



# **Civils Cafe**

**IAS Study Circle**

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**CIVILS CAFE IAS**  
**All India Comprehensive**  
**Prelims Simulator Test 2**  
**PAPER-1**  
**(ANS)**

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## 1. A

**Statement 1 is incorrect.** It was the **Charter Act of 1853, not the Indian Councils Act of 1861** which separated for the first time the legislative and executive functions of the Governor-General's council.

**The Charter Act of 1853** provided for the addition of six new members called legislative councillors to the council, thereby established a separate Governor-General's legislative council which came to be known as the Indian (Central) Legislative Council.

**Statement 2 is incorrect.** It was the **Government of India Act 1919, not the Government of India Act 1909**, which declared for the first time the British Government's objective to gradually introduce responsible government in India.

**Statement 3 is correct. The government of India Act 1919 relaxed the central control over the provinces by demarcating and separating the central and provincial subjects.** The central and provincial legislatures were authorized to make laws on their respective list of subjects. But the structure of government continued to be centralized and unitary.

## 2. A

**Statement 1 is incorrect. Parliament can alter the name of any state under Article 3 of the Constitution by passing a law by simple majority** in that regard.

Article 3 authorizes the Parliament to:

- a. form a new state by separation of territory from any state or by uniting two or more states or parts of states or by uniting any territory to a part of any state;
- b. increase the area of any state;
- c. diminish the area of any state;
- d. alter the boundaries of any state; and
- e. alter the name of any state.

**Article 4 of the Constitution** declares that all the laws made for the purposes of

Article 2 and Article 3 are **not to be considered** as **amendments of the Constitution under Article 368**. Hence, all such laws can be **passed by a simple majority** and by the ordinary legislative process in the Parliament.

**Statement 2 is incorrect.** The Supreme Court has held that the power of Parliament to diminish the area of a state (under Article 3) **does not cover cession of Indian territory to a foreign country. Hence, Indian territory can be ceded to a foreign state only by amending the Constitution under Article 368.**

Consequently, for instance, the Parliament enacted the 9th Constitutional Amendment Act (1960) to transfer the Berubari Union to Pakistan.

**Statement 3 is correct. Article 2 empowers the Parliament to 'admit into the Union of India,** or establish, new states on such terms and conditions as it thinks fit'.

Thus, Article 2 grants two powers to the Parliament:

- a. the power to admit into the Union of India new states; and
- b. the power to establish new states.

The first refers to the admission of states which are already in existence, while the second refers to the establishment of states which were not in existence before.

### **3. C**

**Statement 1 is correct. Article 110(3) of the Constitution** of India states that 'if any question arises **whether a Bill is a Money Bill or not, the decision of the Speaker of the House of the People thereon shall be final**'.

The Speaker is under no obligation to consult any one in coming to a decision or in giving certificate that a Bill is a Money Bill. The Speaker's certificate on a Money Bill once given is final. A Money Bill cannot be referred to a Joint Committee of the Houses.

According to **Article 110(3)**, if there is a question regarding whether a bill is a money bill or not, the decision of the Speaker shall be final. However, the

**decision of the Speaker** under Article 110(3) is **subject to judicial review under certain circumstances.**

**Statement 2 is incorrect. Speaker can cast a casting vote.**

Under the constitutional provisions (**Article 100**), the **Speaker does not vote in the first instance.** But he can exercise a **casting vote in the case of a tie.** Thus, he can vote only when the House is divided equally on any question. Such a vote is called casting vote, and its purpose is to resolve a deadlock.

**Statement 3 is correct.** Speaker is the final interpreter on the following provisions within the House:

- a. The Constitution of India
- b. The Rules of Procedure
- c. Conduct of Business of Lok Sabha
- d. The Parliamentary precedents

**NOTE -**

The Speaker is elected by the assembly itself from amongst its members. Usually, the Speaker remains in office during the life of the assembly. However, he vacates his office earlier in any of the following three cases:

- a. If he ceases to be a member of the assembly;
- b. If he resigns by writing to the deputy speaker; and
- c. If he is removed by a resolution passed by a majority of all the then members of the assembly. Such a resolution can be moved only after giving 14 days advance notice.

#### 4. C

The Citizenship Act (1955) prescribes loss of citizenship by deprivation on following grounds - **By Deprivation** - It is a compulsory termination of Indian citizenship by the Central government, if:

- 1) The citizen has obtained the citizenship by fraud
- 2) The citizen has shown disloyalty to the Constitution of India. **Hence, statement 1 is correct.**
- 3) The citizen has unlawfully traded or communicated with the enemy during a war. **Hence, statement 2 is correct.**
- 4) The citizen has, within five years after registration or naturalisation, been imprisoned in any country for two years; and
- 5) The citizen has been ordinarily resident out of India **for seven years continuously. This will not apply if** he is a student abroad, or is in the service of a government in India or an international organisation of which India is a member, or has registered annually at an Indian consulate with his intention to retain his Indian citizenship. **Hence, statement 3 is incorrect.**

#### 5. A

**Statement 1 is correct. The rare diseases disproportionately affect children since the majority of them have genetic origin.**

WHO defines rare disease as often debilitating lifelong disease or disorder condition with a prevalence of 1 or less, per 1000 persons. These diseases affect a small number of people as compared to other commonly prevailing diseases. Despite being less prevalent and individually rare, collectively they affect between **6% and 8% of the total population** in any country.

These diseases mostly include **genetic diseases, rare cancers, degenerative diseases**, etc.

**Statement 2 is incorrect. Only certain rare diseases are included in the Rashtriya Aarogya Nidhi.**

Under the Umbrella Scheme of **Rashtriya Arogya Nidhi**, a component of rare

diseases has been included for providing **one-time financial assistance upto Rs.15 lakh** to patients belonging to families living **below threshold poverty line** for treatment of specified Rare Diseases amenable to **one-time treatment in Government hospitals.**

This covers disorders amenable to treatment with Hematopoietic Stem Cell Transplantation (HSCT) including such Lysosomal Storage Disorders (LSDs) for which Enzyme Replacement Therapy (ERT) is presently not available and severe form of Mucopolysaccharoidosis (MPS) type I within first 2 years of age.

The Ministry of Health and Family Welfare recently released the **draft National Policy for Rare Diseases**, which **aims to lower the high cost of treatment for rare diseases, with increased focus on indigenous research and local production of medicines.**

Salient Features of Draft Policy -

- 1) It **lists 450 diseases as rare** but does not provide a detailed roadmap on treatment.
- 2) It creates **three categories of rare diseases** -
  - a) diseases requiring one-time curative treatment,
  - b) diseases which need long-term treatment, but cost is low,
  - c) diseases that require life-long treatment and cost are high.
- 3) **Standardisation and monitoring:** A **National Registry for Rare Diseases** will be created at **Indian Council of Medical Research**. It will help to **arrive at a definition of rare diseases**, best suited to India. India **at present does not have a definition** of rare diseases of its own.
- 4) **Financial support for treatment:** Financial support will be provided to patients of rare diseases living below the poverty line under the umbrella scheme Rashtriya Arogya Nidhi.
- 5) **Institutional framework:** Certain medical institutes as **Centres of Excellence for Rare Diseases** will be notified by the government.
- 6) **Funding:** It recommends :
  - a) Creating a corpus fund at Central and State Level for rare diseases.
  - b) It also recommends crowdfunding as a source to fund treatment of rare diseases and advises hospitals to report such cases on digital platforms

to gather funds.

- 7) **Awareness generation:** It aims at developing materials for generating awareness in the general public, patients and their families and for training of health care providers.

## 6. A

If Jaiprakash has attained the age of 32 years in India, than he is eligible to be elected as

- 1) Member of Lok sabha - Minimum age required is 25 Years
- 2) **Prime Minister of India** - Minimum age required is **25 Years. Hence, statement 1 is correct.**
- 3) **Member of Rajya Sabha** - Minimum age required is **30 Years. Hence, statement 3 is correct.**
- 4) **Speaker of the Lok Sabha** - Minimum age required is **25 Years. Hence, statement 5 is correct.**

If Jaiprakash has attained the age of 32 years in India, than he is **not eligible** to be elected as

- 1) President of India - Minimum age required is 35 Years
- 2) **Vice-President of India** - Minimum age required is **35 Years. Hence, statement 2 is incorrect.**
- 3) **Governor of a State** - Minimum age required is **35 Years. Hence, statement 4 is incorrect.**

## 7. D

**The Supreme Court** has declared the following rights as part of **Article 21**:

- 1) Right to live with human dignity.
- 2) Right to a decent environment including pollution free water and air and protection against hazardous industries.
- 3) Right to livelihood.
- 4) **Right to privacy. Hence, statement 1 is correct.**
- 5) Right to shelter.
- 6) **Right to health. Hence, statement 2 is correct.**
- 7) Right to free education up to 14 years of age.
- 8) Right against bonded labour.
- 9) Right against solitary confinement.
- 10) **Right to speedy trial. Hence, statement 3 is correct.**
- 11) Right against handcuffing.
- 12) Right against inhuman treatment.



- 13) Right against delayed execution.
- 14) Right to travel abroad.
- 15) **Right to free legal aid. Hence, statement 4 is correct.**
- 16) Right against custodial harassment
- 17) Right to emergency medical aid.
- 18) Right to timely medical treatment in government hospitals.
- 19) Right not to be driven out of a state.
- 20) **Right to fair trial. Hence, statement 5 is correct.**
- 21) Right of prisoners to have necessities of life.
- 22) Right of women to be treated with decency and dignity.
- 23) Right against public hanging.
- 24) Right to road in hilly areas.
- 25) Right to information.
- 26) Right to reputation.
- 27) Right of appeal from a judgement of conviction
- 28) Right to family pension
- 29) Right to social and economic justice and empowerment
- 30) Right against bar fetters
- 31) Right to appropriate life insurance policy
- 32) Right to sleep
- 33) Right to freedom from noise pollution
- 34) Right to sustainable development
- 35) Right to opportunity.

### 8. C

**The governor, like the president, has situational discretion** (i.e., the hidden discretion derived from the exigencies of a prevailing political situation) in the following cases:

- 1) **Appointment of chief minister when no party has a clear-cut majority in the state legislative assembly** or when the chief minister in office dies suddenly and there is no obvious successor. **Hence, statement 1 is correct**
- 2) Dismissal of the council of ministers when it cannot prove the confidence of the state legislative assembly.

- 3) Dissolution of the state legislative assembly if the council of ministers has lost its majority. **Hence, statement 2 is correct.**

**The governor has constitutional discretion in the following cases:**

- 1) Reservation of a bill for the consideration of the President.
- 2) Recommendation for the **imposition of the President's Rule in the state. Hence, statement 3 is incorrect.**
- 3) While exercising his functions as the administrator of an adjoining union territory (in case of additional charge).
- 4) Determining the amount payable by the Government of Assam, Meghalaya, Tripura and Mizoram to an autonomous Tribal District Council as royalty accruing from licenses for mineral exploration.
- 5) Seeking information from the chief minister with regard to the administrative and legislative matters of the state.

The Constitution makes it clear that **if any question arises whether a matter falls within the governor's discretion or not, the decision of the governor is final** and the validity of anything done by him cannot be called in question on the ground that he ought or ought not to have acted in his discretion.

9. C

**Statement 1 is correct. Political Affairs Committee** - It is **chaired by the Prime Minister of India**. It deals with all policy matters pertaining to domestic and foreign affairs. It is the most powerful of all the Cabinet Committees, often described as a **"Super-Cabinet"**.

**Statement 2 is correct. Economic Affairs Committee** - It is **chaired by the Prime Minister of India**. It directs and coordinates governmental activities in the economic sphere.

**Statement 3 is incorrect. Parliamentary Affairs Committee** - It is **chaired by the Home Minister of India**, not by the Prime Minister of India. It looks after the progress of government business in the Parliament.

**Statement 4 is correct. Appointments Committee** - It is **chaired by the Prime Minister of India**. It decides all higher-level appointments in the Central Secretariat, Public Enterprises, Banks and Financial Institutions.

10. A

**Statement 1 is correct. Archaea are single-celled prokaryotic organisms** distinct from bacteria. Bacteria and Archaea are two types of prokaryotic organisms.

**Statement 2 is correct.** Archaea are slow-growing organisms and due to their unique metabolism, they can exist in very hot and very cold environments, making them resilient microorganisms that can survive attacks that destroy other bacteria. **Archaea can survive and grow in an oxygen-free environment (anaerobic)** and in extreme habitats such as hot springs, cold deserts and hypersaline lakes.

**Statement 3 is correct.** These are known for producing antimicrobial molecules, and for anti-oxidant activity with applications in **eco-friendly waste-water treatment**.

**Note:** Archaea are present in the human gut, mouth, and on the skin. For instance, methanogens belong to the Archaea domain.

Recently, a **new archaeon** was discovered in **Sambhar Salt Lake in Rajasthan** by the National Centre for Microbial Resource — National Centre for Cell Science (NCMR-NCCS) in Pune. It has been named **“Natrialba swarupiae”**.

11. B

**Pair 1 is incorrectly matched. It was the Charter Act of 1833 which made the Governor General of Bengal the Governor-General of India** and vested in him all civil and military powers.

This act created, for the first time, the Government of India having authority over the entire territorial area possessed by the British in India. And accordingly, Lord William Bentick was the first Governor- General of India.

**The Regulating Act of 1773 designated the Governor of Bengal as the ‘Governor-General of Bengal’.** It made the governors of Bombay and Madras presidencies subordinate to the governor-general of Bengal, unlike earlier, when the three presidencies were independent of each other.

**Pair 2 is correctly matched.** In the Pitt's India Act of 1784, the Company's

territories in India were for the first time called the **'British possessions in India'**. Also, through this act, the British Government was given the **supreme control over Company's affairs** and its administration in India.

**Pair 3 is incorrectly matched.** The **Charter Act 1813 abolished the trade monopoly of the company in India** i.e., the Indian trade was thrown open to all British merchants. However, **it continued the monopoly of the company over trade in tea with India and trade with China.**

12. B

**Statement 1 is incorrect.** Overseas Citizenship of India (OCI) is not to be misconstrued as 'dual citizenship'. OCI does not confer political rights. **The registered Overseas Citizens of India are not entitled to the rights conferred on a citizen of India under article 16 of the Constitution** with regard to equality of opportunity in matters of public employment.

**Statement 2 is correct.** Though this provision is not provided under the Constitution, the Citizenship Act of 1955 provides that the **children of the foreign diplomats posted in India will not be able to acquire Indian citizenship** by virtue of just being born in India.

13. B

**Statement 1 is incorrect.** The Constituent Assembly was constituted in November 1946 under the scheme formulated by the **Cabinet Mission Plan.**

The **Independence of India Act, 1947 conferred the legislative authority upon the respective Constituent Assemblies** of the two dominions of India and Pakistan.

**Statement 2 is correct.** Constituent Assembly was a **partly elected and partly nominated** body since,

- 1) The total strength of the Constituent Assembly was to be 389. Of these, 296 seats were to be allotted to British India and 93 seats to the princely states.
- 2) Seats allocated to each British province were to be divided among the three principal communities– Muslims, Sikhs and General (all except

Muslims and Sikhs), in proportion to their population.

- 3) **Elected representatives** - The representatives of each community were to be elected by members of that community in the provincial legislative assembly and voting was to be by the method of proportional representation by means of single transferable vote.
- 4) **Nominated representatives** - The representatives of the princely states were to be nominated by the heads of the princely states.

14. B

**Pair 1 is incorrectly matched. The Provincial Constitution Committee** was chaired by **Sardar Patel**. Sardar Patel also chaired the Advisory Committee on Fundamental Rights, Minorities and Tribal and excluded areas.

**Dr. B.R. Ambedkar** chaired the **Drafting Committee**.

**Pair 2 is correctly matched. Jawaharlal Nehru** chaired the following major committees –

- a. **Union Powers Committee**
- b. **Union Constitution Committee**
- c. **States Committee** (Committee for negotiating with the states)

**Pair 3 is correctly matched. Rules of Procedure committee** was chaired by **Dr. Rajendra Prasad**. In addition, the **Steering Committee** was also headed by Dr. Rajendra Prasad.

15. A

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**Papua New Guinea is not a claimant of territory in the South China Sea.**



16. B

**Statement 1 is incorrect.** The number of **schedules to the Constitution of India have increased from 8 at the time of its enactment to 12 at present.**

**Statement 2 is correct.** **Addition or deletion of the schedules to the Constitution requires the amendment to the Constitution under Article 368.**

For example, the **52<sup>nd</sup> amendment** to the Constitution **added the tenth schedule** to the Constitution in 1985 and **73<sup>rd</sup> and 74<sup>th</sup> amendment acts added schedule 11 and 12** to the Constitution in 1992.

**NOTE -**

The **9th Schedule** contains a list of central and state laws which cannot be challenged in courts. Currently, 284 such laws are shielded from judicial review. The Schedule was added to the Constitution by the First Amendment in 1951 along with Article 31-B with a view to provide a protective umbrella to land reforms laws to save them from being challenged in courts on the ground of violation of fundamental rights.

The **10th Schedule** of the Indian Constitution is popularly referred to as the 'Anti-Defection Law'. It was inserted by the 1985 Amendment (52<sup>nd</sup>) to the

Constitution. It defines defection and disqualification in order to get rid of the evil of political defection in the lure of political advantage and the lure of office, which certainly pose a threat to the essence of the parliamentary system that is stability.

The **11th Schedule** of the Indian Constitution was added in 1992 by the 73rd Constitution Amendment Act. This schedule contains 29 subjects. This schedule covers important topics such as Panchayat's powers, rural development, poverty alleviation, market, roads and drinking water etc.

The **12th Schedule** specifies the powers, authority and responsibilities of Municipalities. It has 18 matters. This schedule was added by the 74th Amendment Act of 1992.

17. A

**Statement 1 is correct. The Preamble of the Constitution** is based on the **Objective Resolution** drafted and moved by **Pandit Jawahar Lal Nehru** in the **Constituent Assembly in December, 1946**. The Objectives Resolution was adopted by the Constituent Assembly in January, 1947.

**Statement 2 is incorrect. The Preamble of the Constitution was enacted by the Constituent Assembly after the rest of the Constitution was already enacted.** The reason for inserting the Preamble at the end was to ensure that it was in conformity with the Constitution as adopted by the Constituent Assembly.

18. A

**Statement 1 is correct.** The powers and status of the Legislative Council is unequal to the Legislative Assembly of a state in the **Introduction of Money Bill**. Money Bill can be **introduced only in the assembly and not in the council**. The **council cannot amend or reject a money bill**. It should return the bill to the assembly within 14 days, either with recommendations or without recommendations.

**Statement 2 is correct. The Legislative Council cannot remove the council of ministers by passing a no- confidence motion.** This is because; the **council of ministers is collectively responsible only to the assembly**.

But, the council can discuss and criticize the policies and activities of the Government.

**Statement 3 is incorrect.** The powers and status of the **Legislative Council is equal to the Legislative Assembly of a state in the consideration of the reports of** the constitutional bodies like **State Finance Commission**, state public service commission and Comptroller and Auditor General of India.

**Note** - In the following matters, the powers and status of the council are unequal to that of the assembly:

- 1) The council has no effective say in the **ratification of a constitutional amendment bill**. In this respect also, the will of the assembly prevails over that of the council.
- 2) **The final power of passing an ordinary bill also lies with the assembly**. At most, the council can detain or delay the bill for the period of four months–three months in the first instance and one month in the second instance. In other words, the council is not even a revising body like the Rajya Sabha; it is only a dilatory chamber or an advisory body.
- 3) **The Council members do not participate in the election of the President of India** and representatives of the state in the Rajya Sabha. **The Legislative Assembly members on the other hand participate in the election of the President of India** and representatives of the state in the Rajya Sabha.
- 4) The final power to decide whether a particular bill is a money bill or not is vested in the Speaker of the assembly.
- 5) **When an ordinary bill, which has originated in the council and was sent to the assembly, is rejected by the assembly, the bill ends and becomes dead.**
- 6) **Finally, the very existence of the council depends on the will of the assembly.** The council can be abolished by the Parliament on the recommendation of the assembly.

The powers and status of the council are **broadly equal** to the assembly in:

- 1) The **introduction and passage of ordinary bills**. However, in case of the disagreement between the two Houses, the will of the assembly prevails



over that of the council.

- 2) Approval of ordinances issued by the governor.
- 3) **Selection of ministers including the chief minister.** Under the Constitution the ministers including the chief minister can be members of either House of the state legislature. However, irrespective of their membership, they are **responsible only to the assembly.**
- 4) Enlargement of the jurisdiction of the state public service commission.

19. C

**Statement 1 is correct. In the First Schedule of the Constitution, the States and Territories are specified.**

**The 'Union of India' includes only the states.** The expression **'Territory of India'** not only includes states, but also includes the Union territories and the territories that may be acquired by the Government of India at any future time. Hence, the **'Territory of India'** is a wider expression than the **'Union of India'**.

**Statement 2 is correct.** The Union territories and the **acquired territories are directly administered by the Central government.**

**Note** - Being a sovereign state, India can acquire foreign territories according to the modes recognized by international law, i.e.,

- a. **Cession** (following treaty, purchase, gift, lease or plebiscite),
- b. **Occupation** (hitherto unoccupied by a recognised ruler),
- c. **Conquest or subjugation.**

For example, India acquired several foreign territories such as Dadra and Nagar Haveli; Goa, Daman and Diu; Puducherry; and Sikkim since the commencement of the Constitution.

20. A

**Statement 1 is correct. The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN).** It was established in June 1945 by the Charter of the United Nations and began work in April 1946.

The seat of the Court is at the **Peace Palace in The Hague** (Netherlands). Of

the six principal organs of the United Nations, it is the only one not located in New York (United States of America).

**Statement 2 is incorrect.** The Court is composed of 15 judges, who are **elected, not appointed**, for terms of office of nine years **by the United Nations General Assembly and the Security Council**.

**Statement 3 is incorrect. The Court's role is to settle**, in accordance with international law, **legal disputes submitted** to it by States and to **give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies**. Thus, the types of cases dealt by the ICJ are - Sovereignty, boundary disputes, maritime disputes, trade, natural resources, human rights, treaty violations, treaty interpretation, etc.

**ICJ does not deal with cases related to actions of individuals. The International Criminal Court (ICC)** investigates and, where warranted, **tries individuals** charged with the gravest crimes of concern to the international community: **genocide**, war crimes, **crimes against humanity** and the crime of aggression.

The six principal organs of the United Nations are the

- a. General Assembly
- b. The Security Council
- c. The Economic and Social Council
- d. The Trusteeship Council
- e. The International Court of Justice, and
- f. The Secretariat.

#### **About International Criminal Court (ICC) –**

Types of Cases it deals with are those involving allegations of **Genocide, crimes against humanity, war crimes, crimes of aggression**. Its jurisdiction involves individuals accused of international crimes. It uses International Law, as **war crimes violate the Geneva Convention**.

- It derives its authority from the **Rome Statute**.
- It was established in 2002 and has its headquarters at **Hague**.
- It is **independent of the United Nations**. Thus, it is not governed by the

U.N. and can initiate prosecution without UN action. However, it can **receive referrals from UNSC.**

- Funding – It receives contributions from state parties to the Rome Statute; voluntary contributions from the U.N; voluntary contributions from governments, international organizations, individuals, corporations and other entities.
- **India is not a party to the ICC.**

## 21. C

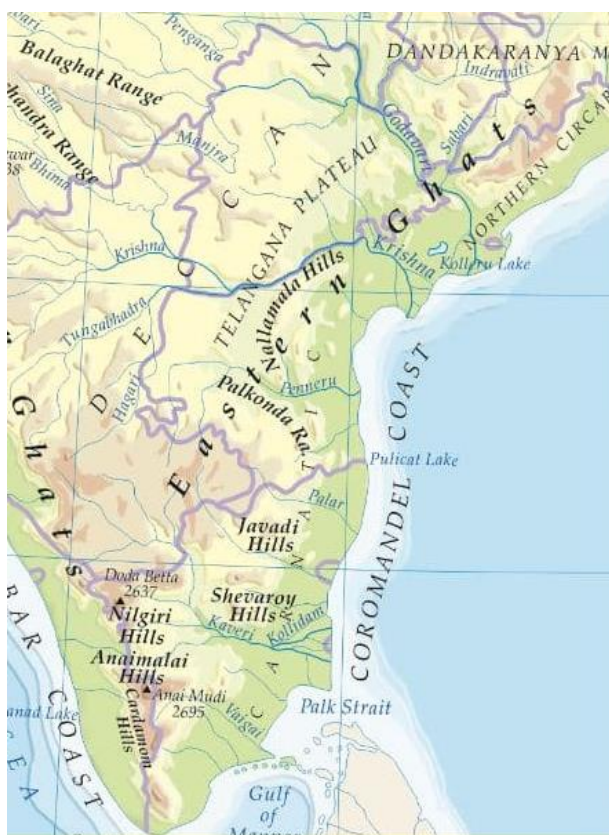
**Shevaroy Hills**, outlying range of the Eastern Ghats, north-central Tamil Nadu state occupy an area of about 390 square km. The highest peaks are in the southwest on the Yercaud plateau. Widespread **bauxite deposits** are the basis for aluminum-processing plants at Mettur and Yercaud. **Coffee** is extensively grown on the plateau. In 1845 the British established a hill station at Yercaud, which is now a resort and educational centre. The local Tamil name comes from a **local deity, Servarayan.**

**Javadhu Hills (also Jawadhi, Jawadhu Hills)** ( Rainfall clouds producing Hills For North Tamilnadu) ( **Ooty of Vellore** ) are an extension of the Eastern Ghats spread across parts of Vellore and Tiruvannamalai districts in the northern part of the state of Tamil Nadu in southeastern India. This range separates Vellore and Tiruvannamalai districts. The Indian astronomer Vainu Bappu selected the hills as the site of the **Kavalur Observatory** (VBO), which began operations in 1967.



**Palani Hills** - are a mountain range in the southern Indian states of Kerala and Tamil Nadu. The Palani Hills are an eastward extension of the Western Ghats ranges, which run parallel to the west coast of India. The Palani Hills **adjoin the high Anamalai range (Kerala) on the west**, and extend east into the plains of Tamil Nadu. It is also home to the main temple of **Lord Muruga**, who is worshipped as the primary god in Tamil Nadu. The range lies between

the **Cumbum Valley on the south**, which is drained by the **Vaigai River** and its upper tributaries, and the **Kongunadu region to the north**. The northern slopes are drained by the **Shanmukha River, Nanganji River, and Kodavanar River**, which are **tributaries of the Kaveri River**. The range lies mostly within Dindigul district, except in the western portion, where it forms the boundary between Dindigul district and Theni district to the south and Idukki District to the south west. The hill station of **Kodaikanal lies in the southern central portion** of the range. **Palani Hills joined with Anamalai Hills and Cardamom Hills at Anamudi peak in Kerala state.**



**Nallamala Hills** - A section of the Eastern Ghats which forms the eastern boundary of Rayalaseema region of the state of Andhra Pradesh and Nagarkurnool district of the state of Telangana. Nallamala Range, range of parallel hills and valleys of the Eastern Ghats in **eastern Andhra Pradesh state, southern India**. Located south of the Krishna River, the hills run north to south, parallel to the Coromandel Coast on the Bay of Bengal. The Nallamala Forests are probably **the largest stretch of undisturbed forest in South India apart from the Western Ghats and were particularly rich in game till the**

**1970s.** A large part of the forest is a part of the Nagarjunsagar-Srisaïlam Tiger Reserve, the largest tiger reserve in India that has a viable tiger population.

**22. A**

**Nagarjuna**, (flourished 2nd century CE), Indian Buddhist philosopher who articulated the **doctrine of emptiness (shunyata)** and is traditionally regarded as the **founder of the Madhyamika (“Middle Way”) school**, an important tradition of Mahayana Buddhist philosophy. He is best known in the West for his writings on emptiness, especially as set forth in his most famous work, the **Mulamadhyamakakarika (“Fundamental Verses on the Middle Way”)**.

For Nagarjuna, the ignorance that is the source of all suffering is the belief in svabhava, a term that literally means “own being” and has been rendered as “intrinsic existence” and “self nature.” It is the belief that things exist autonomously, independently, and permanently. To hold this belief is to succumb to the extreme of permanence. It is equally mistaken, however, to believe that nothing exists; this is the extreme of annihilation. Emptiness, which for Nagarjuna is the true nature of reality, is not the absence of existence but the absence of intrinsic existence.

**Other works –**

- **Ratnāvalī** (Precious Garland), subtitled (rajaparikatha), a discourse addressed to an Indian king (possibly a Satavahana monarch)
- **Sūtrasamuccaya**, an anthology of various sutra passages.
- **Vigrahavyāvartanī** (The End of Disputes)

**23. C**



**Satpura Range** - stretch for some 900 km across Maharashtra and Madhya Pradesh states. The range, the name of which means “Seven Folds,” forms the watershed between the Narmada (north) and Tapti (south) rivers.

**Maikala Range**, mountain range in Madhya Pradesh. It runs in a north-south direction and forms the eastern base of the triangular Satpura Range. The Narmada, Son, Pandu, Kanhar, Rihand, Bijul, Gopad, and Banas rivers run almost parallel from south to north and have carved extensive basins in the relatively soft rock formations of the Maikala Range. Vegetation varies from grass and thorny trees to deciduous trees such as teak and sal (*Shorea robusta*). The principal ethnic groups are the Gonds (numerically and historically the most important), Halbas, Bharais, Baigas, and Korkus

**Kaimur Range** is the eastern portion of the Vindhya Range, about 483 kilometres, extending from around Katangi in Jabalpur district of Madhya Pradesh to around Sasaram in Rohtas district of Bihar. The southern part of the Vindhyan Range up to Katangi is called Bhandar Range. Beyond this point the escarpment enclosing the land-locked valley of Sirampur and the hill range in continuation is called the Kaimur Range. The most important physiographic feature in eastern Madhya Pradesh is the great Kaimur escarpment. This forms the watershed or divide for two of the major rivers of peninsular India, the Son on the south and Tamsa or Tons on the north.

24. B

**Mudumalai National Park** is a national park in the **Nilgiri Mountains in Tamil Nadu**, south India. It covers 321 km<sup>2</sup> in the Nilgiri District and shares boundaries with the states of Karnataka and Kerala. The national park has been part of **Nilgiri Biosphere Reserve** since 1986 and was declared a **tiger reserve** together in 2007.

Mudumalai National Park covers 321 km<sup>2</sup> in the eastern hills of the Western Ghats; it is bordered in the west by **Wayanad Wildlife Sanctuary**, in the north by **Bandipur National Park** and in the east by **Sigur Reserve Forest**. In the south, it is bordered by **Singara Reserve Forest**. The **Moyar River** enters the national park in the south and is joined by five tributaries.

It is part of the **ecoregion South Western Ghats** moist deciduous forests. Mudumalai National Park and the adjacent Sigur Reserve Forest form an important wildlife corridor within the Nilgiri Biosphere Reserve and provide the **highest landscape connectivity for the Asian elephant** (*Elephas maximus*) population in the region.





Note –

- **Bandipur National Park** is a national park covering 868.63 km<sup>2</sup>) in Chamarajnagar district of **Karnataka**. It was established as a **tiger reserve** under Project Tiger in 1973. It has been part of the **Nilgiri Biosphere Reserve** since 1986. The Maharaja of the Kingdom of Mysore created a sanctuary of 90 km<sup>2</sup> in 1931 and named it the **Venugopala Wildlife Park**. The Bandipur Tiger Reserve was established under Project Tiger in 1973 by adding nearly 800 km<sup>2</sup> to the Venugopala Wildlife park. The park is flanked by the **Kabini river** in the north and the **Moyar river** in the south. The **Nugu river** runs through the park. The National Highways NH-181 and NH-766 pass through Bandipur national park. This road has been a major concern as speeding vehicles have killed many wild animals in spite of frequent warnings
- **Mukurthi National Park (MNP)** is a 78.46 km<sup>2</sup> protected area located in the western corner of the **Nilgiris Plateau west of Ootacamund hill station** in the northwest corner of Tamil Nadu. The park was created to protect its **keystone species, the Nilgiri tahr**. As part of the **Western Ghats**, it has been a UNESCO World Heritage Site since 1 July 2012. . At its southwest tip the peaks of this park straddle the northeast corner of **Silent Valley National Park** of Kerala

25. A

Have fun. Achieve dreams.

All are correct.

**Nokrek National Park**, the core area of **Nokrek Biosphere Reserve**, is a national park located approximately 2 km away from **Tura Peak in West Garo Hills** district of **Meghalaya**, India. **UNESCO** added the Nokrek Biosphere Reserve to its list of Biosphere Reserves in May 2009. Along with the **Balpakram National Park in South Garo Hills**, Nokrek is a hotspot of biodiversity in Meghalaya.

- The Nokrek region has a **remnant population of the red panda** that has generated curiosity across the world

- The Nokrek area is also an important habitat of the Asian elephant.
- The park had eight species of cats, ranging from the Royal Bengal tiger to **marbled cat** but the current status of the first is uncertain
- The Nokrek region is also an **Important Bird Area**.
- All important rivers and streams of the Garo Hills region rise from the Nokrek Range, of which the river **Simsang**, known as **Someshwari** when it emerges into Bangladesh at Baghmara, is the most prominent.



26. B

**Dhauri** -It has a sculpture of an elephant on the summit of a small hillock, which **also contains edicts of Asoka** (r. 268-232 BCE), the Maurya king of the Magadha empire with its capital at present day Patna.

- Dhauri hillock and the nearby village are located on the banks of **River Daya** where the **Kalinga battle of Asoka had taken place** in 261 BCE.
- The edicts and the elephant sculpture must have been commissioned by Asoka soon after.
- It's known for "**Dhauri Santi Stupa**", a peace pagoda monument which witnesses the great Kalinga War built by Japan Budhha Sangha and Kalinga Nippon Budhha Sangha



The Dhauli Major Rock Inscription of Ashoka. The front is shaped as an elephant. Dhauli, Puri District, India.

27. C



Russia is bounded to the north and east by the Arctic and Pacific oceans, and it has small frontages in the northwest on the Baltic Sea at St. Petersburg and at the detached Russian oblast (region) of Kaliningrad (a part of what was once

East Prussia annexed in 1945), which also abuts Poland and Lithuania. To the south Russia borders North Korea, China, Mongolia, and Kazakhstan, **Azerbaijan**, and Georgia. To the southwest and west it borders Ukraine, Belarus, Latvia, and **Estonia**, as well as Finland and Norway.

28. B



**Kaliningrad, Oblast (region)**, extreme western Russia. Most of the oblast is in the basin of the **Pregolya River** and its tributaries. **Formerly the capital of the dukes of Prussia and later the capital of East Prussia**, the city was ceded to the Soviet Union in 1945 under the Potsdam agreement.

The oblast is bordered by **Poland to the south, Lithuania to the north and east, and the Baltic Sea to the west**. It is impossible to travel overland between the oblast and the main contiguous portion of Russia without passing through at least two other countries

29. B

**Virdas are shallow wells dug in low depressions called jheels (tanks)**. They are found all over the **Banni grasslands**, a part of the **Great Rann of Kutch in Gujarat**. They are systems built by the **nomadic Maldharis**, who used to roam

these grasslands. Now settled, they persist in using virdas. These structures harvest rainwater.



30. A

**All are true**

The rock shelters on banks of the **River Suyal** at **Lakhudiyar**, about twenty kilometres on the **Almora– Barechina road**, in **Uttarakhand**. These are **prehistoric paintings**. **Lakhudiyar literally means one lakh caves**. The paintings here can be divided into three categories: man, animal and geometric patterns in white, black and red ochre. Humans are represented in stick-like forms. A long-snouted animal, a fox and a multiple legged lizard are the main animal motifs.

Wavy lines, rectangle-filled geometric designs, and groups of dots can also be seen here. One of the interesting scenes depicted here is of **hand-linked dancing human figures**. There is some superimposition of paintings. The earliest are in black; over these are red ochre paintings and the last group comprises white paintings.



31. C

The granite rocks of **Karnataka and Andhra Pradesh** provided suitable canvases to the **Neolithic man for his paintings**. There are several such sites but more famous among them are **Kupgallu, Piklihal and Tekkalkota**. Three types of paintings have been reported from here—paintings in white, paintings in red ochre over a white background and paintings in red ochre.

The subjects depicted are bulls, elephants, sambhars, gazelles, sheep, goats, horses, stylised humans, tridents, but rarely, vegetal motifs.

**Note –**

Have fun. Achieve dreams.

- **Piklihal** is a village near Mudgal in the Lingasugur taluk of **Raichur district in Karnataka**. Piklihal is a **neolithic period site**. The site was excavated by F. Raymond Allchin in 1952
- **Tekkalakote** is a Panchayat town, and **Neolithic site** in Siruguppa taluk of **Ballari district, Karnataka**
- **Kupgallu in Telangana**

32. B



### Note – NORTHEAST REGION

- The total population of Northeast India is 46 million with 68 percent of that living in Assam alone
- The region shares an international border of 5,182 kilometres (about 99 percent of its total geographical boundary) with several neighbouring countries –
  - 1,395 kilometres with **Tibet Autonomous Region** (after Chinese occupation of Tibet) in the north,
  - 1,640 kilometres with **Myanmar** in the east,
  - 1,596 kilometres with **Bangladesh** in the south-west,
  - 97 kilometres with **Nepal** in the west,
  - and 455 kilometres with **Bhutan** in the north-west.
- It comprises an area of 262,230 square kilometres (101,250 sq mi), almost 8 percent of that of India.

- **Guwahati** city in Assam is called the **Gateway to the North East** and is the largest metropolis in North East India.
- **Arunachal Pradesh** is the area-wise **largest state** in the northeast region. It covers an area of 83,743 square km.

33. A

All are correct.

### **Pabna (in Bengal) peasants' movement. of 1873-1885**

- The peasants of Pabna did not object to rent hikes, and, in fact between 1858 and 1873 they met the rent demands of their landlords without any resistance.
- At the root of the movement was the **tendency of the zamindars to annihilate the tenants' newly acquired occupancy rights**.
- Occupancy tenants were being converted into tenants-at-will through forcible written agreements.
- The peasants' growing knowledge of the new laws made them aware of their plight. Then there was the problem of **illegal dues in some places like Tripura**.
- In **1873 the Pabna peasants** formed an **agrarian league** which spread out the entire district very soon. Most of the newspapers which were pre-landlord (like *Amrita Bazar Patrika*) opposed the league.
- What is worth noting is that the **peasants did not defy the colonial authority** and declared that their **goal was to become the ryots of the 'Queen of England'**. They were **opposed to the harassment** and not to the payment of dues. They wanted to be the **'Queen's Ryots'**
- It was led by **Ishan Chandra Roy**
  - Ishan Chandra Roy is **known as "Bidrohi Raja or in English "Rebel King"**. It was supported by intellectuals such as R.C Dutt, Surendranath Banerjee, Bankim Chandra Chatterjee, etc. It was overall a **peaceful movement**
- It was often painted as a communal movement. But, leaders of the Pabna peasants - Kesab Chandra Roy and Sambhunath Pal were Hindus.



- For nearly a decade, from 1873 the Pabna peasants' movement undermined the landlord's perception of their right to fleece the peasants.
- Besides, the movement also spread to other areas like Dacca, Rajshahi, Bakergunje, Faridpur, Tripura and Bogra, etc.

34. D

**Dharwar System** [4 – 1 Billion Years]

- Formation period ranges from 4 billion years ago to – 1 billion years ago.
- Highly **metamorphosed sedimentary rock-system**. [formed due to metamorphosis of sediments of Archaean gneisses and schists].
- They are the oldest metamorphosed rocks.
- Found in abundance in the **Dharwar district of Karnataka**.
- Economically the most important rocks because they possess **valuable minerals** like high grade iron-ore, manganese, copper, lead, gold, etc.

**All except statement 3 are correct.**

- **Uranium deposits** occur in the Dharwar rocks.
  - Geographically, uranium ores are known to occur in several locations along the **Singbhum Copper belt**.
  - It is also found in **Udaipur, Alwar and Jhunjhunu districts of Rajasthan**,
  - **Durg district of Chhattisgarh, Bhandara district of Maharashtra**
  - **Kullu district of Himachal Pradesh.**
- Mineral Belt in the North-Western Region : This belt extends along Aravali in Rajasthan and part of Gujarat and minerals are associated with the Dharwar system of rocks.
  - Copper, zinc have been major minerals.
  - Rajasthan is rich in building stones i.e. sandstone, granite, marble.
  - Gypsum and Fuller's earth deposits are also extensive.
  - Dolomite and limestone provide raw materials for cement industry

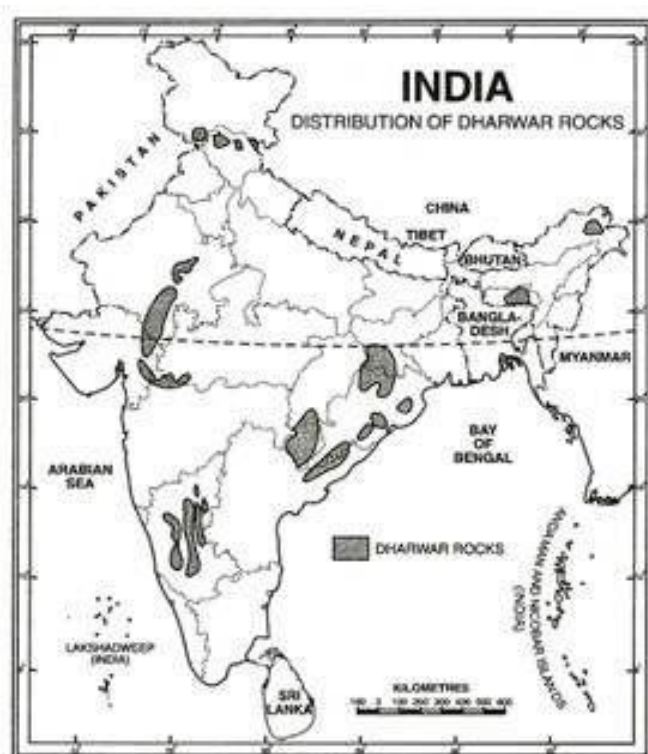


FIG. 2.3. India : Distribution of Dharwar Rocks

- **Manganese** occurs in almost all geological formations, however, it is mainly associated with the Dharwar system.
  - Odisha is the leading producer.
  - Small deposits are reported in Bijapur, Chikmagalur and Dharwar districts.
  - Karnataka is the second largest producer of manganese ore, accounting for 26 percent of the country's total productions.

35. C

**The Volga** is the **longest river in Europe**. **Situated in Russia**, it flows through Central Russia to Southern Russia and into the **Caspian Sea**. The Volga has a length of 3,531 km. It is also **Europe's largest river** in terms of average discharge at delta. It is widely regarded as the **national river of Russia**

- Four of the ten largest cities of Russia, including the nation's capital, **Moscow, are located in the Volga's drainage basin.**

- Volga is the longest river in Europe, and its **catchment area is almost entirely inside Russia**, though the **longest river in Russia is the Ob-Irtysch river system**.
- It belongs to the closed basin of the Caspian Sea, being the longest river to flow into a closed basin
- The Volga has many tributaries, most importantly the rivers **Kama, the Oka, the Vetluga, and the Sura**
- It discharges into the Caspian Sea below Astrakhan at 28 meters below sea level.
- At its most strategic point, it bends toward the **Don ("the big bend")**. **Volgograd, formerly Stalingrad**, is located there.

#### Note-

#### DON RIVER –

- The Don is the fifth-longest river in Europe.
- Flowing from **Central Russia to the Sea of Azov** in the Caucasus, it is one of Russia's largest rivers and played an important role for traders from the Byzantine Empire.
- Its **basin is between the Dnieper basin** to the west, **the lower Volga basin** immediately to the east, and the **Oka basin** (tributary of the Volga) to the north. Native to much of the basin were Slavic nomads.
- Thus, it is **not a tributary of Volga**

#### URAL RIVER-

- Known as **Yaik**, it flows through **Russia and Kazakhstan** in the continental border between Europe and Asia
- It originates in the southern **Ural Mountains** and discharges into the **Caspian Sea**.
- At 2,428 kilometres it is the **third-longest river in Europe after the Volga and the Danube**,
- It drains into the Caspian a few miles below Atyrau, where it forms a fine 'digitate' (tree-like) delta.
- **It is not a tributary of Volga.**

36. D

The Government of India appointed a three-member **States Reorganisation Commission in 1953** under the **chairmanship of Fazl Ali** to examine the issue of reorganization of states. Its other two members were **K.M. Panikkar and H.N. Kunzru**.

The commission identified four major factors that can be taken into account in any scheme of reorganisation of states:

- a. Preservation and strengthening of the unity and security of the country.
- b. **Linguistic and cultural homogeneity. Hence, statement 1 is correct.**
- c. **Financial, economic and administrative considerations. Hence, statement 2 is correct.**
- d. **Planning and promotion of the welfare of the people in each state as well as of the nation as a whole. Hence, statement 3 is correct.**

37. D

**Option d is correct**

From the various judgements, the following have emerged as 'basic features' of the Constitution or **elements of the 'basic structure'** of the constitution:

- 1) Supremacy of the Constitution
- 2) Sovereign, democratic and republican nature of the Indian polity
- 3) Secular character of the Constitution
- 4) Separation of powers between the legislature, the executive and the judiciary
- 5) Federal character of the Constitution
- 6) Unity and integrity of the nation
- 7) Welfare state (socio-economic justice)
- 8) **Judicial review - In L. Chandra Kumar case** a Bench of seven Judges of Supreme court unequivocally declared that the **power of judicial review over legislative action vested in the High Courts under Article 226 and in the Supreme Court under Article 32 of the Constitution** is an integral and essential feature of the Constitution, constituting part of its basic structure. **Hence, statement 1 is correct.**

- 9) Freedom and dignity of the individual
- 10) Parliamentary system
- 11) Rule of law
- 12) **Harmony and balance between Fundamental Rights and Directive Principles.** Chandrachud, chief Justice of India then, stated in **Minerva Mill's case**, the Indian constitution is founded on the bedrock of the balance between Parts III and IV to give absolute primacy to one over the other is to disturb the harmony of the constitution. This **harmony and balance between fundamental rights and Directive principles is an essential feature of the basic structure of the constitution. Hence, statement 2 is correct.**
- 13) Principle of equality
- 14) Free and fair elections
- 15) Independence of Judiciary
- 16) **Limited power of Parliament to amend the Constitution.** The Supreme Court in the **Minerva Mill's case ruled that the power of the parliament to amend the constitution is limited by the constitution.** Hence the parliament cannot exercise this limited power to grant itself an unlimited power. In addition, a majority of the court also held that the parliament's power to amend is not a power to destroy. **Hence, statement 3 is correct.**
- 17) Effective access to justice
- 18) Principles (or essence) underlying fundamental rights
- 19) Powers of the Supreme Court under Articles 32, 136, 141 and 142
- 20) Powers of the High Courts under Articles 226 and 227

**38. D**

**Statement 1 is correct. Fundamental duties are applicable only to the citizens of India** as mentioned in the Article 51 A of the Constitution.

Article 51 A of the Constitution states that –

“It shall be **the duty of every citizen of India**

- 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 which inspired our 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; to renounce practices derogatory to the dignity of women;
- to value and preserve the rich heritage of our composite culture;
- to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;
- to develop the 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 endeavour and achievement.

**Statement 2 is correct. Protection against arrest and detention under Article 22 is not available to enemy aliens,** who are the subjects of that country that is at war with India. Protection under **Article 22 is available to citizens as well as friendly aliens.**

**Statement 3 is correct. Right to equal protection of law under Article 14** of the constitution is available to **all the citizens as well as aliens.**

Article 14 states that –

“The State shall not deny **to any person** equality before the law or the equal protection of the laws within the territory of India.”

**39. B**

**Pair 1 is correctly matched.** Feature of **Judicial review** is borrowed from the constitution of the **United States of America.**

**Pair 2 is incorrectly matched.** The feature of **residuary powers with the Centre** is borrowed from the **Canadian Constitution**.

**Pair 3 is correctly matched.** The feature of **Procedure established by law** is borrowed from the **Japanese Constitution**.

**Pair 4 is correctly matched.** The feature of the **Fundamental Duties** is borrowed from the **Soviet Constitution**.

40. C

**The Global Social Mobility Index is an index prepared by the World Economic Forum in the Global Social Mobility report.**

Recently, WEF has come out with its **first-ever Global Social Mobility Report, 2020**. The inaugural ranking ranked 82 countries. India ranks 76th out of 82 economies. It ranks 41st in lifelong learning and 53rd in working conditions.

- The Index measures the **inter-generational social mobility** in different countries in relation to socioeconomic outcomes.
- The Index assesses the 82 economies on "10 pillars" spread across the following five key dimensions of social mobility:
  - Health;
  - Education (access, quality and equity, lifelong learning);
  - Technology;
  - Work (opportunities, wages, conditions);
  - Protection and Institutions (social protection and inclusive institutions).

41. A

**SANKALP is a Centrally Sponsored Scheme** collaborated with the **World Bank**.

**STRIVE is a Central Sector Scheme** assisted by the **World Bank** to improve the skills training provided through Industrial Training Institutes (ITIs).  
**Statements 1 and 2 are correct.**

The SANKALP scheme and STRIVE scheme both are under the **Ministry of Skill Development and Entrepreneurship**. Hence statement 3 is not correct.

42. C

Poshan Tracker is a mobile based application for ensuring real-time monitoring of stunting, wasting, underweight prevalence among children and last mile tracking of nutrition services delivery.

To promote the nutritional status of women and children, a transparent and enabling environment is being created that nurtures health, wellness and immunity.

Tracking of services to the end beneficiary at a click of a button ensures Services like Take Home Ration (THR) and Hot cooked Meal (HCM), vaccination for Infants and Pregnant Women.

Tracking of nutritional status is done by **Anganwadi workers** under Poshan Abhiyan Scheme.

Hence statements 1 and 3 are correct and statement 2 is not correct.

43. B

The Scheme envisages providing cash incentive amounting to ₹ 5,000/- in three installments directly to the Bank/Post Office Account of **Pregnant Women and Lactating Mother (PW&LM)** in DBT Mode during pregnancy and lactation.

It is a measure for women empowerment through wage compensation and promotion of health seeking behavior.

Hence statement 1 is not correct and statement 2 is correct.

44. D

**SVAMITVA**, a **Central Sector Scheme** of the **Ministry of Panchayati Raj** was nation-wide launched by the Hon'ble Prime Minister on National Panchayati Raj



Day, 24th April 2021 after successful completion of pilot phase of scheme (2020-2021) in 9 states. **Hence statement 1 is not correct.**

**SVAMITVA (Survey of Villages and Mapping with Improved Technology in Village Areas)** aims to provide the 'record of rights' to village household owners possessing houses in inhabited rural areas and issuance of property cards to the property owners. Property owners in rural inhabited areas can download the Aadhaar authenticated property card on their mobile phones through the DigiLocker application. **Hence statement 2 is not correct.**

**INSPIRE Awards--MANAK (Million Minds Augmenting National Aspiration and Knowledge)** is aligned with the 'Start-up India' initiative and is being executed by the Department of Science and Technology with National Innovation Foundation – India (NIF), an autonomous body of DST. **Under the scheme the students (age group of 10-15 years and studying in classes 6 to 10) are invited from all government or private schools throughout the country, irrespective of their educational boards (national and state) to pursue Science and a career in Research.**

45. C

**RBI retail direct scheme**

- Under the scheme RBI allows **retail investors to open gilt accounts** with the central bank to invest in Government securities (G-secs) directly.
- Under the scheme, small investors can buy or sell government securities (G-Secs), or bonds directly **without an intermediary like a mutual fund.**
- It is similar to placing funds in debt instruments such as fixed deposits in banks

**Hence statements 1 and 3 are correct and statement 2 is not correct.**

46. B

**NIPUN BHARAT PROGRAMME**

- This initiative is being launched as a part of **NEP (National Education Policy) 2020.**

- The NIPUN Bharat Programme aims to cover the learning needs of children in the **age group of 3 to 9 years**.
- NIPUN Bharat is envisaged to support and encourage students, along with their schools, teachers, parents, and communities, in every way possible, to help realise the true potential of our children and propel the country to new heights.
- Target of the programme is to **ensure that every child in the country attains foundational literacy and numeracy by the end of Grade 3, by 2026-27**.

Hence statements 2 and 3 are **NOT** correct and statement 1 is **correct**.

47. A

#### **Pradhan Mantri Kisan Maan DhanYojana**

- Eligibility:- **Small and Marginal Farmer (SMF)** – a farmer who owns **cultivable land upto 2 hectare as per land records** of the concerned State/UT.

#### **Salient features of the scheme:**

- It is a **centrally sponsored scheme** for the farmers which are **age groups between 18 and 40 years**
- The scheme is **voluntary and contributory for farmers**.
- A monthly pension of **Rs. 3000/- will be provided to them on attaining the age of 60 years**.
- The farmers will have to **make a monthly contribution of Rs.55 to Rs.200**, depending on their age of entry, in the Pension Fund till they reach the retirement date i.e. the age of 60 years.
- The **Central Government will also make an equal contribution** of the same amount in the pension fund.
- The **spouse is also eligible** to get a separate pension of Rs.3000/- upon making separate contributions to the Fund.
- The Life Insurance Corporation of India (**LIC**) **shall be the Pension Fund Manager** and responsible for Pension payout

Hence statements 1 and 2 are **correct** and statement 3 is **not correct**.

48. D

**Pradhan Mantri Fasal Bima Yojana**

- PMFBY replaced the National Agricultural Insurance Scheme (NAIS) and the Modified National Agricultural Insurance Scheme (MNAIS).
- To provide comprehensive insurance coverage against crop failure, thereby assisting farmers in stabilizing their income.
- All food and oilseed crops, as well as annual commercial/horticultural crops, for which past yield data is available.
- Farmers must pay a 2 per cent premium for all Kharif crops and a 1.5 per cent premium for all Rabi crops. The premium is 5% in the case of annual commercial and horticultural crops.

**Statements 1 , 2 and 3 are correct.**

49. B

**The Khadi and Village Industries Commission (KVIC)** launched a project named **Bamboo Oasis on Lands in Drought (BOLD)** from the village Nichla-Mandwa in Udaipur, Rajasthan.

Khadi and Village Industries Commission (KVIC) functions under the Ministry of Micro, Small and Medium Enterprises.

It is the first of its kind exercise in India. It seeks to create **bamboo-based green patches in arid and semi-arid land zones.**

**Hence statements 2 and 3 are correct and statement 1 is not correct.**

50. C

**ANAMAYA**

- Tribal Health Collaborative 'Anamaya' is a Multi Stakeholder Initiative to enhance Tribal Health and Nutrition.
- The Collaborative is a multi-stakeholder initiative of the **Tribal Affairs Ministry** supported by the **Piramal Foundation** and **Bill and Melinda Gates Foundation (BMGF).**

- It will converge efforts of various Government agencies and organisations to enhance the health and nutrition status of the tribal communities of India

**Hence statements 1 and 3 are correct and statement 2 is not correct.**

**51. A**

**“Raising and Accelerating MSME Performance” (RAMP) is a World Bank assisted Central Sector Scheme.**

It has been launched to support various **Resilience and Recovery Interventions of the Ministry of Micro, Small and Medium Enterprises (MoMSME).**

In addition to building the MoMSME’s capacity at the national level, the RAMP program will seek to scale up implementation capacity and MSME coverage in States.

**Hence statement 1 is correct and statement 2 is not correct.**

**52. A**

A genome refers to all of the genetic material in an organism, and the human genome **is mostly the same in all people, but a very small part of the DNA does vary between one individual and another. Hence statement 1 is not correct.**

Every organism’s genetic code is contained in its Deoxyribose Nucleic Acid (DNA), the building blocks of life. A higher organism has thousands of genes **but each organism has only one genome. Hence statement 2 is not correct.**

The genetic sequence was made available in 2003 from the Human Genome Project. Human Genome Project is an international collaboration between 1990 and 2003, containing information from a region of the human genome known as the euchromatin. Here, the chromosome is rich in genes, and the DNA encodes for protein. The 8% that was left out was in the area called heterochromatin, which is a smaller portion of the genome, and does not

produce protein. **Now, the fully sequenced genome is the result of the efforts of a global collaboration called the Telomere-2-Telomere (T2T) project.** The invention of new methods of DNA sequencing and computational analysis helped complete the reading of the remaining 8% of the genome. **Hence statement 3 is correct**

53. B

**Mes Aynak** is a site that is located 40 km southeast of **Kabul, Afghanistan**. It is located in the Logar Province's barren region. This region contains the **largest copper deposit in Afghanistan**. Also, in this region, there are remains to be found of an **ancient settlement that has 400 Buddha stupas**, statues, and a monastery complex of 100 acres.

54. C

A geomagnetic storm is a major disturbance of Earth's magnetosphere that occurs when there is a very efficient exchange of energy from the solar wind into the space environment surrounding Earth. The magnetosphere shields our home planet from harmful solar and cosmic particle radiation, as well as erosion of the atmosphere by the solar wind – the constant flow of charged particles streaming off the Sun. **Hence statement 1 is correct.**

Solar storms are caused by the release of magnetic energy called solar winds from the sunspots. **Hence statement 2 is correct.**

55. A

The **Ministry of Women and Child Development** has sent its **draft guidelines for Mission Vatsalya Scheme** to States and Union Territories to seek their suggestions.

Mission Vatsalya is one of the **new triad of schemes** along with **Mission Shakti, and Poshan 2.0**, that aims at securing a **healthy and happy childhood for every child**.

It focuses on Child Protection Services and child welfare services. It is essentially a **renamed version** of the pre-existing scheme called **Child Protection Services**.

Under the mission, the Government plans to partner with the private sector as well as volunteer groups for its scheme for the protection of vulnerable children such as those abandoned or missing. **Hence statement 1 is correct and statement 2 is not correct.**

**56. A**

**Kuthiran Tunnel** is a **Twin-tube tunnel** at Kuthiran in Thrissur District of Kerala.

It is located on **National Highway 544**, owned and operated by the **National Highways Authority of India**. It is Kerala's first-ever tunnel for road transport and **South India's Longest 6-lane road tunnel**.

**Hence statement 1 is correct and statement 2 is not correct.**

**57. D**

**Statement 1 is incorrect. Originally the Election Commission had only a Chief Election Commissioner.** It currently consists of the Chief Election Commissioner and two Election Commissioners. For the first time two additional Commissioners were appointed on 16th October 1989 but they had a very short tenure till 1st January 1990. Later, on 1st October 1993 two additional Election Commissioners were appointed. **The concept of multi-member Commission has been in operation since then**, with decision making power by majority vote.

**Statement 2 is incorrect.** The President appoints Chief Election Commissioner and Election Commissioners. **They enjoy the same status and receive salary and perks as available to Judges of the Supreme Court of India.** They have tenure of six years, or up to the age of 65 years, whichever is earlier. The Chief Election Commissioner can be removed from office only through impeachment by Parliament.

**Statement 3 is incorrect.** The **Electoral Photo Identity Card (EPIC)** is an identity document issued by the electoral registration officer. The EPIC contains details of the elector like name, father's/mother's/husband's name, date of birth/ age on the qualifying date, sex, address, and most importantly, the photograph of the elector. EPIC is a permanent document for an elector. It

is to be used by the elector to establish one's identity at the time of polls.

The Election Commission of India has directed that all electors in all constituencies who have been issued an **Electors Photo Identity Card (EPIC)** have to produce the Electors Photo Identity Card for their identification at the polling station before casting their votes.

**Those electors who are not able to produce the EPIC shall produce one of the following alternative photo identity documents for establishing their identity.** The list of eleven documents is:

1. Passport,
2. Driving License,
3. Service Identity Cards with photograph issued to employees by Central/State Govt./PSUs/Public Limited Companies,
4. Passbooks with photograph issued by Bank/Post Office,
5. PAN Card,
6. Smart Card issued by RGI under NPR,
7. MNREGA Job Card,
8. Health Insurance Smart Card issued under the scheme of Ministry of Labour,
9. Pension document with photograph,
10. Official identity cards issued to MPs/MLAs/MLCs, and
11. Aadhaar Card.

The Election Commission of India is an autonomous constitutional authority responsible for administering Union and State election processes in India.

**Article 324** of the Constitution provides that the power of superintendence, direction and control of elections to parliament, state legislatures, the office of president of India and the office of vice-president of India shall be vested in the election commission. The Election Commission was established in accordance with the Constitution on 25th January 1950.

**58. A**

**Statement 1 is correct. Articles 315 to 323 in Part XIV of the Constitution** contain elaborate provisions regarding the composition, appointment and removal of members along with the independence, powers

and functions of the UPSC. **The chairman or a member of the Union Public Service Commission (UPSC) can be removed from office by the President only** in the manner and on the ground mentioned in the Constitution. Therefore, they enjoy security of tenure.

**Statement 2 is incorrect.** The UPSC consists of a chairman and other members appointed by the president of India. **The Constitution, without specifying the strength of the Commission has left the matter to the discretion of the president, who determines its composition.** Usually, the Commission consists of nine to eleven members including the chairman.

**Note** - The President may by order remove from office the Chairman or any other member of a Public Service Commission if the Chairman or such other member, as the case may be, -

- 1) is adjudged an insolvent; or
- 2) engages during his term of office in any paid employment outside the duties of his office; or
- 3) is, in the opinion of the President, unfit to continue in office by reason of infirmity of mind or body.

**Article-323** - Reports of Public Service Commissions

It shall be the **duty of the Union Public Service Commission to present annually to the President a report** as to the work done by the Commission and on receipt of such report the **President shall cause a copy thereof** together with a memorandum explaining, as respects the cases, if any, where the advice of the Commission was not accepted, the reasons for such non-acceptance to be **laid before each House of Parliament.**

**59. A**

**All are correct.**

**Kenduli Mela** is held at Kenduli in **Birbhum district, West Bengal** in January, known for the **congregation of 'Bauls' or wandering minstrels of Bengal.** Kenduli is the birthplace of the **famous poet Jaidev** in the Birbhum district of West Bengal.



It is most well known for the gathering of the Bauls, a group of mystic minstrels. They are the bearers of a unique musical tradition, who are identified by their **saffron attire** and distinctive **musical instrument, the Ektara**.

Bauls have the proud distinction of being included in the **list of 'Masterpieces of the Oral and Intangible Heritage of Humanity'**. The Baul community earns their livelihood by singing. The most interesting characteristic of their songs is that they convey **profound philosophical viewpoints** of life using simple expressions.

**Note –**

Birbhum district in West Bengal, fondly known as the **Lal-Mati-r Desh** owing to its rare red soil.

**60. A**

**Navtej Singh Johar Vs. Union of India 2018:**

**Section 377 of the Indian Penal Code (IPC)** criminalised consensual sexual intercourse between persons of the same sex for being “against the order of nature”. However in this case the Court upheld the **right to equal citizenship of all members of the LGBTQI community in India**. Thus, it read down Section 377 to exclude consensual sexual relationships between adults, whether between same-sex individuals or otherwise.

**61. D**

Have fun. Achieve dreams.

**42nd Constitutional Amendment Act, 1976** - This amendment is also famous as the mini Constitution. This amendment brought a big change in the Constitution's preamble by adding the words 'SOCIALIST', 'SECULAR', and 'INTEGRITY' in the preamble. This amendment made it mandatory for the President to work with the aid and advice of the council of ministers. This amendment also added a vital **Part IVA in the Constitution as Fundamental duties**.

**61st Constitutional Amendment Act, 1988** - This amendment brought a change in the pattern of the election in India. It **reduced the voting age from 21 to 18 years**.

**77th Constitutional Amendment Act, 1995** - This amendment added clause 4A in Article 16 of the Constitution for the **promotion of scheduled castes and scheduled tribes** in government jobs.

**86th Constitutional Amendment Act, 2002** - This amendment brought a change in education for children. It added Article 21A in the Constitution as the right to education for children of age group 6 to 14 years. Now the right to education has become a Fundamental Right.

62. A

All are correct.

**Avalokiteshvara**, (Sanskrit: avalokita, “looking on”; ishivara, “lord”) - in Mahayana Buddhism, the **bodhisattva of infinite compassion and mercy**, possibly the most popular of all figures in Buddhist legend. Avalokiteshvara is beloved throughout the Buddhist world—not only in **Mahayana Buddhism but also in Theravada** (“Way of the Elders”), the branch of Buddhism that largely does not recognize bodhisattvas, and in **Vajrayana** (“Diamond Vehicle”), the Tantric (or Esoteric) branch of Buddhism.

Avalokiteshvara supremely exemplifies the **bodhisattva’s resolve to postpone his own buddhahood until he has helped every sentient being on earth achieve liberation from suffering** (dukkha) and the process of death and rebirth (samsara). His name has been variously interpreted as “the lord who looks in every direction” and “the lord of what we see”.

Avalokiteshvara is the earthly manifestation of the **self-born eternal Buddha Amitabha**, whose figure is represented in his headdress, and he guards the world in the interval between the departure of the historical Buddha, Gautama, and the appearance of the **future buddha, Maitreya**. **Avalokiteshvara protects against shipwreck, fire, assassins, robbers, and wild beasts. He is the creator of the fourth world, which is the actual universe.**



*Bodhisattva Avalokiteshvara, 900-1000. Nalanda, Bihar state, India. Stone. Courtesy of the Asian Art Museum, The Avery Brundage Collection, B63S44+.*

Avalokiteshvara is shown here sitting on a lion throne and arrayed in jewels like a prince. Above his head is a parasol, an ancient symbol of royal status. Beside his head are lotus-borne stupas, topped with sun and crescent moons. Avalokiteshvara's right hand is in the gesture of gift granting, and in his left hand he holds a long-stemmed lotus. In his elaborate hairdress is an image of the Buddha Amitabha.

63. C

**All are correct**

**Synthesis gas (also known as syngas)** is a mixture of **carbon monoxide (CO) and hydrogen (H<sub>2</sub>)** that is used as a fuel gas but is produced from a wide range of carbonaceous feedstocks and is used to produce a wide range of chemicals.

- The production of synthesis gas, i.e, Mixtures of carbon monoxide and hydrogen has been known for several centuries and can be produced by gasification of carbonaceous fuels.
- However, it is only with the commercialization of the Fischer–Tropsch reaction that the importance of synthesis gas has been realized.
- Synthesis gas can be produced from any one of several carbonaceous feedstocks (such as a crude oil residuum, heavy oil, tar sand bitumen, and biomass) by gasification (partially oxidizing) the feedstock
- It is a fuel gas mixture consisting primarily of hydrogen, carbon monoxide, and very often some carbon dioxide.
- The name comes from its use as intermediates in creating synthetic natural gas and for producing ammonia or methanol.
- Syngas is combustible and can be used as a fuel of internal combustion engines.
- Historically, it has been used as a **replacement for gasoline**, when gasoline supply has been limited; for example, wood gas was used to power cars in Europe during WWII

**Note -**

- The chemical composition of syngas varies based on the raw materials and the processes. **Syngas produced by coal gasification** generally is a mixture of **30 to 60% carbon monoxide, 25 to 30% hydrogen, 5 to 15% carbon dioxide, and 0 to 5% methane**. It also contains a lesser amount of other gases.
- The main reaction that produces syngas, steam reforming, is an endothermic reaction with 206 kJ/mol methane needed for conversion.
- Syngas is used to directly reduce iron ore to sponge iron

**64. D**

**The Elephanta Caves** are a collection of cave temples predominantly dedicated to the Hindu god Shiva. They are on **Elephanta Island, or Gharapuri** (literally "the city of caves"), in **Mumbai Harbour**.

The **Trimurti** is considered a masterpiece and the most important sculpture in the caves.. It is also known as **Sadashiva and Maheshmurti**. The image, 6 m in height, depicts a **three-headed Shiva, representing Panchamukha Shiva**.

The three heads represent three essential aspects of Shiva: **creation, protection, and destruction**

- As per another version, the three heads symbolize compassion and wisdom
- The right half-face shows him holding a lotus bud, depicting the promise of life and creativity. This face is symbolism for Brahma, the creator or Uma or Vamadeva, the feminine side of Shiva and creator.
- The left half-face is that of a moustached young man. This is Shiva as the terrifying Aghora or Bhairava, the chaos creator and destroyer. This is also known as Rudra-Shiva, the Destroyer.
- The central face, benign and meditative Tatpuruasha, resembles the preserver Vishnu. This is the Shiva form as the "master of positive and negative principles of existence and preserver of their harmony"

65. D

**The fourth Schedule contains provisions as to the allocation of seats in the Council of States.**

Schedules 1 to 12
First schedule contains the list of states and union territories and their territories
Second schedule contains provisions as to the President, Governors of States, Speaker and the Deputy Speaker of the House of the People and the Chairman and the Deputy Chairman of the Council of States and the Speaker and the Deputy Speaker of the Legislative Assembly and the Chairman and the Deputy Chairman of the Legislative Council of a State, the Judges of the Supreme Court and of the High Courts and the Comptroller and Auditor-General of India the list of states and union territories and their territories
Third Schedule contains the Forms of Oaths or Affirmations.
Fourth Schedule contains provisions as to the allocation of seats in the Council of States.
Fifth Schedule contains provisions as to the Administration and Control of Scheduled Areas and Scheduled Tribes.
Sixth Schedule contains provisions as to the Administration of Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram.
Seventh Schedule contains the Union list, State list and the concurrent list.
Eighth Schedule contains the list of recognised languages.
Ninth Schedule contains provisions as to validation of certain Acts and Regulations.
Tenth Schedule contains provisions as to disqualification on ground of defection.
Eleventh Schedule contains the powers, authority and responsibilities of Panchayats.
Twelfth Schedule contains the powers, authority and responsibilities of Municipalities.

66. A

Have fun. Achieve dreams.

The DPSP, under **Article 47**, laid down the obligation of states to bring about the **prohibition of consumption, except for medicinal purposes, of intoxicating drinks which are injurious to health.**

Justice A. K. Sikri reiterated this obligation in the **State of Kerala & Ors. v. Kandath Distilleries** by describing potable alcoholic beverages as "inherently a dangerous article of consumption". The obligation under Article 47 is an obligation to strive for the improvement of public health and to that end to prohibit the consumption of intoxicating drinks.

Accordingly, the state legislature is empowered with complete authority to formulate the laws regarding the trade in alcohol under **entry 8, list II of the VII Schedule of the Constitution.**

**67. A**

**Champakam Dorairajan case (1951)** - The Supreme Court ruled that in case of any conflict between the Fundamental Rights and the Directive Principles, the former would prevail.

**Golaknath case (1967)** - Court held that the Fundamental Rights cannot be amended for the implementation of the Directive Principles.

**Kesavananda Bharati case (1973)** – Basic structure doctrine evolved

**68. A**

**All are correct.**

By the time of the Buddha the **masses were speaking languages** which were much simpler than Sanskrit. These were the **Prakrits.**

**Prakrit was the lingua franca of the masses.** It was used in the production of various literary texts across the subcontinent from about the second or third century. It has been used in various inscriptions of ruling dynasties across South Asia over the first four or five centuries.

Prakrit reflects regional subtypes. The scholarly developments in Sanskrit had put Prakrit under pressure and grammars, dictionaries and various treatises came to be written in Prakrit. Both Sanskrit and Prakrit coexisted, but they occupied diverse spaces. **Inscriptions of pre-Gupta times**, especially the **Ashokan edicts are in Prakrit.** Various secular literatures were composed in Prakrit. **Prakrits were much simpler than Sanskrit both in sound and grammar.**

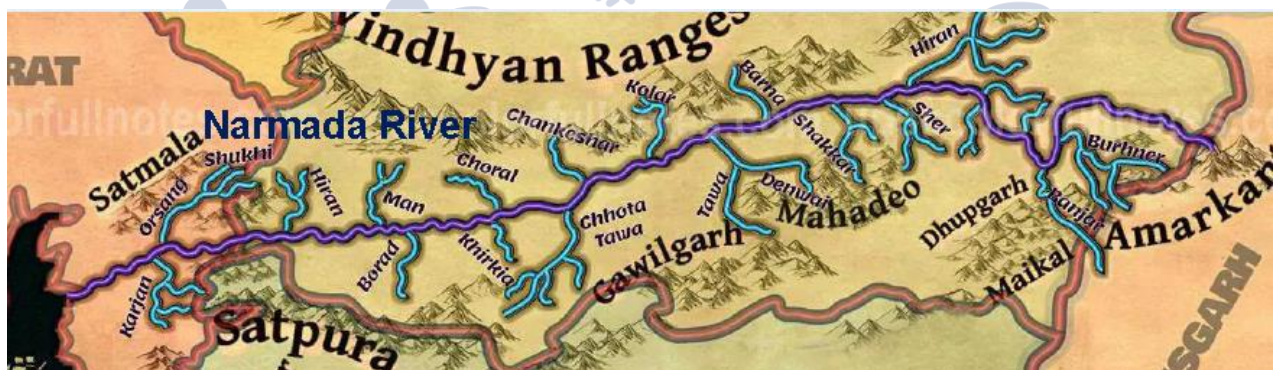
**One very important early popular dialect was Pali**, which became the language of the **Sthaviravadin Buddhists.** The Buddha probably taught in Magadhi, but with time his doctrines were adapted to local dialects. The

language chosen by the Sthaviravadins was a Western one, probably spoken in the region of Sanchi and Ujjayini.

**Other important Prakrits** were **Saurasena**, spoken originally in the western part of modern Uttar Pradesh; and **Maharastri**, spoken in the north-western Deccan. Saurasena was particularly used in drama, by women and respectable people of the lower orders. Maharastri was a literary language, especially popular for lyric songs. There were several other Prakrits of lesser importance. By the time of the Guptas, the Prakrits were standardized and had lost their local character.

69. B

**Narmada river** rises near **Amarkantak in Madhya Pradesh** at an elevation of about 900 m and flows for about 1312 km before outfalling into the Arabian Sea through the Gulf of Cambay. Its principal tributaries are the **Burhner, the Halon, the Heran, the Banjar, the Dudhi, the Shakkar, the Tawa, the Barna, the Kolar, the Ganjal, the Beda, the Goi, and the Orsang.**



The major Hydro Power Projects in the basin are **Indira Sagar, Sardar Sarovar, Omkareshwar, Bargi & Maheshwar.**

Jabalpur is the only important urban centre in the basin. Other important towns situated in the basin are Khandwa and Baruch.

The basin has only few industries located mainly at Jabalpur, Khandwa and Baruch. These are textiles, drugs and pharmaceuticals, tobacco products, machine tools, glass and ceramics etc.



70. A

**Mitiyala Wildlife Sanctuary** also known as **Mitiyala Grasslands** is situated near Mitiyala in **Gujarat**. Mitiyala Wildlife Sanctuary occupies 18.22 km<sup>2</sup> and its status was confirmed in 2004. It is home to almost **11 to 12 lions and leopards**.

Lions often meander down to **Sasan Gir forest** as this sanctuary shares a common boundary with the woodlands. The area **between Gir and Mitiyala serves as a passage connecting two habitats of wildlife**.

Mitiyala grasslands known for the rustic, untamed essence of undulating hill tracks engulfed with tall grasses, semi-dry deciduous trees, is almost like an offshoot of Gir Lion Sanctuary.

**Pania Sanctuary** - Popularly known as **Chanchai-Pania**, this sanctuary is an integral part of the **famous Gir Wildlife Sanctuary**. Pania Sanctuary was notified in June 1989. This patch of forest, having arid conditions in absence of any natural water source, has given way to abundant growth of grass making the area ideal for **chinkara- the Indian gazelle**.

71. C

**Manas National Park** is a **national park, UNESCO Natural World Heritage Site, a Project Tiger reserve, an elephant reserve and a biosphere reserve in Assam**. Located in the Himalayan foothills, it is contiguous with the Royal Manas National Park in Bhutan. The park is known for its rare and endangered endemic wildlife such as the Assam roofed turtle, hispid hare, golden langur and pygmy hog. Manas is famous for its population of the wild water buffalo.

**Statement 2 is wrong.**

**Sariska Tiger Reserve** - It is the first reserve in the world with successfully relocated tigers. It is an important biodiversity area in the Northern Aravalli leopard and wildlife corridor.

**Ranthambore Tiger Reserve** - The park is located in the Sawai Madhopur district of southeastern Rajasthan, which is about 130 km from Jaipur.



**Panna National Park** is a national park located in Panna and Chhatarpur districts of **Madhya Pradesh** in India. It was declared in 1994 as the twenty second **Tiger reserve** of India . By 2009, the entire tiger population had been eliminated by poaching with the collusion of forest department officials.

- The forests of **Panna National Park along with Ken Gharial Sanctuary** and adjoining territorial divisions form a significant part of the catchment area of the **Ken River**, which runs northeast for about 72 km (45 mi) through the park.
- Panna National Park and the surrounding forest area of North and South Panna forest division is the only large chunk of wildlife habitat remaining in northern Madhya Pradesh.
- The National Park is situated at a point where the continuity of the tropical and subtropical dry broadleaf forests belt, which starts from Cape Comorin in South India, is broken and beyond this the Upper Gangetic Plains moist deciduous forests of the great Indo-Gangetic Plain begins.
- This area is the **northernmost tip of the natural teak forests** and the **easternmost tip of the natural 'Kardhai' Anogeissus pendula forests**.

72. B

**All are correct.**

**A hydrogel** is a **crosslinked hydrophilic polymer** that **does not dissolve in water**. They are **highly absorbent** yet maintain well defined structures. These properties underpin several applications, especially in the biomedical area. Many hydrogels are **synthetic, but some are derived from nature**.

Applications –

- Breast implants
- Contact lenses
- Disposable diapers where they absorb urine, or in sanitary napkins
- Dressings for healing of burns or other hard-to-heal wounds.
- EEG and ECG medical electrodes using hydrogels composed of cross-linked polymers

**Hydrogel agriculture technology** involves gel forming polymers that are **insoluble water absorbing polymers** designed exclusively for agricultural use. They were developed to **improve physical properties of soil** to:

1. Increase water holding capacity
2. Increase water use efficiency
3. **Enhance soil permeability and infiltration rate**
4. Reduce irrigation frequency
5. **Reduce compaction tendency**
6. Stop soil erosion, farm run-off & surface leaching
7. Increase plant performance, particularly in structure-less soils stressed with drought condition

**Note –**

- Hydrogel works as water reservoirs round the root mass zones of the plant. In the presence of water, it expands to around 200-800 times the original volume.

- There is ample possibility to trap irrigation and rainwater that can then be collected, stored and gradually released for crop requirements over prolonged durations
- Hydrogel mixed with soil increases soil permeability and improves germination rates.
- It is compatible with a wide range and type of soils and thus has in general a tendency to increase plant performance and yield. Rainwater retention, soil erosion by storm water run-offs, especially in sloped terrains can be greatly averted.
- Scientists have developed a hydrogel from the gum of **guar (cluster bean)** that can increase soil moisture and help farmers save their crops in case of water scarcity. The **Guar gum-based hydrogel is biodegradable**. Besides increasing moisture content, it adds organic content to the soil upon degradation.
- **The addition of hydrogel also lowered bulk density of the soil signifying increased porosity by nine percent.** Higher porosity **improves soil aeration** and microbial count thus improving the overall quality of the soil.
- In sedimentology, **compaction** is the process by which a sediment progressively loses its porosity due to the effects of pressure from loading. This forms part of the process of lithification.

73. B

### Ghana Vadya

Have fun. Achieve dreams.

The earliest instruments invented by man are said to be the Ghana Vadya. This variety of instruments do not need special tuning prior to playing. In early times these instruments were the extension of the human body such as sticks, clappers, rods, etc. and were also closely related to objects of utility in daily life such as pots and pans, jhanj, falams, etc. They are **principally rhythmic in function** and are best suited as accompaniment to **folk and tribal music and dance**.

**Jhanj Player, Konarak, Orissa** - In the **Sun temple** of Konarak, Orissa, we see this large sculpture nearly 8 ft. high of a lady playing the Jhanj.



74. C

**All statements are correct.**

The word **Karewa in Kashmiri dialect means, “elevated table-land.”** This term refers to **unconsolidated to semi - consolidated sand-clay-conglomerate sequence.** These sediments occur as terraces, plateaus and mounds and rest over the Paleozoic-Mesozoic sediments of the Kashmir ‘basin’.

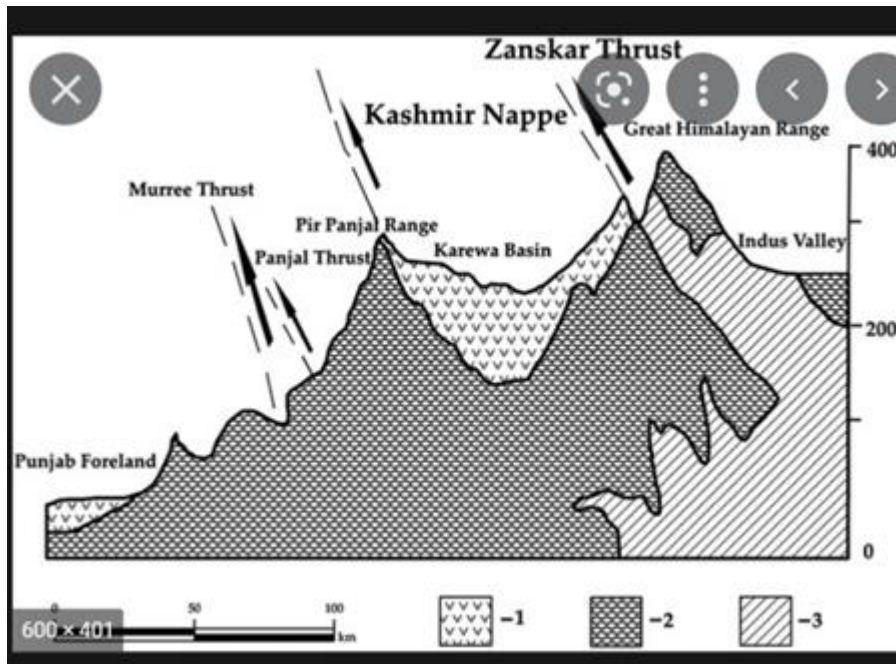
The Kashmir valley owes much of its fortune to the plateau-like landforms that remain tucked away in the folds of the surrounding mountains, particularly the **Pir Panjal range** of the Himalayas that borders the valley on the southwest.

Known as karewa, these plateaus are **13,000-18,000 metre-thick deposits of alluvial soil and sediments like sandstone and mudstone.** This makes them ideal for cultivation of **saffron, almonds, apples and several other cash crops.**

**Kashmir saffron,** which received a **Geographical Indication (GI) tag in 2020 for its longer and thicker stigmas, deep-red colour, high aroma and bitter flavour, is grown on these karewas.**

The fertility of these patches is believed to be the result of their long history of formation. When formed during the **Pleistocene period (2.6 million years to 11,700 years ago), the Pir Panjal range blocked the natural drainage in the region and formed a lake spanning 5,000 sq km.** Over the next few centuries, the water receded, making way for the valley and the formation of the karewas between the mountains.

Today, the karewa sediments **not only hold fossils and remnants of many human civilisations and habitations, but are also the most fertile spots in the valley.**



75. B

The Alps are the highest and most extensive mountain range system that lies entirely in Europe stretching across eight Alpine countries (from west to east): **France, Switzerland, Monaco, Italy, Liechtenstein, Austria, Germany, and Slovenia.**

Major European rivers flow from the Alps, such as the **Rhine, the Rhône, the Inn, and the Po**, all of which have headwaters in the Alps and flow into neighbouring countries, finally emptying into the North Sea, the Mediterranean Sea, the Adriatic Sea and the Black Sea. Other rivers such as the **Danube have major tributaries flowing into them that originate in the Alps.**

The **Rhône is second to the Nile as a freshwater source to the Mediterranean Sea**; the river begins as glacial meltwater, **flows into Lake Geneva**, and from there to France where one of its uses is to cool nuclear power plants. The Rhine originates in Switzerland and represents almost 60% of water exported from the country.

**Statement 3 is wrong. Mount Elbrus** - is the **highest and most prominent peak in Russia and Europe.** It is situated in the western part of the Caucasus and is the **highest peak of the Caucasus Mountains.** The **dormant volcano** is the highest stratovolcano in Eurasia.

The glacier-covered dome of **Mont Blanc** at 4,807 metres is the **highest peak in the Alps**.

**The Matterhorn** is a **mountain of the Alps**, straddling the main watershed and border **between Switzerland and Italy**.



76. C

**All of them are genetic disorders.**

**Tay-Sachs disease** is a rare genetic disorder passed from parents to children. It's caused by the absence of an enzyme that helps break down fatty substances. These fatty substances, called gangliosides, build up to toxic levels in the brain and spinal cord and affect the function of the nerve cells.

**Achondroplasia** -The most common type of **short-limbed dwarfism**. While it's sometimes hereditary, most cases of dwarfism are caused by a genetic mutation. This is why the majority of people with achondroplasia are born to parents of average height. People with achondroplasia typically have short arms and legs, an enlarged head and an average-sized torso.

**Duchenne muscular dystrophy (DMD)** is a genetic disorder characterized by progressive muscle degeneration and weakness due to the alterations of a protein called dystrophin that helps keep muscle cells intact.

**Sickle Cell Anemia** - A group of disorders that cause red blood cells to become misshapen and break down. With sickle cell disease, an inherited group of disorders, red blood cells contort into a sickle shape. The cells die early, leaving a shortage of healthy red blood cells and can block blood flow causing pain.

77. D

All are correct.

- A **mitochondrion** is a **double-membrane-bound organelle** found in most **eukaryotic organisms**. Mitochondria use aerobic respiration to generate most of the cell's supply of adenosine triphosphate (**ATP**), which is subsequently used throughout the cell as a **source of chemical energy**.
- Some cells in some multicellular organisms **lack mitochondria (for example, mature mammalian red blood cells)**
- In addition to producing energy, **mitochondria store calcium** for cell signaling activities, generate heat, and mediate cell growth and death.
- Mitochondria are unlike other cellular organelles in that they have two distinct membranes and a unique genome and reproduce by binary fission; these features indicate that mitochondria share an **evolutionary past with prokaryotes** (single-celled organisms).
- Mitochondria are the organelle which **contain DNA in circular form**, and in animals it is the **only organelle in addition to nucleus which contain DNA and gene**. The sperm contains very low number of mitochondria and mitochondrial gene. So **in the offspring the mitochondrial genes are inherited from the mother**. Thus a father with mitochondrial gene defect can not transmit the disease to his offspring.
- **Mitochondrial DNA (mtDNA)** is **highly susceptible to mutations**, largely because it **does not possess the robust DNA repair mechanisms** common to nuclear DNA.



78. D

**Khelo India Youth Games (KIYG)**, formerly Khelo India School Games (KISG), are **the annual national level multidisciplinary grassroot games** in India held in January or February for two categories, namely under-17 years school students and under-21 college students. Every year the best 1,000 kids will be given an annual scholarship of ₹5 lakh for 8 years to prepare them for the international sporting events. It is not an international event. Statement 1 is wrong.

**On 31 January 2018**, Prime Minister, Narendra Modi, **inaugurated Khelo India School Games** at the opening ceremony **based on Guru-shishya tradition held at Indira Gandhi Arena. From 2019 Khelo India School Games were renamed to Khelo India Youth Games** after the Indian Olympic Association came on board earlier in September 2018.

Only selected school kids below the age of 17 years are eligible to compete.

The **2022 edition is to be held in Haryana**. Five traditional games namely **Gatka, Kalaripayattu, Thang-Ta, Mallakhamba and Yogasana** would be a part of this edition of the sporting event.

79. B

The **Badami cave temples** are a complex of **Hindu and Jain cave temples** located in Badami, a town in the Bagalkot district in northern part of **Karnataka**. Badami is also referred to as **Vatapi, Vatapipura, Vatapinagari and Agastya Tirtha in historical texts**.

Badami was the **capital of the early Chalukyan dynasty** which ruled the region from 543 to 598 CE. The Chalukya king, **Mangalesha, patronised the excavation of the Badami caves**. The inscription in Cave No.4 mentions the date 578–579 CE, describes the beauty of the cave and includes the dedication of the image of Vishnu. Thus it may be presumed that the cave was excavated in the same era and the patron records his **Vaishnava affiliation. Therefore, the cave is popularly known as the Vishnu Cave**. Only a fragment of the painting has survived on the vaulted roof of the front *mandapa*.

**Paintings in this cave depict palace scenes.** One shows **Kirtivarman, the son of Pulakesi I and the elder brother of Mangalesha, seated inside the palace with his wife and feudatories watching a dance scene.**

The sinuously drawn lines, fluid forms and compact composition exemplify the proficiency and maturity the artists had achieved in the sixth century CE. The gracefully drawn faces of the king and the queen **remind us of the style of modelling in Ajanta.** Their eye sockets are large, eyes are half-closed, and lips are protruding. It is noteworthy to observe that the contours of different parts of the face create protruding structures of the face itself. **Thus, with simple line treatment artists could create volume.**

**Note-**

- The Badami cave temples represent some of the earliest known examples of Hindu temples in the Deccan region. They along with the temples in Aihole transformed the **Mallaprabha River valley** into a cradle of temple architecture that influenced the components of later Hindu temples elsewhere in India
- In Cave 1, among various sculptures of Hindu divinities and themes, a prominent carving is of the **Tandava-dancing Shiva as Nataraja.** Cave 2 is mostly similar to Cave 1 in terms of its layout and dimensions, featuring Hindu subjects of which the **relief of Vishnu as Trivikrama** is the largest. The largest cave is Cave 3, featuring Vishnu-related, and it is also the most intricately carved cave in the complex. **Cave 4 is dedicated to revered figures of Jainism.**



Nataraja or Dancing Shiva in Cave 1



Left: Vishnu as Varaha rescuing Earth as Bhudevi. Right: Trivikrama stepping Vishnu, Vamana avatar legend and ancient Indian musical instruments carved below.

**AIHOLE** - also referred to as **Aivalli, Ahivolal or Aryapura**, is a historic site of ancient and medieval era **Buddhist, Hindu and Jain monuments in Karnataka**, India that dates from the sixth century through the twelfth century CE.

- The **Durga temple** is the best known and studied of the Aihole temples. It has a misleading name, because the temple is not named after goddess Durga.
- **The Lad Khan Temple** is near the Durga temple and has been dated to about 450 CE". The temple is named after the Muslim commander under Adil Shahi Sultan who briefly stayed here about a thousand years after it was built
- **Ravanaphadi** is one of the **oldest rock-cut cave temples in Aihole**, located less than a kilometer uphill, northeast from the Durga temple complex. The temple dates to the 6th century.

**PATTADAKAL**, also called **Paṭ ṭ adakallu or Raktapura**, is a complex of 7th and 8th century CE **Hindu and Jain temples in northern Karnataka**

- Located on the west bank of the **Mallaprabha River** in Bagalakote district, this **UNESCO World Heritage Site** is 23 km from Badami and

about 9.7 km from Aihole, both of which are historically significant centres of Chalukya monuments.

- The **Virupaksha temple** is the largest and most sophisticated of the monuments at Pattadakal. In inscriptions, it is referred to as "**Shri Lokeshvara Mahasila Prasada**", after its sponsor **Queen Lokmahadevi**, and is dated to about 740 CE
- **Papanatha temple** - the temple is noted for its novel **mixture of Dravida, and Nagara, Hindu temple styles**. The unusual layout of the temple is possibly due to its construction, which occurred in three stages, but there is a lack of epigraphical evidence to support this hypothesis. Its architectural and sculptural details do show a consistent and unified theme, indicative of a plan. The temple is longer, incorporating two interconnected mantapas, one with 16 pillars and another with 4 pillars

The temples at Pattadakal are symbolic of the **Chalukya inclination towards integration, and experimentation**, resulting in a **merging of the Northern and Southern Indian architectural styles**. This is particularly evident when the architecture at Pattadakal, Aihole and Badami are viewed together.

Aihole, in the 5th century, served as the incubator for the concepts that would lead to this integration of styles. These concepts were further refined in Badami during the 6th and 7th centuries. The culmination of this is, as described by UNESCO, "the apogee of an eclectic art which, in the 7th and 8th centuries, achieved a harmonious blend of architectural forms from the north and south of India.

## 80. B

**Statement 1 is incorrect.** The freedom with partition formula was coming to be widely accepted well before Mountbatten arrived in India. One major innovation was the immediate transfer of power on the basis of grant of dominion status (with a right of secession) was **actually suggested by the then Secretary of State's Department VP Menon**.

**Statement 2 is incorrect.** It recommended a referendum was to be held on NWFP (North West Frontier Province) to decide which dominion to join. NWFP

decided to join Pakistan **while Khan Abdul Gaffar Khan boycotted and rejected the referendum.**

**Statement 3 is correct.** This Plan was accepted by both the Congress and Muslim League. By then, the Congress had also accepted the inevitability of the Partition.

**Statement 4 is correct. Independence for princely states was ruled out- They would join either India or Pakistan.**

**Note-** In **May 1947, Mountbatten** came up with a plan under which he proposed that the provinces be declared independent successor states and then be allowed to choose whether to join the constituent assembly or not. This plan was called **Plan Balkan**. Jawaharlal Nehru apprised of the plan. And it was given up. Then the Viceroy came up with another plan called the Mountbatten plan.

**81. C**

**Statement 1 is incorrect.** It was passed during the **Viceroyship of Lord Lytton.**

**Statement 2 is correct.** There was a strong opposition to this act and **Finally Ripon repealed it in 1882.**

**Statement 3 is correct. The act came to be named as “the gagging act”** because of its features like  
 (i) discrimination between English and Vernacular press,  
 (ii) no right of appeal.

**Statement 4 is incorrect.** The Magistrate’s action was final and **no appeal could be made in the court of law.**

**Statement 5 is incorrect. Tilak had not criticized the government measures to check Plague,** instead he supported the measures. **Tilak was imprisoned after the murder of Rand on the basis of the publication of a poem’ Shivaji Utterances’ in Kesari and a speech which Tilak had delivered at the Shivaji festival,** justifying Afzal Khan’s murder by Shivaji.

**Under the Vernacular Press Act (VPA), 1878**, proceedings were instituted against *Som Prakash, Dacca Prakash, Bharat Mihir, and Samachar. Amrit Bazar Patrika* turned overnight into an English Newspaper to escape VPA. **Surendranath Bannerji became the first Indian journalist to be imprisoned.**

82. B

Here the **keyword** to identify the revolt is '**fraudulent contracts**'

**Indigo Revolt-** Some important features of this revolt are-

- The Indigo planters, nearly all Europeans, exploited the local peasants by forcing them to grow indigo on their land instead of the more paying crops like rice. **The planters forced the peasants to take advance sums and enter into fraudulent contracts which were then used against the peasants.**
- The planters intimidated the peasants through kidnappings, illegal confinements, flogging, attacks on women and children.
- The Revolt started from Govindpur village in Nadia district of Bengal under the leadership of Digambar Biswas and Bishnu Biswas when they gave up Indigo cultivation
- Peasants also organized a counter force against the planter's attack.
- The ryots went on rent strikes by refusing to pay the enhanced rents. Gradually **they learned to use the legal machinery and initiated legal action supported by fund collection.**
- **The Bengali intelligentsia played a significant role by supporting the peasant's cause through newspaper's campaign, organization of mass meetings, preparing propaganda on peasant's grievances**
- Peasants organized themselves and showed a remarkable degree of discipline, organization and cooperation.
- **The Hindu-Muslim unity made the movement more effective.**
- **Neel Darpan of Din Bandhu Mitra** portrayed the oppressed peasants.

**Finally, an Indigo commission was appointed which banned the indigo cultivation by the use of force and would ensure that all disputes were settled by legal means.**

83. D

**Option a is correct.** 'Purna Swaraj' was declared as the aim of the Congress.

**Option b is correct.** The Congress Working Committee was authorised to launch a programme of civil disobedience including non-payment of taxes.

**Option c is correct.** It was decided to boycott the Round Table Conference.

**Option d is incorrect.** A resolution on **Fundamental Rights** was adopted in the **Karachi Session of Congress 1931**. Jawaharlal Nehru was the President of the session. It was also decided to celebrate 26th January, 1930 as the First Independence Day.

84. B

**Option a is incorrect.** The pact **abandoned a separate** electorate for depressed classes.

**Option b is correct.** The pact made provisions for reservation of seats for depressed classes in central and provincial legislatures.

**Option c is incorrect.** The **Communal Award accorded** minority status to depressed classes.

**Option d is incorrect.** The Poona Pact led to an amendment to the Communal Award and didn't repeal it.

The seats reserved for the depressed classes were increased from 71 to 147 in provincial legislatures and to 18 percent of the total in the Central Legislature.

85. C

**Bhulabhai Desai the leader of congress party** in central legislative assembly met with **Liaqat Ali Khan deputy leader of Muslim league** and both came up with this pact to end the **constitutional deadlock** and seek **congress league cooperation** to secure independence and meanwhile establish an **interim government** at center.

The pact proposed equal no of members nominated each by Congress and League in the central legislature. However, both the leaders did not discuss it

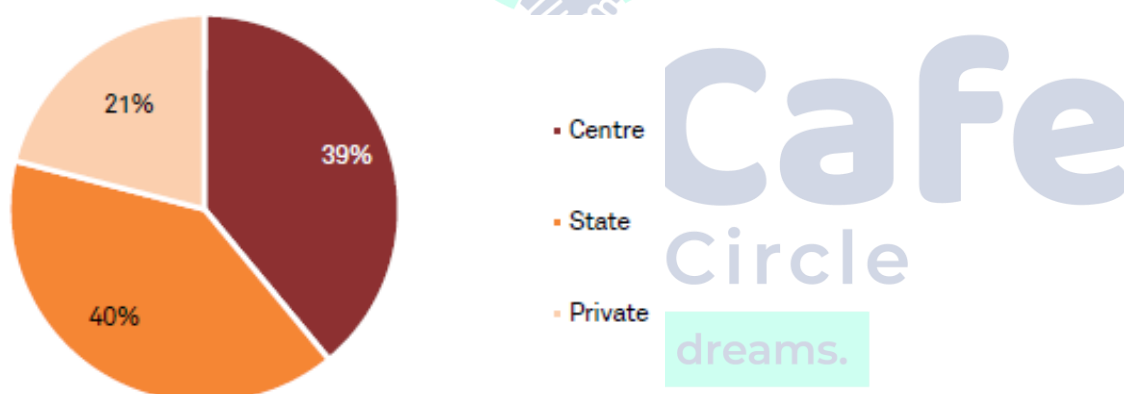
prior in their own parties and major leaders were not even informed of this. In fact, the reports of a prospective deal were leaked by the press and both parties were alarmed with this news. **Hence Option c is incorrect.**

**86. A**

**Statement 1 is correct. The National Infrastructure Pipeline (NIP)** is expected to enable well-prepared infrastructure projects which will create jobs, **improve ease of living**, and **provide equitable access to infrastructure for all**, thereby making growth more inclusive. NIP also intends to facilitate supply side interventions in infrastructure development to boost short-term as well as the potential GDP growth. Improved infrastructure capacities will also drive competitiveness of the Indian economy.

**Statement 2 is correct. The Centre (39%) and State (40%) are expected to have almost equal share** in implementing the National Infrastructure Pipeline in India, followed by the **private sector (21%)**.

**Figure: Share of Centre, State and Private sector in the NIP**



**Statement 3 is incorrect.** Sectors such as **energy (24%)**, **roads (18%)**, **urban (17%)** and **railways (12%)** amount to around **71% of the projected infrastructure investments in India.**

**Note:** It is estimated that India would need to spend \$4.5 trillion on infrastructure by 2030 to sustain its growth rate. The endeavour of the National Infrastructure Pipeline (NIP), is to make this happen in an efficient manner.



NIP is a group of social and economic infrastructure projects in India over a period of five years with a sanctioned amount of ₹ 102 lakh crore. It is a pillar of the government of India's aim to become a **\$5 trillion economy by 2025**. It is a first-of-its-kind initiative to provide world-class infrastructure across the country and **improve the quality of life for all citizens**. It will improve project preparation, **attract investments** (both domestic & foreign) into infrastructure.

**87. B**

**Option a is correct.** Preamble is non-justiciable in nature as **its provisions are not enforceable in courts of law**.

**Option b is incorrect.** Preamble has been amended only once after the enactment of the Constitution under the 42<sup>nd</sup> Constitutional Amendment Act, 1976. The 42<sup>nd</sup> amendment act added three new words – Socialist, Secular and Integrity to the Preamble.

**Option c is correct. Preamble is considered by the judiciary as an integral part of the Constitution.**

- In the Kesavananda Bharati case (1973), the Supreme Court held that Preamble is a part of the Constitution. It observed that the Preamble is of extreme importance and the Constitution should be read and interpreted in the light of the grand and noble vision expressed in the Preamble.
- In the LIC of India case (1995), the Supreme Court again held that the Preamble is an integral part of the Constitution.

**Option d is correct.** The Preamble declares the nature of the Indian State. It declares India to be of a **sovereign, socialist, secular democratic and republican polity**.

**88. C**

**Statement 1 is correct. Geranium plant has huge medicinal value and its essential oil works as an anti-inflammatory and antiseptic agent.** In India, the plant is cultivated in Himachal Pradesh, Punjab, Haryana, Uttar Pradesh and North Eastern Regions.

**Statement 2 is correct. The production of Geranium has got boost under the Aroma mission of Council of Scientific and Industrial Research (CSIR).** Scientists from Council of Scientific and Industrial Research- Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP), Lucknow have developed a new low-cost technology to prepare Geranium saplings and make this available for the farmers too.

### **Aroma mission**

**Council of Scientific and Industrial Research (CSIR)** had launched the Aroma mission to boost cultivation of aromatic crops and medicinal plants. Aromatic plants are a special kind of plants used for their aroma and flavour. Many of them are also used for **medicinal purposes** such as **rosemary, lavender, lemongrass** among others. The mission aims to develop **superior aroma crop varieties and their agro- technologies**. The mission also facilitates the assessment of their suitability for large scale cultivation in specific agro climatic regions.

**89. B**

**The Reserve Bank of India (RBI) released the National Strategy for Financial Inclusion (NSFI) for the period 2019-2024.**

Strengthen the ecosystem for various modes of **digital financial services in all Tier-II to Tier VI centers** to move towards a **less-cash society by March 2022**.

Increase outreach of banking outlets to provide banking access to every village within a 5-km radius or a hamlet of 500 households in hilly areas by March 2020. Aim was also to see that every adult had access to a financial service provider through a mobile device by March 2024.

**Financial inclusion** is increasingly being recognized as a **key driver of economic growth and poverty alleviation** world over. Access to formal finance can **boost job creation, reduce vulnerability to economic shocks and increase investments in human capital**. Seven of the United Nations Sustainable Development Goals (SDG) of 2030 views **financial inclusion as a key enabler for achieving sustainable development worldwide**.

90. B

**Statement 1 is incorrect. The National Startup Advisory Council will be chaired by the commerce and industry minister.**

- **Joint secretary of the Department for Promotion of Industry and Internal Trade will be the convener of the body.**
- It will also consist of non-official members to be nominated by the government from various categories such as founders of successful startups, veterans who have grown and scaled companies.
- The term of the non-official members of the council will be for a period of two years.
- The nominees of the ministries or departments concerned will not be below the rank of joint secretary, they will be nominated as the ex-officio members of the council.

**Statement 2 is correct. The National Startup Advisory Council was formed with an aim to drive sustainable economic growth and generate employment opportunities.** It will also suggest measures to make it easier to start, operate, grow and exit businesses by reducing regulatory compliances and costs, and promote ease of access to capital for startups.

**Mandate of the National Startup Advisory Council:** - The Council will suggest measures to foster a culture of innovation amongst citizens and students in particular, promote innovation in all sectors of the economy across the country. It will also suggest measures to facilitate public organizations to assimilate innovation with a view to improve public service delivery; promote creation, protection and commercialization of intellectual property rights.

91. A

**Option a is correct.**

**The World Economic Forum has launched the Reskilling Revolution.** It is an initiative to provide **one billion people with better education, skills and jobs by 2030.**

The scheme aims to **future-proof workers from technological change and help economies by providing new skills for the Fourth Industrial**

**Revolution.**

Founding governments include Brazil, France, **India**, Pakistan, the Russian Federation, UAE and the US. Business partners include PwC, Salesforce, ManpowerGroup, Infosys, LinkedIn, Coursera Inc. and The Adecco Group.

The Reskilling Revolution platform has been designed to prepare the global workforce with the skills needed to future-proof their careers against the expected **displacement of millions of jobs and skills instability as a result of technological change**. It is also designed to provide businesses and economies with the **skilled labour** needed to fulfil the millions of new roles that will be created by the Fourth Industrial Revolution, shifts in the global economy and **industrial transitions towards sustainability**.

92. D

**Statement 1 is correct. Urban lakes can ease the impact of floods and droughts by storing large amounts of water and releasing it during shortages.**

**Statement 2 is correct.** Urban lakes help in replenishing groundwater level as they are essential receptors for groundwater recharge, positively influencing water quality of downstream watercourses and **preserving the biodiversity and habitat of the surrounding areas.**

**Statement 3 is correct. There is no specific definition for 'urban lakes' in India.** According to the **National Lake Conservation Plan (NLCP)**, a water body having a minimum depth of three metres, spread over more than 10 hectares, and having no or very little aquatic vegetation, is considered as a lake.

**Note:**

Urban lakes are an important part of city ecosystems as they play a major role in providing environmental, social and economic services. Urban lakes provide prime opportunities for recreation, tourism and domestic purposes. They hold historical and traditional values and at places are sources of water supply for a municipality. Lakes such as **Carambolim (Goa), Chilika (Odisha), Dal (Jammu and Kashmir), Deepor Beel (Assam), Khabartal (Bihar), Kolleru**

(Andhra Pradesh), Loktak (Manipur), Naini (Uttarakhand), Nalsarovar (Gujarat), and Vembanad (Kerala), have long been providing recreational, tourism, fisheries, irrigation and domestic water supply services.

93. D

**Option d is correct.**

**Statement 1 is incorrect. The New and Emerging Strategic Technologies (NEST) Division has been set up by the Ministry of External Affairs.** The Division will function under the supervision of a Head of Division. NEST will act as the nodal division within the ministry for issues pertaining to new and emerging technologies. It will help in collaboration with foreign partners in the field of 5G and artificial intelligence.

**Statement 2 is incorrect.** It will not be the nodal division for implementing strategies for the Fourth Industrial Revolution in India.

**NEST will engage in technology diplomacy and deal with the foreign policy and international legal aspects of new and emerging technologies.** It will also help assess foreign policy and international legal implications of new and emerging technologies and technology-based resources, and recommend appropriate foreign policy choices.

94. C

**Statement 1 is incorrect. The GST Council is a joint forum of the centre and the states and consists of the following members: (a) The Union Finance Minister as the Chairperson (b) The Union Minister of State in-charge of Revenue or Finance, and (c) The Minister in-charge of Finance or Taxation or any other Minister nominated by each state government**

**Statement 2 is correct.** The **101st Amendment Act of 2016** paved the way for the introduction of a new tax regime (i.e. goods and services tax - GST) in the country. The amendment inserted a new **Article 279-A** in the Constitution. **This Article empowered the President to constitute a GST Council by an order.** Accordingly, the President issued the order in 2016 and constituted the Council.

**Statement 3 is incorrect. The Union Revenue Secretary acts as the ex-**

**officio Secretary to the Council.** Both the Secretariat of the GST Council and its headquarters are located at New Delhi.

**Note:**

The members of the Council from the states have to choose one amongst themselves to be the Vice- Chairperson of the Council. They can also decide his term.

The **Union Cabinet also decided to include the Chairperson of the Central Board of Excise and Customs (CBEC) as a permanent invitee** (non-voting) to all proceedings of the Council.

**One-half of the total number of members** of the Goods and Services Tax Council is the **quorum** for conducting a meeting.

The decisions of the Council are taken at its meetings. Every decision of the Council is to be taken by a **majority of not less than three-fourths of the weighted votes** of the members present and voting at the meeting.

The decision is taken in accordance with the following principles:

- 1) The vote of the central government shall have a weightage one-third of the total votes cast in that meeting.
- 2) The votes of all the state governments combined shall have a weightage of two-thirds of the total votes cast in that meeting.

Any act or proceedings of the Council will not become invalid on the following grounds:

- a. Any vacancy or defect in the constitution of the Council; or
- b. Any defect in the appointment of a person as a member of the Council; or
- c. Any procedural irregularity of the Council not affecting the merits of the case.

**95. C**

**Option c is correct.**

**Statement 1 is correct. Prompt corrective action (PCA) is a framework under which banks with weak financial metrics are put under watch by the**

**Reserve Bank of India.** The Reserve Bank of India introduced the PCA framework in 2002 as a structured early-intervention mechanism for banks that become undercapitalized due to poor asset quality, or vulnerable due to loss of profitability.

**Statement 2 is correct. Prompt corrective action (PCA) aims to check the problem of Non-Performing Assets (NPAs) in the Indian banking sector.** The PCA is invoked when certain risk thresholds are breached.

There are three risk thresholds which are based on certain levels of **asset quality, profitability, capital and net non-performing assets (NPA) ratio.**

There are two types of restrictions under Prompt corrective action (PCA) - **mandatory** and **discretionary.**

- 1) The restrictions on dividends, branch expansion, and director's compensation are **mandatory** while **discretionary restrictions could include curbs on lending and deposit.**
- 2) RBI may also place **restrictions on credit by PCA banks** to unrated borrowers or those with high risks but it **doesn't invoke a complete ban on their lending.**
- 3) RBI may also impose restrictions on the bank on borrowings from the interbank market.
- 4) Further, the banks may also not be allowed to enter into new lines of business.

96. A

**Option a is correct.**

**Statement 1 is correct.** Quadrilateral Security Dialogue (**QUAD**) is an **informal strategic dialogue between India, USA, Japan and Australia.** All the countries have their own interpretation of the Quad. The idea behind Quad has not been explicated clearly. It remains an **informal dialogue mechanism without any structure.**

**Statement 2 is correct.** All of the Quad nations maintain 2+2 level meetings with one another.

**Statement 3 is correct.** Malabar naval exercise is a multilateral naval exercise that includes simulated war games and combat maneuvers. It started in 1992 as a **bilateral exercise between the Indian and US navies. Japan joined in 2015. For the first time in over a decade, the exercise saw the participation of all four Quad countries in 2020(India, US, Japan and Australia).**

**Statement 4 is incorrect.** The **Blue Dot Network** was formally announced in 2019 at the Indo-Pacific Business Forum in Bangkok, Thailand. It is led by the US, Japan and Australia. **India has not joined the initiative yet.**

97. B

**Option b is correct.**

**The Camp David Accords was signed by Israel and Egypt in 1978.** The ultimate goal was to establish a framework for peace in the Middle East. A year later in 1979, Israel and Egypt concluded their peace treaty. Thus, Egypt became the first Arab state to sign a peace agreement with Israel. Later, Jordan became the second country to do so in 1994.

**Option c is incorrect.** With **Abraham Accords** signed in September, 2020, the **UAE** has become the **third Arab** state to conclude peace with Israel.

**Option d is incorrect.** **US - Russia Missile Pact:** The **Intermediate-Range Nuclear Forces Treaty (INF)** was signed by US President Ronald Reagan and Soviet leader Mikhail Gorbachev in 1987. It banned missiles with ranges between 500 and 5,500 km.

98. C

**Option c is correct.**

**The Christchurch Call to Action** initiative is named after the **New Zealand** city where 51 people were killed in an attack on mosques. It is aimed at stopping **abuse of the Internet by extremists.**

**Statement 1 is correct.** It aims to attempt to bring an end to the ability of using social media to organize and promote terrorism and violent extremism.



**Statement 2 is correct.** It **brings together countries and online service providers to prevent the abuse of the internet as occurred in and after the Christchurch attacks.** The online service providers which have signed the pledge include Amazon, Facebook, Google etc.

**Statement 3 is incorrect.** It outlines **collective, voluntary commitments** from Governments and online service providers intended to address the issue of terrorist and violent extremist content online.

**Statement 4 is correct.** India became a signatory to the pledge in 2019.

99. A

**Option a is correct.**

**Statement 1 is correct.** The **StarLink project** seeks to build a **low-cost, satellite based broadband network capable of delivering internet access to the entire globe.** The Starlink network will eventually have **42,000 satellites.**

**Statement 2 is correct.** The Starlink satellites will be deployed in the altitude band of 350 km to 1,200 km in the **Low Earth Orbit (LEO).** The LEO extends up to 2,000 km above the Earth's surface.

**Statement 3 is incorrect.** The main advantage of putting satellites in **LEO** for space-based Internet is that it **will reduce the latency between a user seeking data, and the server sending that data.**

100. B

Have fun. Achieve dreams.

**Option (b) is the correct answer.**

**Point Calimere Wildlife Sanctuary in Vedaranyam Range** has been closed for a week in view of water-logging caused by a heavy spell of rainfall. Study notes that the water quality at the Point Calimere Wildlife Sanctuary might be unsafe for avifauna to feed and breed.

Key Fact about Point Calimere WLS:

- It is located in **Nagapattinam district of Tamil Nadu** spreads across an area of 30 sq.km and comprises **sandy coastal, saline swamps and**

**thorn scrub forests** around the backwater.

- It is a protected area and a **Ramsar site**.
- It harbors the single-largest stretch of the **unique dry-evergreen forest** in the country besides open grasslands and tidal mudflats is of interest to tourists.
- Around 100 species of birds including the **Greater Flamingo, Painted Stork, Little Sting, Sea Gull and Brown-headed gull** have been making their presence felt since September.
- **Blackbuck** (Antelope Cervicapra) is the **flagship species** of the sanctuary.
- Other important animals are the spotted deer, black-napped hare, wild boar, Indian jackal, feral horses, palm civet, short-nosed fruit bat, jungle cat and monitor lizard.

**Gahirmatha Marine Sanctuary** is a marine wildlife sanctuary located in Odisha and is a very popular tourist attraction of **Odisha** in India. It is the **world's largest nesting beach for Olive Ridley Turtles**. It extends from **Dhamra River mouth in the north to Brahmani river mouth** in the south.

Malvan is one of the biologically richest coastal regions in **Maharashtra**. **The Malvan Marine Sanctuary** is extremely rich in **coral and marine life**. The marine flora and fauna here pertain to sea anemones, mollusks, polychaetes, pearl oysters, corals, seaweed and mangroves.

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