |
| C. Lucknow | 3. Maulvi Ahmadulna |
| D. Faizabad | 4. Taty Tope |

Which of the above is/are correctly matched?

- (a) A-3, B-1, C-2, D-4
- (b) A-3, B-2, C-1, D-4
- (c) A-4, B-1, C-2, D-3
- (d) A-4, B-2, C-1, D-3

73. Answer: (c)

- The Revolt of 1857, also known as the First War of Independence or the Sepoy Mutiny, stands as a pivotal role in India's struggle for independence.



- It provide a nuanced perspective, unraveling the complex sequence of events that shaped the course of India's struggle against colonial rule.
- **Bengal Sepoy Mutiny** marked the first such uprising in India. Sepoys demanded equal treatment and increased pay, citing the substantial accumulation of wealth by the East India Company. The mutiny, predominantly non-violent, was quelled by the British.
- In March 1857, **Mangal Pandey**, a sepoy in **Barrackpore**, had refused to use the cartridge and attacked his senior officers. He was hanged to death on 8th April.
- On 9th May, 85 soldiers in Meerut refused to use the new rifle and were sentenced to ten years' imprisonment.
- The revolt spread over the entire area from the neighbourhood of Patna to the borders of Rajasthan. The main centres of revolt in these regions namely Kanpur, Lucknow, Bareilly, Jhansi, Gwalior and Arrah in Bihar.

The main centers of the revolt of 1857 and the leaders of the revolt were:-

Position - Leader

- Gwalior - Taty Tope
- Mathura - Devi Singh
- Lucknow - Begum Hazrat Mahal
- Faizabad - Maulvi Ahmadullah
- Jhansi - Rani Lakshmbai
- Bareilly - Khan Bahadur
- Allahabad - Liaquat Ali
- Kanpur - Nana Saheb
- Gorakhpur - Gajadhar Singh
- Farrukhabad - Nawab Tafazzat Hussain
- Sultanpur - Shaheed Hasan
- Haryana - Rao Tularam
- Bihar - Kuwar Singh
- Meerut - Kandam Singh
- Raipur - Narayan Singh
- Mandsaur - Prince Humayun (Firoz Shah)



74. Consider the following events and arrange them in chronological order using the code given below
- I. Hindu Widow Remarriage Act
 - II. Maternity Benefit Act
 - III. Hindu Adoption and Management Act
 - IV. Prohibition of Child Marriage (Amendment) Act
- Code:
- (a) IV, II, III, I
 - (b) I, III, II, IV
 - (c) III, II, I, IV
 - (d) I, II, IV, III

74. Answer: (b)

Constitutional provisions for women-

- Hindu Widow Remarriage Act of 1856.
- Hindu Adoption and Management Act of 1956.



- Maternity Benefit Act of 1961.
- Child Marriage Prohibition (Amendment) Act of 1978.
- Bengal Regulation Act of 1829 – by which Sati Pratha was declared illegal.
- Bengal Regulation Act of 1795 and 1804 – under which child murder was declared a crime, provision of punishment and fine.
- Age of Consent Act of 1891 – under which the age of marriage was increased.
- Sharda Act of 1930.
- Special Marriage Act of 1954.
- Hindu Marriage and Divorce Act of 1954.

75. Consider the following statements with reference to the ‘Gupta Period’:

1. This period is called the golden age of Indian history.
2. The administration during gupta period was highly centralised.
3. Chandragupta II in 319 AD introduced a new era that was known as ‘Gupta Era’.

Which of the statements given above is/are correct?

- (a) Only 2
- (b) 1, 2 and 3
- (c) Only 1 and 2
- (d) Only 1

75. Answer: (d)

About the Gupta period:-

- Gupta period was from 319 to 550 AD. and is called the Golden Age of Indian history.
- Chandragupta I is considered to be the real founder of the Gupta dynasty. He started a new era ‘Gupta Samvat’ in 319 AD.
- The Gupta rulers regained the political unity that was lost after the fall of the Mauryas and by bringing almost the whole of India under one political region, successfully faced the powerful foreign invaders and paved the way for progress in the economic, social and literary fields.
- The most important event of the reign of Chandragupta I was the establishment of matrimonial relations between the Guptas and the Lichchhavis.
- He married the Lichchhavi princess Kumaradevi.
- After marrying Kumaradevi, he issued Raja-Rani type or Chandragupta Kumaradevi type coins.
- Chandragupta I was the first in the Gupta dynasty to introduce silver coins.
- The administration of guptas were comparatively decentralized than the mauryan administration.

76. Which one of the following statements is not correct with reference to ‘Mauryan coins’?

- (a) Silver coins were called Karshapana.
- (b) Gold coins were called Nishka or Suvarna.
- (c) Small copper coins were called Dharan.
- (d) Ownership marks were also put on these coins.

76. Answer: (c)

Chandragupta Maurya (321–297 BCE) is considered to be the founder of the **Mauryan Empire**. Inspired by Alexander, Chandragupta built up an army and overthrew the Nanda power in Magadha, in present-day eastern India, establishing the Mauryan Empire. After becoming king, Chandragupta took additional lands by force and **alliances**. Chandragupta’s chief minister, **Kautilya**, sometimes advised **Chandragupta** and contributed to the empire’s legacy.



About Mauryan coins:-

- The gold coin was called Nishka or Suvarna.
- The silver coins were called Karshapana/Dharana.
- The small copper coins were called Kakarni.
- Ownership marks were also put on these coins.

Tamlipti (eastern coast) and Bhrigukachchha and Sopara (western coast) were important ports during the Mauryan period.

77. In which state do the Standard Time Meridian and the Tropic of Cancer intersect with each other?
- (a) Uttar Pradesh
 - (b) Madhya Pradesh
 - (c) Odisha
 - (d) Chhattisgarh

77. Answer: (d)

- For determining the **Indian Standard Time, 82°30' East longitude** has been considered as the Standard Meridian, which passes through **Mirzapur in Uttar Pradesh**.
- **(In some sources it has also been mentioned as 'Naini' in Allahabad).**
- **The Standard Time Line and the Tropic of Cancer intersect each other** in Koriya district in Chhattisgarh.
- This **'Standard Time Line'** passes through 5 states of India - **Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Odisha and Andhra Pradesh.**
- **The Indian Standard Time** is 5 hours 30 minutes ahead of Greenwich Mean Time.
- Tropic of cancer passes through Gujrat, Rajasthan, Madhya Pradesh, Chattisgarh, Jharkhand, West Bengal, Tripura and Mizoram.

78. Match List-I with List-II :

| List-I (Main festivals) | List-II(States) |
|-------------------------|--|
| A. Losar | 1. Nagaland |
| B. Hornbill | 2. Sikkim |
| C. Losung/Losang | 3. Guwahati (Assam) |
| D. Ambubachi | 4. Ladakh Himachal Pradesh, Sikkim and Arunachal Pradesh |

Select the correct answer from the code given below:

- (a) A-3, B-1, C-2, D-4
- (b) A-3, B-2, C-1, D-4
- (c) A-4, B-1, C-2, D-3
- (d) A-4, B-2, C-1, D-3

78. Answer: (d)

Major festivals celebrated in the states of India: -

Losar:

- Buddhists living in **Tibet and Himalayan region celebrate Losar festival** as the beginning of the New Year.
- In India, **'Losar Festival'** is celebrated with enthusiasm in Ladakh, Himachal Pradesh, Sikkim and Arunachal Pradesh.

Hornbill Festival:

- It is one of the **largest indigenous festival organised by the state government of Nagaland to promote** tourism in the state.



Losung/Losang:

- ‘**Sikkimese New Year**’ is celebrated in the month of December by the Bhutia and Lepcha tribes residing in Sikkim .
- It is also called ‘**Namsung**’ .
- This festival is celebrated for good agricultural yield.
- During this time people consume locally made wine called Chhaang.

Ambubachi Fair:

- This festival is celebrated during the monsoon season near the Kamakhya temple in Guwahati (Assam).
- The fertility festival ‘ **Ambubachi**’ fair is also known as ‘**Ameti**’ and **Tantric fertility festival**.
- Meaning of Ambu - ‘water’
- Meaning of Bachi – ‘breeding’
- It is also called ‘**Mahakumbh of the East**’ .

79. ‘Rohtang Pass’ is situated in which of the following Himalayas?
- Lesser Himalayan region
 - Trans Himalayan region
 - Greater Himalayan region
 - North-eastern Himalayas

79. **Answer: (a)**

About Rohtang Pass:-

- **Rohtang Pass** is a major pass located in Himachal Pradesh (Lesser Himalayas) which connects Manali to Leh by a road.
- **Rohtang Pass** is called the ‘**gateway**’ to the ‘**Lahaul-Spiti**’ district of Himachal Pradesh.
- This pass connects ‘**Kullu**’ and ‘**Lahaul-Spiti**’.



80. Consider the following statements with reference to ‘Intensive subsistence agriculture’:
1. In this, farming is done on small plots of land using simple methods and more labour.
 2. It is prevalent in densely populated areas of South-East Asia.

Which of the statements given above is/are correct?

- Only 1
- Only 2
- Both 1 and 2
- Neither 1 nor 2



80. Answer: (c)

About Intensive Subsistence Agriculture:-

- It is a type of farming where Small plots are cultivated by simple methods and more labour.
- Apart from the main crop rice, the production of wheat, maize, pulses, oilseeds also.
- In Southern, and East Asia it is prevalent in intensive populated regions.

Primitive subsistence agriculture:

- This includes transfer agriculture and movable animal herding.
- Transfer agriculture: Cultivation of maize, potato etc. on the plots cleaned by cutting trees and burning.
- In Amazon Basin, Tropical Katariya Africa, the transfer agriculture is prevalent in East Asia and North-Eastern India region.

81. Which of the following is/are examples of a 'Development Bank' in India?

1. State Financial Corporation
2. Industrial Development Bank of India
3. Industrial Finance Corporation of India
4. Indian Overseas Bank

Code:

- (a) Only 1 and 2
- (b) Only 1, 2, and 3
- (c) Only 1, 3, and 4
- (d) Only 3 and 4

81. Answer: (b)

- Currently, there are five Industrial Development Banks, one Agricultural Development Bank, and one Export-Import Bank at the all-India level.
- The first development bank, the Industrial Finance Corporation of India (IFCI), was established in 1948.
- **Examples of Development Banks in India:**
 - Industrial Finance Corporation of India (IFCI)
 - State Financial Corporations (SFC)
 - Industrial Development Bank of India (IDBI)
 - Industrial Credit and Investment Corporation of India (ICICI)
 - Unit Trust of India (UTI)
 - Industrial Reconstruction Bank of India (IRBI) / Industrial Investment Bank of India (IIBI)
 - Export-Import (Exim) Bank of India and a few others.

82. Phillips Curve illustrates the relationship between which of the following?

- (a) Inflation and employment rate
- (b) Inflation and unemployment rate
- (c) Deflation and employment rate
- (d) Deflation and unemployment rate

82. Answer: (b)

Phillips Curve :

- The concept behind the Phillips Curve suggests that changes in unemployment within an economy have a predictable impact on price inflation.
- It describes the inverse relationship between unemployment and inflation with inflation on the Y-axis and unemployment on the X-axis, depicted as a downward-sloping, concave curve.



83. Headline inflation in India is based on:
- Consumer Food Price Index (CFPI).
 - Consumer Price Index (Rural Labour) (CPI - RL).
 - Wholesale Price Index (WPI).
 - Consumer Price Index (Combined) (CPI-C)

83. Answer: (d)

- In India, headline inflation is based on the Consumer Price Index-Combined (CPI-C).
- Headline inflation figures include inflation for a basket of goods that encompasses items like food and energy.
- Most central banks use headline inflation or a similar measure as their target variable.
- The reason for using headline inflation is that it is a comprehensive measure that closely represents the basket of goods and services consumed by most households. The Reserve Bank of India also uses headline inflation..

84. Consider the following statements about Treasury Bills:

- These bills can be issued by central government and state governments.
- These are short term debt instrument issued by Government of India
- Treasury bills are issued at a discount to their face value.

Which of the statements is/are correct?

- Only 1
- Only 2 and 3
- Only 3
- 1, 2, and 3



84. Answer: (b)

Treasury Bills:

- Treasury Bills were first issued in India in 1917.
- They are money market instruments and short-term debt instruments issued by the Government of India.
- They are primarily a means for the central government to borrow short-term (with a maturity of less than one year) loans. They are safe and hence called as a guilt edge.
- Currently, these bills are issued in three tenures and have interest rate known as Coupon Rate.
- The active T-Bills are the 91-day T-Bill, 182-day T-Bill, and 364-day T-Bill.
- 91-day T-Bills are issued based on weekly auctions.
- While 182-day T-Bills are auctioned on non-reporting Fridays, and 364-day T-Bills are auctioned on the Wednesday before reporting Friday.
- In 1997, the government also introduced 14-day Intermediate Treasury Bills. The auctions of T-Bills are conducted by the RBI.
- In India only Central Government and not State Government can issue T-bills.

85. Which of the following is the correct order for irrigation methods adopted in India?

- Tube wells > Canals > Wells > Tanks
- Tube wells > Wells > Canals > Tanks
- Canals > Tube wells > Wells > Tanks
- Wells > Canals > Tube wells > Tanks

85. Answer: (a)

Tube wells > Canals > Wells > Tanks



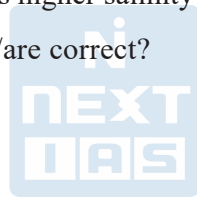
- Since 1950-51, the government had given considerable importance to the development of command area under canals.
- In 1950-51, the Canal irrigated area was 8.3 million hectares and it currently stands at 17 million hectares. Despite that, the relative importance of Canals has come down from 40% in 1951 to 26% in 2010-11.
- On the other hand, the well and tube well accounted for 29% total irrigated area and now they share 64% of the total irrigated area. Well Irrigation is common in alluvial plains of the country except the deserts of Rajasthan.
- Plains of UP, Bihar, Gujarat, Karnataka & Tamil Nadu are the states which are more prominently under the well irrigation.
- Canals are second most important source of irrigation in India after tube wells. The Canals are irrigating those lands which have large plains, fertile soils and perennial rivers.
- The plains of North India are mostly canal irrigated. Other parts are coastal low lands and some parts of Peninsular India.
- The states are: Andhra Pradesh, Assam, Haryana, Jammu & Kashmir, West Bengal, Punjab Rajasthan, Bihar, Karnataka, Tamilnadu and UP.

86. Consider the following statements regarding Salton Sea:

1. It is a shallow, located between mountain ranges in Africa.
2. It is located below sea level and has higher salinity than seawater.

Which of the statements given above is/are correct?

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



86. Answer: (b)

About the Salton Sea:

- It is a **shallow, saline lake** located in the lower **Colorado Desert, Southern California, United States**.
- It is a **geological depression located between mountain ranges and** below sea level.
- Its **salinity** (about 45 parts per thousand) is much higher than that of sea water.
- It is an important stopover point for **migratory waterfowl and** serves as a vital habitat for birds traveling **south to Mexico and Central America**.



87. ‘Essequibo Region’ was recently seen in the news in reference to which of the following?

- (a) Maritime dispute in the Aegean Sea
- (b) Russia-Ukraine conflict



- (c) Guyana-Venezuela conflict
- (d) Increase in plastic pollution in the Mediterranean Sea basin

87. Answer: (c)

About Guyana-Venezuela conflict:

- The land border between **Guyana and Venezuela** has been disputed since the colonial establishment between **the British and Spanish powers in South America**.
- The bone of contention is the heavily **forested Essequibo region**, which **Venezuela** claims as its own territory.
- Offshore, the disputed land area is a maritime region recently discovered to be rich in **hydrocarbon resources**, raising **the risk of a land boundary dispute**.
- **Guyana presented the dispute** to the International Court of Justice in 2018.
- Despite **Venezuela’s withdrawal from the case**, **proceedings are currently ongoing**.



88. Consider the following statements regarding Nicaragua:

- I. It is a landlocked country in Central America.
- II. It was the only country in Latin America that was colonized by both Spanish and British Government.

Which of the statements given above is/are correct?

- (a) Both I and II
- (b) Only I
- (c) Only II
- (d) Neither I nor II

88. Answer: (c)

About Nicaragua:

- It is a **country in Central America** and the largest of the **Central American republics**.
- The country is bordered by **Honduras to the north and Costa Rica to the south**.
- It **borders Pacific Ocean** to the west, and the country’s eastern border is **Caribbean Sea**.
- It was **the only country in Latin America** that was colonized by both **Spanish and British Government**.
- It then joined a group of surrounding countries called the **Provinces of Central America, with a central government in Guatemala City**.
- It is a **republic country**. **Power is divided into four government branches: Executive, Legislative, Judicial and Supreme Electoral Council**.



- **Capital** – Managua
- **Official languages** - Spanish, English, indigenous languages
- **Currency** - Nicaraguan cordoba (NIO)



89. It connects Pangolakha Wildlife Sanctuary in Sikkim and the Torsa Reserve of Bhutan. It comprises features of all the three sub-regions, namely the Himalayan Mountain System, the Indian Peninsular Sub-region and the Malayan Sub-region. This statement explains which of the following?
- (a) Silent Valley National Park
 - (b) Dampa Tiger Reserve
 - (c) Manas National Park
 - (d) Neora Valley National Park

89. **Answer: (d)**

Neora Valley National Park:

- It is located in **the Kalimpong district of West Bengal.**
- It is one of the **richest biologically rich regions in the entire Northeast.**

Boundaries:

- It is adjacent to **Sikkim and Bhutan on its northern and north-eastern borders** respectively and connects **the Pangolakha Wildlife Sanctuary in Sikkim and the Torsha Strict Reserve of Bhutan.**
- The highest point of the park is **the Rachela Pass.**
- It incorporates the features of all the three sub-regions, namely, **the Himalayan Mountain System, the Indian Peninsular Sub-region and the Malayan Sub-region.**

Silent Valley National Park:

- Silent Valley is located in the **Southwestern** corner of Nilgiris.
- A perennial river named **Kunthipuzha** is passing through the western side of the park, from north to south direction finally merging into Bharathapuzha.

Dampa Tiger Reserve:

- Dampa Tiger Reserve is in the western limit of Mizoram. On the West, the reserve is bound by the Chittagong hill tracts (Sazek hill range) of Bangladesh.



- The terrain is hilly with elevation ranging from 49 to 1095 m. above mean sea level. The tract is dissected by numerous drainages.

Manas National Park:

- It is situated in Assam, at the base of the Himalayas. It shares a border with Bhutan's Royal Manas National Park. The Manas River is where the park gets its name.
- Manas was designated as one of India's First Tiger Reserves in 1973 as part of the Indian government's Project Tiger. Manas Tiger Reserve, for example. Manas was subsequently designated a World Heritage Site (Natural) by UNESCO in 1985 due to its Outstanding Universal Conservation Value.

90. Where is Sohagibarwa Wildlife Sanctuary located?

- (a) Manipur
- (b) Gujarat
- (c) Maharashtra
- (d) Uttar Pradesh

90. Answer: (d)

- Recently, **Chief Minister of Uttar Pradesh** directed officials to conduct **archaeological excavations at the Sohagibarwa Wildlife Sanctuary.**
- Located in **Maharajganj district of Uttar Pradesh.**
- It was declared a **wildlife sanctuary in June 1987.**
- In the northern side, it shares **international border with Nepal, and on the eastern border is Valmiki Tiger Reserve of Bihar.**
- The underlying soil of the area is composed of alluvial formation, which shows a **series of clay, silt and sand beds.**
- It is **drained by the Badi Gandak, Chhoti Gandak, Payas and Rohini rivers.**

91. Consider the following statements regarding Central Water Commission (CWC):

- I. It is headed by the Prime Minister.
- II. It functions as an attached office of the Ministry of Environment, Forest and Climate Change.

Which of the statements given above is/are correct?

- (a) Both I and II
- (b) Only I
- (c) Only II
- (d) Neither I nor II

91. Answer: (d)

About Central Water Commission(CWC):

- It is a premier technical organisation in India in **the field of water resources.**
- It is presently functioning as an attached office of **the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti, Government of India.**
- **Headquarters: New Delhi**
- Central Water Commission CWC is headed by a **Chairman**, with the status of Ex-Officio Secretary to the Government of India
- It is entrusted with the general responsibilities of initiating, coordinating and pursuing schemes in **consultation with the State Governments** concerned for **the control, conservation and utilisation of water resources throughout the country for flood control, irrigation, navigation, drinking purposes.**



92. Consider the following statements with reference to ‘Methane’:
1. Methane is a potent greenhouse gas (GHG).
 2. Methane is the second most abundant hydrocarbon pollutant
 3. Wetlands are the most prominent methane emitters.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None of these

92. Answer: (b)

About methane gas:-

- Methane is a powerful greenhouse gas (GHG) and its atmospheric life is 20 years.
- India is included in the world’s top 5 methane emitter destination.
- Methane is the most abundant hydrocarbon pollutant
- wetlands are the most prominent methane emitter.
- After this fossil fuel extraction, livestock
- And landfill and agricultural waste come. Its global warming capacity is 80 times higher than carbon dioxide (CO₂).
- Its contribution to global warming is more than 25%.
- It is responsible for an increase in ozone manufacturing in the anger.

93. Match List-I with List-II :

| List-I (Pollutants) | List-II (is found) |
|---------------------|--------------------------------------|
| A. Lead (Pb) | 1. Motherboard |
| B. Cadmium(Cd) | 2. Cathode Ray Tube |
| C. Mercury (Hg) | 3. Chip Resistors and Semiconductors |
| D. Beryllium (Be) | 4. Printed circuit boards, CFL |

Select the correct answer from the code given below:

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 4 | 3 | 2 | 1 |

93. Answer: (c)

- Electronic waste (e-waste), is a generic term used to describe all types of **old, end-of-life or discarded electrical and electronic equipment**, such as household appliances, office information and communications equipment etc.
- E-waste contains numerous toxic chemicals including metals such as lead, cadmium, **mercury**, and nickel.

About the toxic/dangerous substances found in e-waste:-

Pollutants - found

- Lead (PB) - Cathode Ray Tube



- Cadmium (CD) - Chip resistor and semiconductor
- Para (HG) - Relay and switch, printed circuit boards, CFL
- Berillium (BE) - Motherboard

Hexavalent Chromium (CR) VI - Unfedded and galvanized steel plate to protect them from corrosion and to strengthen the structure of the steel

94. Which of the following seismic waves are the most destructive?
- (a) P-waves
 - (b) S-waves
 - (c) L-waves
 - (d) Both (a) and (b)

94. Answer: (c)

EARTHQUAKE:

- Earthquakes occur due to the release of energy caused by internal and external forces of the Earth, leading to the creation of waves that spread in all directions and cause vibrations on the Earth's surface. This phenomenon is known as an 'earthquake'.

SEISMIC WAVES:

P Waves:

- P waves are the first to originate during an earthquake and travel from their source in all directions.
- On the Earth's surface, P waves are the first to be felt.
- They are also known as 'Primary waves'.
- These are longitudinal waves, similar to sound waves.
- Therefore, these waves can travel through solid, liquid, and gas mediums, but their speed decreases respectively in solid, liquid, and gas.
- Their speed is the fastest and their intensity is the least (compared to S and L waves).

S Waves:

- After P waves, S waves reach the Earth's surface.
- This is why they are called 'Secondary Waves' or 'Shear Waves'.
- These are transverse waves, similar to light waves.
- Their speed is less than P waves but more than L waves.
- Their intensity is greater than P waves but less than L waves.
- They can only travel through solid mediums.

L Waves:

- Also known as 'Love waves', named after the scientist 'A. E. H. Love'.
- Their speed is the slowest (compared to P and S waves), so L waves appear on the Earth's surface after P and S waves.
- Their intensity is greater than both P and S waves, making them the most destructive.

95. Consider the following statements in context to 'Black/Regur' soil:
- I. This soil is more useful and famous for cotton cultivation.
 - II. In Maharashtra, this soil is known as 'Karela'.
 - III. This soil is rich in nitrogen, phosphorus, and organic matter.

Which of the above statements is/are correct?

- (a) Only I
- (b) Only I and III



- (c) Only III
- (d) I, II, and III

95. Answer: (a)

Black/Regur Soil:

- This soil is formed from the disintegration of lava material (basalt rock) emitted by fissure eruptions.
- It is the third major type of soil in India.
- It is predominantly found in the northwestern region of the 'Deccan Trap' in Maharashtra.
- Additionally, it is found in the Malwa Plateau of Madhya Pradesh, Kathiawar Peninsula of Gujarat, Bangalore-Mysore Plateau of Karnataka, Coimbatore-Madurai Plateau of Tamil Nadu, plateaus of Andhra Pradesh and Telangana, and the Rajmahal mountainous area of Chota Nagpur.
- This soil is particularly useful and well-known for cotton cultivation, hence it is also called 'Black Cotton Soil' or 'Regur'.
- It is also referred to as 'tropical chernozem' and 'tropical black earth'.
- In Uttar Pradesh, this soil is known as 'Karela'.
- Apart from cotton, this soil is suitable for cultivating sugarcane, wheat, onions, and fruits.
- Black soil is clayey, deep, and impervious; it becomes sticky when wet and forms large cracks when dry, giving the appearance of being self-plowed, hence it is also known as 'self-plowing soil'.
- This soil has a high water retention capacity, reducing the need for irrigation.
- Due to the presence of humus, aluminum, and iron in the form of titaniferous magnetite, the soil is black in color.
- This soil is poor in nitrogen, phosphorus, and organic matter but has adequate amounts of potash, aluminum, and magnesium carbonate.

96. Ribosomes present in cell are sites for

- (a) Fat synthesis
- (b) Photosynthesis
- (c) Protein synthesis
- (d) Respiration

96. Answer: (c)

Ribosomes are one of the most important cell organelles composed of RNA and protein that converts genetic code into chains of amino acids

- Ribosomes are **essential cellular organelles responsible for protein synthesis in all living organisms.**
- They are complex macromolecular machines **composed of ribosomal RNA (rRNA) and proteins.**
- Ribosomes play a central role in translating genetic information from mRNA into functional proteins, making them indispensable for cell growth, proliferation, and maintenance of cellular functions.

Structure of Ribosomes:

- **Composition:** Ribosomes consist of two subunits - a large subunit and a small subunit.
- **Eukaryotic Ribosomes:** In eukaryotic cells, the ribosome is composed of a 60S large subunit and a 40S small subunit, forming an 80S ribosome.
- **Prokaryotic Ribosomes:** Prokaryotic ribosomes are smaller, consisting of a 50S large subunit and a 30S small subunit, forming a 70S ribosome.
- **Ribosomal RNA (rRNA):** rRNA provides the structural scaffold for ribosomes and catalyzes peptide bond formation during protein synthesis.
- **Ribosomal Proteins:** Proteins associate with rRNA to stabilize the ribosome structure and participate in various functions during protein synthesis.



Function of Ribosomes:

- **Protein Synthesis:** Ribosomes catalyze the translation of mRNA sequences into polypeptide chains.
- **Translation Process:** Ribosomes decode the genetic information carried by mRNA in the form of codons (three-nucleotide sequences) and assemble amino acids into a polypeptide chain according to the mRNA sequence.
- **Aminoacyl: tRNA Binding Sites:** Ribosomes contain three binding sites - the A site (aminoacyl-tRNA site), P site (peptidyl-tRNA site), and E site (exit site) - where tRNA molecules bind and undergo the steps of translation.

97. Consider the following statements with reference to ‘Lithium’:

1. It is an alkali metal and is solid at room temperature.
2. It is the lightest of all the elements.
3. The largest reserves of Lithium in the world are found in China.

Which of the above statements is correct?

- (a) Only one
- (b) Only two
- (c) All the three
- (d) None

97. Answer: (a)

- Classified as an alkali metal, lithium is solid at room temperature.
- **It is the lightest of the solid elements whereas Hydrogen is lightest of all the elements.**
- It is soft, white and lustrous.
- It reacts vigorously with water.
- It has body-centered cubic crystal structure.
- Lithium comprises about 0.002% of the Earth’s surface.
- Being highly reactive, it is not found as a metal in nature, but is found in trace amounts in almost all igneous rocks and in the water of many mineral springs.
- Spodumene, petalite, lepidolite and amblygonite are the most important minerals containing lithium.
- Major reserves: Lithium reserves are concentrated in the Lithium Triangle of South America - Argentina, Bolivia and Chile, with 50% of the reserves concentrated in these regions.
- In 2023, Australia led the world in terms of lithium mine production, with Chile and China in second and third place.

Important information:

- The most important use of lithium is in rechargeable batteries for mobile phones, laptops, digital cameras and electric vehicles.
- Lithium metal is mixed with aluminum and magnesium to form alloys which increases their strength and makes them lighter.
- Magnesium-Lithium alloy is used for armour plating.
- Aluminum-Lithium alloy is used in aircraft, bicycle frames and high-speed rail vehicles.
- Lithium oxide is used in special glasses and glass ceramics.
- Lithium chloride is one of the most hygroscopic substances used in air conditioning and industrial drying systems (as is lithium bromide).



98. Consider the following statements:
- I. Australia ranks second in the world after China in the production of bauxite.
 - II. Kalgarlie and Coolgardie of Australia are famous as gold mining cites.

Which of the above statements is/are not correct?

- (a) Both I and II
- (b) Only I
- (c) Only II
- (d) Neither I nor II

98. Answer: (b)

About minerals and industries in Australia:-

- Australia is a country rich in mineral resources.
 - Huge reserves of iron, manganese, bauxite, tin and gold are found here.
 - Australia holds the first place in the world in the production of bauxite. Queensland's Weipa is world famous for bauxite production. China ranks third in ballistic production
 - Kalgurli and Coolgardie of Australia are famous as gold mining.
 - Ballistic is used metallurgy, chemical industries and as raw material in building and road aggregates.
99. Consider the following statements with reference to 'United Nations Development Programme' (UNDP):
1. Its headquarters is located in Geneva.
 2. It is fully funded by voluntary contributions from member countries.

Which of the statements given above is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) neither 1 nor 2

99. Answer: (b)

- United Nations Development Programme (UNDP) was established on January 1, 1966, following a resolution by the United Nations General Assembly. UNDP is a leading global development organization. It is part of the United Nations system and works in collaboration with countries to address key development challenges and achieve sustainable development goals.
- The headquarters of UNDP is located in New York City, United States.
- It is fully funded by voluntary contributions from member countries.
- UNDP mandate includes abolishing poverty, democratic rule, law rule and building inclusive institutions.

100. Consider the following:

1. India
2. Maldives
3. Mauritius
4. Myanmar

Which of the above countries is/are members of the Colombo Security Conclave (CSC)?

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



100. Answer: (b)

About Colombo Security Conclave (CSC):

- It is a **regional security grouping** comprising **India, Sri Lanka, Maldives and Mauritius**.
- The CSC was initially known as **the Trilateral for Maritime Security Cooperation, which evolved out of trilateral meetings between the NSAs and Deputy NSAs of India, Maldives and Sri Lanka that began in 2011**.
- It came **to a halt after 2014** due to increased tensions between **India and Maldives** .
- Since its revival and re-branding as **CSC in 2020, Mauritius** was added as a member of the group.
- It mainly focusses on cooperation to enhance and strengthen regional security.

101. Which of the following countries shares its border with the Mediterranean Sea?

1. Italy
2. Lebanon
3. Jordon
4. Iraq
5. Turkiye

Code:

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



101. Answer: (b)

About the Mediterranean Sea:-

- It is an ocean in the Atlantic Ocean, which is located between Eurasia and African continent and is almost completely surrounded by land.
- **Border Countries (21 countries):** Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Mistr, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, and turkey.
- Nile River (Africa) falls into the Mediterranean Sea.



102. What is ‘NASAMS’, which was in the news recently?

- (a) An international economic cooperation initiative
- (b) A state-of-the-art artificial intelligence platform



- (c) A ground-based air defence system
- (d) A space exploration mission

102. Answer: (c)

About NASAMS(National Advanced Surface-to-Air Missile System):

- It is a medium-range ground-based air defence system.
- It is world’s **first networked short and medium-range air defence system** that can integrate with other equipment and air defence systems.
- It provides short- to medium-range air defense against **aircraft, helicopters, cruise missiles, and drones.**
- It is best suited for protecting **critical fixed assets**, such as key **military assets, infrastructure, or cities.**
- It was jointly designed and developed by Raytheon (United States) and Kongsberg Defence & Aerospace (Norway).
- **NASAMS** is operated by 13 countries and has been integrated into the US National Capital Region Air Defense System since 2005.
- **In addition to the US, Norway, Finland, Spain, the Netherlands, Oman, Lithuania, Indonesia, Australia, Qatar, Hungary, Ukraine, and an unnamed country** rely on NASAMS to defend the homeland and protect critical assets.

103. Consider the following statements regarding Pradhan Mantri Scheduled Caste Abhyudaya Yojana (PM-AJAY) scheme:

1. It is a central sector scheme.
2. Villages with 50% or more Scheduled Caste population are eligible for grants under this scheme.

Which of the statements given above is/are correct?

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

103. Answer: (b)

- **Pradhan Mantri Scheduled Caste Abhyudaya Yojana (PM-AJAY):** It is a merged scheme of **three centrally sponsored** schemes, namely **Pradhan Mantri Adarsh Gram Yojana (PMAGY)** , Special Central Assistance to Scheduled Castes Sub Plan (**SCA to SCSP**), and Babu Jagjivan Ram Hostel Yojana (**BJRCY**) .
- The main **objective of the scheme** is to increase the income of the target population through various income generating schemes, skill development and infrastructure development.
- **people living below the poverty line are eligible to get benefits under this scheme.**
- **50% or more Scheduled Caste** population are eligible for grants under the scheme.

104. Match List-I with List-II :

| List-I (Names of cities) | List-II (Surname) |
|--------------------------|---------------------|
| A. Balrampur | 1. Mahamaya Nagar |
| B. Hathras | 2. Jaiprakash Nagar |



| List-I (Names of cities) | List-II (Surname) |
|--------------------------|-------------------|
| C. Gonda | 3. Buddha City |
| D. Siddharth Nagar | 4. Shakti Peeth |

Select the correct answer from the code given below:

- (a) A-3, B-1, C-2, D-4
- (b) A-3, B-2, C-1, D-4
- (c) A-4, B-1, C-2, D-3
- (d) A-4, B-2, C-1, D-3

104. Answer: (c)

Names of cities of Uttar Pradesh - surnames

- Balrampur - Shaktipeeth
- Hathras - Mahamaya Nagar
- Gonda - Jaiprakash Nagar
- Siddharth Nagar - Buddha City
- Agra - City of Taj, City of Petha
- Bahraich - Syed Masood Ghazi Nagar, Rishi Bhumi
- Bulandshahr - Ahar Area
- Aligarh - Lock City

105. Match List-I with List-II:

| List-I (Institute) | List-II (Location) |
|---|--------------------|
| A. Central Institute Horticulture for Subtropical | 1. Cuttack |
| B. Indian Vegetable Research Institute | 2. Varanasi |
| C. National Rice Research Institute | 3. Lucknow |
| D. Central Potato Research Institute | 4. Shimla |

Select the correct answer from the code given below:

- (a) A-3, B-1, C-2, D-4
- (b) A-3, B-2, C-1, D-4
- (c) A-4, B-1, C-2, D-3
- (d) A-4, B-2, C-1, D-3

105. Answer: (b)

Major Agricultural Institute Institute of India - Place:

- Central Institute for Subtropical Horticulture - Lucknow
- Indian Vegetable Research Institute - Varanasi
- National Rice Research Institute - Cuttack
- Central Potato Research Institute - Shimla
- National Organic Farming Center - Ghaziabad

106. Which one of the following pairs is correctly matched with reference to Uttar Pradesh?

- (a) Total agro-climatic zones in the state - 9
- (b) Total soil group area in the state - 8
- (c) Total agro-ecological zones in the state - 20
- (d) All of the above

106. Answer: (d)



Uttar Pradesh - Soil, Agriculture and Animal Husbandry

- The most abundant soil in Uttar Pradesh is **Alluvial**
- Total agro-ecological zones in the state - **20**
- Total agro-climatic zones in the state - **9**
- Total soil group area in the state - **8**
- **Uttar Pradesh Maximum Holding Limit Imposition Act or Ceiling Law** came into force - **1960**
- Dry agriculture area in the state - **Bundelkhand**

The source of irrigation after tube wells on the total sown area in the state – **canals**

107. In which year Kumbh Mela was included in the intangible cultural heritage of UNESCO?

- (a) 2014
- (b) 2016
- (c) 2017
- (d) 2022

107. Answer: (c)

About some intangible cultural heritages of UNESCO:-

- Kumbh Mela was included in the Intangible Cultural Heritage of India in the year **2017**.
- Garba has been recently included under it in **2022**
- Durga Puja in Kolkata – **2021**
- Brass and copper utensils made by thatheras of Punjab – **2014**
- Yoga – **2016**

108. Which one of the following statements is false in the context of ‘Oniks Missile’?

- (a) The missile has a strike range of up to 500 km on its default trajectory.
- (b) It is a self-guided munition, designed keeping in mind the “fire and forget” principle.
- (c) It can be launched from surface ships, submarines and land-based equipment.
- (d) It is also known as Russian BrahMos.

108. Answer: (a)

About Oniks Missile:

- The P-800 Oniks missile, also known as Oniks, is a supersonic medium-range cruise missile developed by Russia.
- It is a self-guided munition designed with the “fire and forget” principle in mind.
- The missile has a range of up to 300 km on the default trajectory and 120 km on the low-altitude trajectory.
- It can be launched from surface ships, submarines and land-based equipment.
- It is designed to combat surface ship groups as well as destroy ground targets in conditions of strong fire and electronic countermeasures.
- Also known as the Russian BrahMos, it can reach speeds of over 3,000 km/h, making it extremely difficult to intercept.
- Additionally, the missile operates at an altitude of 10–15 metres above ground or water, further enhancing its stealth capabilities.



109. Which of the following exercises are conducted between India and Maldives?

- I. Ekuverin
- II. Dosti
- III. Ekta
- IV. Mitra Shakti

Code:

- (a) Only I, III and IV
- (b) Only I, II and III
- (c) Only II
- (d) All of the above

109. Answer: (b)

About Maldives:-

- India is the second largest business partner in Maldives.
- Maldives organized various exercises with India such as Ekuverin, Dosti , Ekta and operation shield etc.
- The Greater Male connectivity project by an Indian company is the largest infra project in Maldives so far.

Major Exercise with Sri Lanka-

- India is the third largest export destination in Sri Lanka.
- India is the first country to officially support Sri Lanka's debt restructuring program in IMF.
- **Major issue:** Fishermen crossing the sea border.
- **Important practice:** Mitra Shakti (Army), SLINEX

110. Which of the following districts of Uttar Pradesh share their border with Madhya Pradesh?

- I. Jhansi
- II. Fatehpur
- III. Etawah
- IV. Jalaun

Select the correct option:

- (a) Only I, III and IV
- (b) Only I and IV
- (c) Only II
- (d) all of the above

110. Answer: (a)

Madhya Pradesh-11 states along with the border of Uttar Pradesh-

- Sonbhadra
- Jhansi
- Jalaun
- Etawah
- Agra
- Mirzapur
- Prayagraj
- Chitrakoot



- Banda
- Mahoba
- Lalitpur

111. Which district of Uttar Pradesh has been listed under the 'One District, One Product' scheme for Munj Product?

- (a) Azamgarh
- (b) Prayagraj
- (c) Mirzapur
- (d) Auraiya

111. Answer: (b)

One District One Product is a flagship initiative of Uttar Pradesh govt in order to identify, brand, and market one product from every district in the state. Under the scheme some of the products identified are:-

- Azamgarh - Black clay artefacts
- Etawah - Clothing Profession
- Prayagraj - Moon Products
- Mirzapur - Carpet
- Etah - Ghungroo, Beckle and Brass Products
- Auraiya - Milk processing (native ghee)

112. Which date has the Government of India decided to celebrate as 'Constitution Murder Day'?

- (a) 25 June
- (b) 15 August
- (c) 26 January
- (d) 2 October

112. Answer: (a)

- On **12 July 2024**, **Central Government** issued a **gazette notification** declaring **June 25** which was the **date of commencement of emergency as Constitution Murder Day**.
- **This day is in remembrance to the immense contribution of all those who suffered the inhuman suffering in the Emergency of 1975.**
- **On 25 June 1975, an Emergency was declared in the country for 21 months.**
- President Fakhruddin Ali Ahmed signed the order of emergency at the request of then Prime Minister Indira Gandhi. After which, **Indira Gandhi the then PM** announced emergency on the radio.

113. What is the name of Piyush Pandey's book based on Manoj Bajpayee's biography?

- (a) Manoj Bajpayee: The Untold Story
- (b) Manoj Bajpayee: The Complete Biography
- (c) Manoj Bajpayee: The Definitive Biography
- (d) Manoj Bajpayee: The Incredible Journey

113. Answer: (c)

Name of Piyush Pandey's book based on Manoj Bajpayee's biography is:-

"Manoj Bajpayee: The Definitive Biography", this book by journalist **Piyush Pandey** gives readers an intimate glimpse into the life of one of India's most respected actors, who stands out in the world of **celebrity biographies** for his **honesty and inspiring narrative**.



114. Recently which award has been given to 'P. Geetha' for the work "Aan Thachukal" (Male creations)?
- Sahitya Akademi Award
 - K. Saraswathi Amma Award
 - Bharat Ratna
 - Padma Shri

114. Answer: (b)

- For the significant recognition of **feminist literature and studies, writer, critic and feminist activist P. Geetha** has been awarded the first **K. Saraswathi Amma Award**.
- WINGS (Women's Integration and Growth Through Sports)** Kerala, this prestigious award marks a significant moment in the acknowledgement of feminist contributions to **literature and social discourse**.
- P. Geetha's** groundbreaking work "Aan Thachukal" (Male creations), an analysis of **M.T. Vasudevan Nair's** screenplays, won her the prestigious award.

115. Who has been honoured with the Spice Award 2024 instituted by ICAR-Indian Institute of Spices Research?
- Sopana Kallingal
 - Niru Yadav
 - Mohini Verma
 - Radhika Merchant

115. Answer: (a)

About Spice Award 2024:-

- Sopana Kallingal of **Kallingal Plantation, Thrissur** received the **Spice Award 2024** instituted by **ICAR- Indian Institute of Spices Research**.
- The award has been given to her for his initiatives in **enterprise diversification and integrated crop management** strategies, promoting a sustainable spice-based crop system.
- The Spice Awards** is an annual event that primarily aims to honour **Asian and Indian food in Scotland**.

116. 'Project PARI' is an initiative of which ministry?

- Ministry of Agriculture
- Ministry of Women and Child Development
- Ministry of Culture
- Ministry of Education

116. Answer: (c)

- Project PARI (Public Art of India)** is an initiative of the **Ministry of Culture, Government** of India.
- This is being implemented by Lalit Kala Academy and National Gallery of Modern Art.
- It aims to bring out the folk art drawing inspiration from **thousands of years of artistic heritage (folk art/folk culture)** while incorporating **modern themes and techniques**.

117. Name the spacecraft that has recently become India's first space-based solar observatory mission to complete its first halo orbit around the Sun-Earth Lagrangian point 1 (L1 point).

- XPoSat
- Aditya-L1
- Bandwagon-1
- Astrosat

117. Answer: (b)



About Aditya-L1:-

- On **July 2, 2024**, **Aditya-L1 spacecraft**, India's first space-based solar observatory mission at Lagrangian point 1 (L1), will complete its first halo orbit around **the Sun-Earth L1 point**.
- A spacecraft in a **halo orbit** takes **178 days** to complete one revolution around **L1**.
- Aditya-L1 is the **first space-based Indian mission** to study the sun from the **Lagrangian point 1 (L1)** of the sun-earth system which is roughly 1.5 million kilometres from Earth.
- The project was initially **proposed as Aditya-1**, a **400 kg class** satellite carrying a single payload, the Visible Emission Line Coronagraph (VELC).
- It was however **renamed 'Aditya-L1 mission'** since the satellite was positioned in the hallowed orbit of the Sun-Earth system's Lagrangian point 1 (L1).
- Named after one of many Sanskrit names for the Sun- Aditya- is scheduled to be launched from **Sriharikota, Andhra Pradesh** using the **Polar Satellite Launch Vehicle (PSLV-XL)**.
- The mission has **seven payloads on board** to observe the photosphere, chromosphere, and the outermost layers of the sun viz.,
 - Visible Line Emission Coronagraph (VELC),
 - Solar Ultraviolet Imaging Telescope,
 - Aditya Solar Wind Particle Experiment,
 - Plasma Analyser Package for Aditya,
 - Solar Low Energy X-ray Spectrometer,
 - High Energy L1 Orbiting X-ray Spectrometer,
 - Magnetometer.
- The mission will **capture near-simultaneous photos** of the many layers of the Sun's atmosphere, revealing how **energy is routed and transported from one layer to the next**.

118. Which company has recently launched the world's first CNG-powered motorcycle?

- (a) Bajaj
- (b) Hero Moto Corp
- (c) Honda Motor
- (d) TVS

118. Answer: (a)

- **Bajaj Auto** launched the world's first **CNG** -powered **motorcycle, Bajaj Freedom 125**.
- This **bike** will run on both **CNG** and **petrol**.
- One can switch between **CNG** and **petrol** by pressing a button.

119. With whom has the Indian Olympic Association recently partnered as official principal partner for the Olympic Games from 2024 to 2028?

- (a) BPCL
- (b) Reliance Industries
- (c) HPCL
- (d) IOCL

119. Answer: (a)

- **Bharat Petroleum Corporation Limited (BPCL)** has recently signed an agreement with the Indian Olympic Association (IOA) as the Official Principal Partner for the Paris 2024 Olympics to Los Angeles 2028 Olympics.
- Currently the IOA President is **PT Usha**.



120. Which country recently joined SCO as the 10th member?

- (a) Afghanistan
- (b) Belarus
- (c) Mongolia
- (d) Turkmenistan

120. Answer: (a)

- SCO originated from the “Shanghai Five,” formed in 1996, consisting of China, Russia, Kazakhstan, Kyrgyzstan, and Tajikistan.
- It was created to address concerns about extremist religious groups and ethnic tensions following the dissolution of the USSR in 1991.
- **The 24th meeting** of the Council of **Heads of State of the Shanghai Cooperation Organisation (SCO)** was held on 4 July 2024 in **Astana**, the capital of **Kazakhstan**.
- President of **Kazakhstan Kassym-Jomart Tokayev** hosted the summit.
- **Eurasian** country **Belarus** was admitted as **the 10th full member of the SCO**.

121. Match List-I with List-II:

| List-I (Appointment in 2024) | List II (Appointees) |
|-----------------------------------|----------------------|
| A. New Prime Minister of UK | 1. K.P. Sharma Oli |
| B. New Prime Minister of Estonia | 2. Keir Starmer |
| C. Elected as President of Rwanda | 3. Kristen Michal |
| D. New Prime Minister of Nepal | 4. Paul Kagame |

Select the correct answer from the code given below:

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 1 | 2 | 3 | 4 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 2 | 3 | 4 | 1 |
| (d) | 4 | 3 | 2 | 1 |

121. Answer: (c)

About the new Prime Minister of UK:-

- **Buckingham Palace** in Britain has announced that **King Charles** has invited **Labour Party** leader **Keir Starmer** to **form a new government**. The **Labour Party** has won a big victory in the results of the general elections.
- **Under Starmer’s leadership**, the party won **412 seats**, ending **14 years of rule of the Conservative Party**.

New Prime Minister(PM) of Estonia:-

- On **23 July 2024**, **Estonian President Alar Karis** swore in **Kristen Michal**, chairman of the centrist **Reform Party**, as the **new Prime Minister (PM)** of Estonia.

Election as President of Rwanda:-

- **Paul Kagame** has been re-elected as **President of the Republic of Rwanda** for a **fourth five-year term from 2024 to 2029**.
- He has served as **the President of Rwanda since April 2000**.

New Prime Minister of Nepal:-

- **In Nepal**, **President Ramchandra Paudel** has appointed **Communist Party of Nepal – Unified Marxist Leninist** President **KP Sharma Oli** as **the next Prime Minister**. He will replace **Pushpa Kamal Dahal Prachanda**.



- Mr. Prachanda had lost the vote of confidence in the House of Representatives due to which a new government is being formed.

Current (in July 2024) President of Lithuania:-

- **Lithuania's President Gitanas Nausėda** was sworn in for a second term.
- **Mr Nausėda** was sworn in as President at a formal ceremony at **Lithuania's Parliament, the Seimas**.

122. What is the financial outlay for National Green Hydrogen Mission under Union Budget for 2024-25?
- (a) ₹ 600 crore
 - (b) ₹ 450 crore
 - (c) ₹ 300 crore
 - (d) ₹ 250 crore

122. Answer: (a)

- **The Centre** has issued guidelines for **funding of testing facilities, infrastructure and institutional support** for development of **standards and regulatory regime** under the **National Green Hydrogen Mission**. Budget 2024-25 has given financial outlay of ₹ 600 Cr for the mission.

National Green Hydrogen Mission (NGHM) is a key part of India's strategy to become energy self-reliant. The Union Cabinet approved the mission in January 2023, and the Ministry of New & Renewable Energy (MNRE) is implementing it. The mission's goals include:

- **Production capacity:** Achieve a production capacity of 5 million tonnes of green hydrogen per year by 2030
- **Renewable energy:** Add about 125 GW of renewable energy capacity
- **Fossil fuel imports:** Reduce fossil fuel imports by over Rs. 1 lakh crore
- **Greenhouse gas emissions:** Reduce greenhouse gas emissions by nearly 50 MMT annually

123. According to the Minister of State for Environment, what percentage of India's total area is covered with forests?
- (a) 21.71%
 - (b) 23.45%
 - (c) 19.32%
 - (d) 18.56%

123. Answer: (a)

- **Union Minister for Environment, Forest and Climate Change** According to **Minister of State Kirti Vardhan Singh**, the total forest area of the country is **7,13,789 square kilometres**, which is **21.71%** of the geographical area of the country.
- This information was given by **Minister of State Kirti Vardhan Singh** in the Lok Sabha on **22 July 2024**.
- **Minister of State Kirti Vardhan Singh** gave this information citing **the India State of Forest Report (ISFR) 2021**.
- India's **State of Forest Report** is prepared biennially by the **'Forest Survey of India'** located in **Dehradun, Uttarakhand**.
- **The Forest Survey of India** comes under the Union Ministry of Environment.
- **Madhya Pradesh** has the largest forest area in the country where **77,493 square kilometer** area of the state is covered with forests.

124. Recently in the news, Modified Interest Subsidy Scheme (MISS) is implemented by which two organisations?
- (a) NABARD and RBI
 - (b) RBI and SEBI



- (c) NABARD and SEBI
- (d) SEBI and NITI Aayog

124. Answer: (a)

About the Modified Interest Subsidy Scheme:-

- Central Government is planning to increase the upper limit of **short-term crop loans** under the **Modified Interest Subsidy Scheme (MISS)** from Rs 3 lakh to Rs 5 lakh.
- **Implemented from Kharif season in 2006-07, MISS provides concessional short-term credit to farmers and is active from 2022-23 to 2024-25.**
- Interest subsidy is available to various **banks** , and the scheme is **managed by NABARD and RBI** .
- Eligible recipients include **owner farmers, tenant farmers, and SHGs.**

125. ‘Carlos Alcaraz’, who won Wimbledon men’s singles title 2024, is a player from which country?

- (a) Czech Republic
- (b) France
- (c) Spain
- (d) Italy

125. Answer: (c)

- **Carlos Alcaraz of Spain and Barbora Krejckikova of the Czech Republic won the men’s and women’s singles titles respectively at the 2024 Wimbledon Tennis Championships.**
- It was **the second consecutive Wimbledon singles title** for Carlos Alcaraz and the first Wimbledon singles title for **Barbora Krejckikova** .

126. Recently, BSF organized “Grow with the Trees” tree plantation campaign in collaboration with which bank?

- (a) HDFC Bank
- (b) State Bank of India (SBI)
- (c) Punjab National Bank (PNB)
- (d) Canara Bank

126. Answer: (b)

- **Border Security Force (BSF)** in collaboration with **State Bank of India (SBI)** organised “**Grow with the Trees**” tree plantation drive at **BSF Headquarters** in Srinagar.
- The initiative, **aimed at creating a greener environment and** promoting the importance of tree plantation, was attended by **BSF officers, jawans, SBI officials and school children** .

127. Which traditionally isolated tribe was recently found in Peru due to encroachment and in search of food and safety?

- (a) Yanomami
- (b) Mashco Piro
- (c) Awa
- (d) Tarahumara

127. Answer: (b)

- Recently, the uncontacted **Mashco Piro tribe** has been discovered in **Peru**, due to **encroachment and in search of food and safety.**
- **The Mashco Piro** are the world’s largest uncontacted tribe, with over 750 members.
- They **traditionally** live in isolation in the Amazon rainforest.

They **occasionally** interact with the Yin community, with whom they share **a common language and ancestry**, but because they are **not immune to diseases** , these contacts can be **detrimental to their health.**



128. 'Davis Strait', recently seen in the news, is located between which two regions?

- (a) Alaska and Russia
- (b) Greenland and Canada
- (c) Iceland and Norway
- (d) Siberia and Canada

128. Answer: (a)

About 'Davis Strait' (Greenland and Canada):-

- A **microcontinent** has been discovered in the **Davis Strait** between **Canada and Greenland**.
- Formed millions of years ago due to **tectonic plate shifts**, it consists of **19-24 km thick continental crust**, now named the **Davis Strait proto-microcontinent**.
- The **strait**, which is **650 km from north to south and 200–400 miles wide**, connects the **Atlantic and Pacific Oceans** via the **Northwest Passage** but is **impassable in winter** because of region frozen with ice.



129. As per the 'World Economic Outlook (WEO)' update released by the International Monetary Fund (IMF) in July 2024, India's GDP (gross domestic product) growth for FY 25 (2024-25) is _____.

- (a) 7%
- (b) 6.6%
- (c) 7.1%
- (d) 8%

129. Answer: (a)

- **The International Monetary Fund (IMF)** released the report ' **World Economic Outlook (WEO)** Update, July 2024: A report of **the Global Economy**.
- The report has raised **India's gross domestic product (GDP) growth** forecast by 20 basis points (bps) to **7%** for FY25 (2024-25) from **6.8% (in April 2024)**.

130. Which highest civilian honour of Russia has been awarded to Prime Minister Narendra Modi?

- (a) The Order of St. Andrew the Apostle
- (b) The Order of Lenin
- (c) The Order of St. George
- (d) The Order of St. Peter



130. Answer: (a)

About The Order of St. Andrew the Apostle:-

- **Prime Minister Narendra Modi** was conferred **Russia's highest civilian honour, the Order of St Andrew the Apostle.**
- **Russian President Vladimir Putin** gave this honour to Mr Modi.
- The **award** recognises **Prime Minister Modi's outstanding contribution** to developing a privileged strategic partnership between Russia and India and promoting friendly relations between the two countries.

131. Where was the 'NATO Summit' held recently?

- (a) Paris
- (b) Ankara
- (c) Washington
- (d) London

131. Answer: (c)

- Recently the summit of **the military alliance NATO** was held in **Washington, America .**
- **Ukraine's** membership was discussed in detail in this conference.
- It also considered providing a **minimum of 40 billion euros (\$43.28 billion)** in **military aid to Ukraine** within the next year.
- North Atlantic Treaty Organization (NATO) is an intergovernmental military alliance formed in 1949 by Washington Treaty. It was established with the primary goal of providing collective defence against potential aggression, particularly from the Soviet Union during the Cold War era. **It is headquartered in Belarus.**
- Sweden is recently added as 32nd member of NATO

132. With reference to 'Angel Tax', consider the following statements:

1. It was first introduced in 2010 to prevent laundering of black money through share sales.
2. Recently Parliament proposed to abolish 'Angel Tax' for all classes of investors.

Which of the statements given above is/are correct?

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

132. Answer: (c)

- Recently, **the Union Finance Minister** while presenting **the Union Budget 2024-25 in the Parliament** proposed to abolish '**Angel Tax**' for all classes of investors.
- It was earlier levied on capital raised by **unlisted companies by issuing shares to Indian investors**, if the share price of the issued **shares** is observed to be higher than the fair market value of the company.
- **Additional funds raised at a price above the fair value were treated as income, which were taxed.**
- It originated from **Section 56(2) (viib) of the Income Tax Act, 1961 .**
- **It was first introduced in 2012 to curb the smuggling of black money through share sales.**

133. Which of the following statements best describes the term 'dark oxygen'?

- (a) Oxygen produced by bacteria living in the deep sea in the absence of sunlight.
- (b) Oxygen produced by plants growing in the deep sea.
- (c) Oxygen produced by underwater volcanic activity.
- (d) Oxygen produced by electrochemical activity in polymetallic nodules.



133. Answer: (d)

About Dark Oxygen:

- **Scientists have** recently discovered a strange phenomenon in **the deep ocean**, called **“dark oxygen.”**
- **The oxygen** that is produced in **complete darkness** thousands of feet below **the sea surface** is called **dark oxygen.**
- Until now it was believed that oxygen was only formed through **photosynthesis, a process that** requires **sunlight.**
- **Ocean plankton, floating plants, algae, and some bacteria** are the **primary elements responsible** for producing oxygen in the ocean.
- All these organisms are capable of performing **photosynthesis.**
- **Oxygen production at this depth** is thought to be impossible, as plants do not receive enough sunlight for **photosynthesis.**
- However, in this case, **oxygen** is not being produced by the plants.
- **Oxygen** is released from polymetallic bodies that look similar to **piles of coal.**
- These bodies, made of metals like manganese, iron, cobalt, nickel, copper and lithium, can produce oxygen through electrochemical activity even in the absence of light.
- They are splitting H₂O molecules into hydrogen and oxygen.

134. Which state has seen the most significant improvement in the SDG India Index from 2018 to 2023-24?

- (a) Gujarat
- (b) Maharashtra
- (c) Uttar Pradesh
- (d) Kerala



134. Answer: (c)

- **NITI Aayog** released the **SDG India Index 2023-24** and said that **despite global adversities, India** is moving ahead towards **the Sustainable Development Goals.**
- Between 2018 and 2023-24, the fastest growing states are **Uttar Pradesh** (score increased by 25), followed by **Jammu and Kashmir (21), Uttarakhand (19), Sikkim (18), Haryana (17), Assam, Tripura and Punjab (16-16), Madhya Pradesh and Odisha (15-15).**

135. Consider the following statements:

Statement-I: CEPI (the Coalition for Epidemic Preparedness Innovations) is a global partnership that works towards research against emerging infectious diseases.

Statement-II: Its goal is to make vaccines accessible to everyone in need.

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

- (a) Both Statement-I and Statement-II are correct and Statement –II is the correct explanation of Statement-I
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect
- (d) Statement-I is incorrect but Statement-II is correct

135. Answer (a)

- Recently, Union Minister Dr. Jitendra Singh inaugurated Asia’s first health research “Pre-clinical Network Facility” at the Regional Centre of Biotechnology in Faridabad, under the CEPI (Coalition for Epidemic Preparedness Innovations).



- CEPI is a global partnership that works to develop vaccines and other biological countermeasures to prevent epidemics and pandemics. Hence, statement I is correct.
- CEPI’s goal is to make these vaccines accessible to everyone in need, and its approach includes financial investments, partnerships, advocacy, and policy contributions. Its headquarter is located at Oslo in Norway. Hence, statement II is correct.

Here, statements I and II both are correct and statement II is the correct explanation of statement.

- 136.** Who are the laureates for the Nobel Prize in Physiology or Medicine 2023, recognized for their contributions to the development of effective mRNA vaccines against COVID-19?
- Ferenc Krausz and Pierre Agostini
 - Jon Fosse and Aleksey Yekimov
 - Katalin Karikó and Drew Weissman
 - Louis Brus and Anne L’Huillier

136. Answer (c)

The Nobel Prize for Medicine 2023 has been awarded to Katalin Karikó and Drew Weissman for developing the mRNA vaccine technology. This technology became the foundation for history’s fastest vaccine development programme during the COVID-19 pandemic.

Discovery- Their discovery is concerned about the nucleoside base modifications that enabled the development of effective mRNA vaccines against COVID-19.

What is mRNA- Messenger RNA (mRNA) is a type of single stranded RNA molecule that carries the genetic information from DNA to the ribosome. This information from mRNA is used to make proteins. mRNA serves as the intermediate between the genetic information stored in DNA and the functional proteins produced in cells. The mRNA molecule is synthesized from a DNA template in a process called transcription.

- 137.** Which stadium won the Pitch and Ground Award in IPL 2024?
- Wankhede Stadium
 - Eden Gardens
 - Rajiv Gandhi International Stadium
 - M. Chinnaswamy Stadium

137 Answer. (c)

- 2024 Indian Premier League (IPL 17), also branded as TATA IPL 2024, marked the 17th edition of the franchise Twenty20 cricket league in India, overseen by the Board of Control for Cricket in India. Ten teams participated in 74 matches held from 22nd March to 26th May 2024, across 13 cities in India.
- Chennai hosted both the opening ceremony and the final.
- Kolkata Knight Riders clinched their third IPL title by defeating Sunrisers Hyderabad with an impressive 8-wicket victory in IPL Final 2024.

| Player | Team | Award |
|--------------------|------|-------------------------------|
| Pat Cummins | SRH | Team Fair Play award |
| Harshal Patel | PBKS | Purple Cap (most wickets) |
| Ramandeep Singh | KKR | Catch of the season |
| Travis Head | SRH | Most fours |
| Sunil Narine | KKR | Player of the Season |
| Virat Kohli | RCB | Orange Cap (most runs) |
| Nitish Kumar Reddy | SRH | Emerging Player of the Season |
| Abhishek Sharma | SRH | Most sixes |

- Rajiv Gandhi International Stadium won the best pitch and ground award in IPL 2024.



138. Recently International Booker Prize 2024 for Kairos was given to?

- (a) Jenny Erpenbeck
- (b) Michael Hofmann
- (c) Howard Jacobson
- (d) Idris Elba

138. Answer (a)

Recently, the International Booker Prize 2024 was awarded to “Kairos” written by **Jenny Erpenbeck**, and translated by Michael Hofmann.

The International Booker Prize is awarded annually for the finest single work of fiction from around the world which has been translated into English and published in the UK and/or Ireland.

139. What is the rank of India in the ‘Global Hunger Index (GHI) 2023’?

- (a) 101
- (b) 111
- (c) 108
- (d) 131

139. Answer (b)

- The Global Hunger Index (GHI) is a tool for comprehensively measuring and tracking hunger at global, regional, and national levels. GHI scores are based on the values of four component indicators:
- Undernourishment: the share of the population with insufficient caloric intake.
- Child stunting: the share of children under age five who have low height for their age, reflecting chronic undernutrition.
- Child wasting: the share of children under age five who have low weight for their height, reflecting *acute* undernutrition.
- Child mortality: the share of children who die before their fifth birthday, partly reflecting the fatal mix of inadequate nutrition and unhealthy environments.
- Based on the values of the four indicators, a GHI score is calculated on a 100-point scale reflecting the severity of hunger, where 0 is the best possible score (no hunger) and 100 is the worst. Each country’s GHI score is classified by severity, from *low* to *extremely alarming*.
- In the 2023 Global Hunger Index, India ranks 111th out of the **125 countries with sufficient data to calculate 2023 GHI scores**. With a score of **28.7** in the 2023 Global Hunger Index, India has a level of hunger that is *serious*.

140. What is the Parliament of Myanmar called as?

- (a) Bundestag
- (b) The National Diet
- (c) People’s Majlis
- (d) Assembly of Union

140. Answer (d)

- Bundestag is the Parliament of Germany
- The National Diet is the Parliament of Japan
- People’s Majlis is the Parliament of Maldives
- Assembly of Union is the Parliament of Myanmar

141. When was the census work done for the first time in India?

- (a) 1852
- (b) 1862



- (c) 1881
- (d) 1872

141. Answer (d)

- In **1872 AD**, the **first Census** was done in India under the rule of **Lord Mayo**.
- The **First Official Census** in India was done in **1881 AD** under **Lord Rippon**.
 - It was called the First synchronised census.
- Since **1901**, it has been taking place every **decade**.
- **Census 2011**, is the **15th census and 7th after independence**. The slogan of Census 2011 is “**Our Census, Our Future**”.

142. Which among the following is not a secondary occupation?

- (a) Food Processing
- (b) Cement Production
- (c) Making yarn out of cotton
- (d) Mining

142. Answer (d)

Secondary sector consists of processing, manufacturing, and construction companies. The secondary sector produces goods from the natural products within the primary sector. The secondary sector includes the following business activities like Food Processing, Cement Production, Making yarn out of cotton etc.

Mining on the other hand is a part of primary sector of economy

143. Which of the following is not correctly matched?

- (a) Sansad Adarsh Gram Yojana – 2014
- (b) Hridaya Yojna – 2015
- (c) Start-up India – 2016
- (d) SATAT Scheme – 2017

143. Answer (d)

Sansad Adarsh Gram Yojana (SAGY) is a **village development project** launched by Government of India in October 2014, under which **each Member of Parliament will take the responsibility of developing physical and institutional infrastructure in three villages by 2019**.

HRIDAY scheme called National Heritage City Development and Augmentation Yojana was launched by the Ministry of Housing and Urban Affairs on 21st January 2015. This scheme was introduced to preserve and revitalize the rich cultural heritage of the country. HRIDAY scheme aims in the conservation of heritage, urban planning and in increasing the economic growth of the heritage cities.

Startup India is a **flagship initiative launched by the Government of India in January, 2016 to build a strong eco-system for nurturing innovation and startups** in the country which will drive economic growth and generate large scale employment opportunities.

Launched in October 2018, the **SATAT Scheme** is a collaborative effort between the Ministry of Petroleum and Natural Gas and several oil-related public sector units, including Bharat Petroleum Corporation and Hindustan Petroleum Corporation. Its primary objective is to establish Compressed Biogas production facilities and make this eco-friendly fuel available for automotive use.

144. Consider the following statement and identify which of the following is not correct with respect to budget 2024-25?

- (a) GDP for Budget FY 2024-25 (Regular) is estimated at Rs. 3,26,36,912 crore.
- (b) Capital expenditure in BE 2024-25 reflects an increase of 16.9 per cent.
- (c) 2 lakh crore has been allocated to the Department of Economic Affairs for New Schemes.
- (d) Fiscal deficit estimated in the budget is 5.9%



144. Answer (d)

- **Constitutional provision:** As per **Article 112** of the Indian Constitution, the Union Budget is a statement of the government's estimated receipts and expenditures.
 - It is also known as the **Annual Financial Statement of the Government**; however, the term **budget** is not mentioned in the Constitution.
- **Key Budget documents:** Apart from Budget Speech, other major documents include:
- **Annual Financial Statement (Article 112)**
- **Demands for Grants (Article 113)**
- **Finance Bill (Article 110)**
- Fiscal Policy Statements mandated under the **FRBM Act, 2003**, including
 - The Macro-Economic Framework Statement and
 - The Medium-Term Fiscal Policy cum Fiscal Policy Strategy Statement.
- **Additional Documents:** Other explanatory documents presented include:
 - Expenditure & Receipt of Budget, Expenditure Profile, Budget at a Glance, Memorandum Explaining the Provisions in the Finance Bill, Output Outcome Monitoring Framework, Key Features of Upcoming Financial Year Budget, and implementation of Budget Announcements for the Closing financial year.

Finance Minister presented the **Union Budget for 2024-25** on July 23, 2024. Earlier, interim budget 2024 was presented in February 2024.

Key highlights:

- GDP for Budget FY 2024-25 (Regular) is estimated at Rs. 3,26,36,912 crore.
- Capital expenditure in BE 2024-25 reflects an increase of 16.9 per cent.
- 2 lakh crore has been allocated to the Department of Economic Affairs for New Schemes.
- fiscal deficit estimated in the budget is 4.9%, Revenue deficit is 1.8% and Primary deficit is 1.4%.

145. Consider the following statements with reference to 'In-situ conservation':

1. In-situ conservation is when plants or organisms are preserved where they are naturally found.
2. Seed bank is a type of in situ conservation.

Which of the above statements is/are correct?

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

145. Answer: (a)

In-situ and ex-situ conservation-

- Biodiversity is conserved in two ways.
 - In-situ
 - Ex-situ

In-situ:

- In-situ conservation is that in which plants or animals are conserved where they are naturally found.
- Example - National Park, Sanctuaries, Sacred grooves etc.

Ex-situ:

- In ex-situ conservation, plants or animals are conserved by taking them to another safe place.
- Examples - Zoo, Botanical gardens, Seed banks etc.
- From the point of view of biodiversity conservation, in-situ is considered to be the best method of conservation.



146. Consider the following types of organisms:

1. Copepods
2. Cyanobacteria
3. Diatoms
4. Foraminifera

Which of the above is/are primary producers in the food chains of oceans?

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

146. Answer (a)

- The bottom level of the ocean food chain is made up primarily of single-celled organisms called phytoplankton. They are primary producers in food chain of ocean ecosystem.
- Examples of phytoplankton include cyanobacteria, silica-ended diatoms, din flagellates, green algae, and chalk-coated coccolithophores.
- Primary consumers in the ocean include zooplankton, small fishes, crustaceans and copepods.
- Foraminifera are single celled heterotrophic organisms which consumes smaller organisms and organic matter.
- These include fish such as sardines, lobsters, herring, and menhaden.
- Such small fish eat large quantities of zooplankton. However, they are often eaten by the animals.

147. Arrange the following Acts in the order of their implementation:

1. Air Act
2. Water Act
3. Environment Act
4. Forest Conservation Act

Code:

- (a) 1, 2, 3, 4
- (b) 1, 3, 2, 4
- (c) 2, 4, 1, 3
- (d) 2, 1, 3, 4

147. Answer: (c)

- Air pollution & control Act was passed in 1981 for contral & abatement of pollution it entrust CPCB as body to enforce this act.
- Water prevention and control Act 1974 was enacted to establish an institutional structure for preventing and abating water pollution.
- Environment protection Act was formulated on 1986 to protect & safe gard environment.
- Forest Act 1980 was enacted to ensure cnservation of forest and its resource.

148. Which of the following gases is produced due to human activities in the emission of greenhouse gases?

1. Carbon dioxide
2. Hydrogen dioxide
3. Nitrous oxide
4. Sulphur dioxide



Select the correct answer using the code given below:

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

148. Answer: (d)

Causes of climate change:

- Climate change is happening due to both natural and human causes, in which human causes have a greater contribution.

The following human activities can be seen in human causes.

- Increase in emission of greenhouse gases such as carbon dioxide, methane, nitrous oxide, sulfur dioxide etc. is a major reason for increase in average temperature of the earth.
- Change in land use is also responsible for this as it has increased the albedo of the surface.
- Apart from this, activities like deforestation, animal husbandry, increase in agriculture, use of nitrogen fertilizers in agriculture etc. are also responsible for climate change.
- There are primary 10 GHGs of these H_2O , CO_2 , CH_4 , N_2O , SO_2 are naturally occurring where as perfluoro carbons, hydrocarbons and sulphur hexafluorides are produced due to industrial process.

149. Consider the following statements with reference to 'ozone':

1. Ozone acts as a harmful pollutant in the stratosphere.
2. It is found in the stratosphere in very thin and transparent layer.
3. Fujita scale is used to measure ozone

Which of the above statements is/are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only
- (d) All of the above

149. Answer: (b)

About ozone:-

- Ozone (Ozone- O_3) is a gas formed by the combination of three atoms of oxygen which is found in very small quantities in the atmosphere.
- Its concentration is higher at a height of 30-32 km from the surface of the earth.
- It is a light blue coloured, strong smelling toxic gas.
- Ozone is measured by **Dobson** unit. Fujita scale is used to measure **tornado** severity.

Good & Bad Ozone:

- Ozone gas is found in the stratosphere as a very thin and transparent layer.
- Some amount of ozone is also found in the lower atmosphere (troposphere).
- This ozone is generally man-made which is called bad ozone.
- In the stratosphere it protects the earth from harmful ultraviolet radiation.
- In the troposphere ozone acts as a pollutant and due to being in very small quantity it causes harm to the earth. Despite this, it can cause harm to human lungs, tissues and plants.

150. Where is National Brain Research Institute located?

- (a) Sikandrabad
- (b) Lucknow



- (c) Kolkata
- (d) Gurgaon

150. Answer (d)

National Brain Research Centre is a research institute in **Manesar, Gurgaon, India**. It is an autonomous institute under the **Department of Biotechnology, Ministry of Science and Technology, Government of India**. The institute is dedicated to research in **neuroscience** and brain functions in health and diseases using multidisciplinary approaches. This is the first autonomous institute by DBT to be awarded by the **Ministry of Education, Government of India**.

