

1. Ans: b

Explanation:

Legal justice demands that every individual should be able to have impartial justice under the existing judicial system. There should be equal protection of laws.

Hence, statement 1 is incorrect.

Legal justice is broadly applied in two contexts: justice according to law and law according to justice. In the first case, **the validity of the law is not questioned, and the focus is on the principles of administration of justice** according to the prevalent law. In the second case, the substance of the law itself is examined to ensure that it conforms to the requirements of justice.

Hence, statement 2 is correct.

Legal justice is related to the process of law-making and the judicial system of society. It demands that the law be reasonable and that everyone receive justice according to the law. Law is not only to be reasonable but also equal for all. The object of law is the well-being of the whole community; hence, **the law should be equal for equals and unequal for unequals.**

Hence, statement 3 is correct.

2. Ans: b

Explanation:

CONSTITUTIONALISM

Constitutionalism recognizes the need for government but insists that limitations should be placed upon governmental powers. Constitutionalism envisages checks and balances and puts the powers of the legislature and executive under some restraints, not making them uncontrolled and arbitrary.

‘Constitutionalism’ connotes, in essence, a limited government or a limitation on government. Constitutionalism is the antithesis of arbitrary power.

‘Constitutions spring from a belief in a limited government.

A written Constitution, an independent judiciary with powers of judicial review, the doctrine of Rule of Law and **separation of power, free election to the legislature**, accountable and transparent democratic government, **Fundamental Rights of the people**, federalism, and decentralization of power, **Directive Principles of State Policy of India** are some of the principles and norms which promotes Constitutionalism in a country.

Hence, option b is correct.

3. Ans: d

Explanation:

EQUALITY BEFORE LAW

- The expression “equality before the law” is a **negative concept** indicating the **absence of any special privilege in favour of individuals and the equal subjection of all classes to ordinary law.**
- **The concept of “equality before the law” does not mean absolute equality among human beings, which is physically impossible.**

EQUAL PROTECTION OF LAW

- The expression “equal protection of the law” is a **positive concept** and implies the equality of treatment in equal circumstances.
- Equal protection of the law would mean “that among equals, the law should be equal and equally administered, and that **likes should be treated alike.**” Equal protection requires affirmative action by the state towards unequals by providing facilities and opportunities.

Hence, option d is correct.

4. Ans: c

Explanation

Article 5: Citizenship at the commencement of the Constitution.—

At the commencement of this Constitution, every person who has his domicile in the territory of India and—

- (a) who was born in the territory of India; or
- (b) **either of whose parents were born in the territory of India or**
- (c) **who has been ordinarily resident in the territory of India for not less than five years immediately preceding such commencement shall be a citizen of India.**

Hence, statements 1 and 2 are correct.

Article 6: Rights of citizenship of certain persons who have migrated to India from Pakistan.—

Notwithstanding anything in Article 5, a **person who has migrated to the territory of India from the territory now included in Pakistan shall be deemed to be a citizen of India at the commencement of this.**

Constitution if—

(a) he or either of his parents or any of his grand-parents was born in India as defined in the Government of India Act, 1935 (as originally enacted); and

(b)(i) In the case where such a person has so migrated before the nineteenth day of July 1948, he has been ordinarily resident in the territory of India since the date of his migration or

(ii) in the case where such a person has so migrated on or after the nineteenth day of July 1948, he was registered as a citizen of India by an officer appointed on that behalf by the Government of the Dominion of India on an application made by him therefore to such officer before the commencement of this Constitution in the form and manner prescribed by that Government:

Provided that no person shall be so registered unless he has been resident in the territory of India for at least six months immediately preceding the date of his application

Hence, statement 3 is correct.

A person who, upon renunciation of citizenship of another country and by notifying the intention to become an Indian citizen, comes under Section 6 (I) of Schedule 3 of the Citizenship Amendments Act (CAA) 1955.

Hence, statement 4 is incorrect.

5. Ans: a

Explanation:

Article 142(1): Enforcement of decrees and orders of Supreme Court as to discovery, etc.– The Supreme Court, in the exercise of its jurisdiction, **may pass such decree or make such order as necessary for doing complete justice** in any cause or matter pending before it.

Hence, statement 1 is correct.

Article 138(1): Enlargement of the jurisdiction of the Supreme Court– The Supreme Court shall have such further jurisdiction and powers with respect to any of the matters in the Union List as Parliament may by law confer

The Parliament, by law, **can only enlarge but cannot curtail** the powers and jurisdiction of the Supreme Court.

Hence, statement 2 is incorrect.

Article 129: Supreme Court to be a court of record– The Supreme Court shall be a court of record and shall have all the powers of such a court, including the power to punish for contempt of itself.

Article 215: High Courts to be courts of record– Every High Court shall be a court of record and shall have all the powers of such a court, including the power to punish for contempt of itself.

Hence, statement 3 is correct.

6. Ans: c

Explanation:

- **Article 310:** Tenure of office of persons serving the Union or a State.—(1) Except as expressly provided by this Constitution, every person who is a member of a defense service or of a civil service of the Union or an all-India service or holds any post connected with defense or any civil post under the Union holds office during the pleasure of the President, and every a person who is a member of a civil service of a State or holds any civil post under a State holds office during the pleasure of the Governor of the State.
- (2) Notwithstanding that a person holding a civil post under the Union or State holds office during the pleasure of the President or, as the case may be, of the Governor 2 of the State, any contract under which a person, not being a member of a defense service or an all-India service or of a civil service of the Union or a State is appointed under this Constitution to hold such a post may, if the President or the Governor 4, as the case may be, deems it necessary to secure the services of a person having special qualifications provide for the payment to him of compensation, if before the expiration of an agreed period that post is abolished or he is, for reasons not connected with any misconduct on his part, required to vacate that post.

Hence, statement 1 is correct.

- The pleasure of the president or the governor under Article 310 cannot be exercised in a discriminatory manner and is controlled by Articles 14,15 and 16. The doctrine of pleasure is subject to fundamental rights. **A person who enters the government service does not surrender or waive off his fundamental rights** and is not barred from challenging the constitutionality of the rules on the grounds of the violation of part III. the government servant can invoke Article 14 if his services are terminated in a discriminatory /arbitrary manner. He/she can invoke Article 15(I) if the services are terminated on account of religious bigotry, racial prejudice, casteism, provincialism, or sex. He/she can also invoke Article 16(I).

Hence, statement 2 is Incorrect.

- Under Article 320(3)(c), the **Union Public Service Commission or the State Public Service Commission must be consulted on all disciplinary matters** affecting a person serving in a civil capacity under the central or state government.

Hence, statement 3 is correct.

7. Ans: b

Explanation:

EXECUTIVE POWERS

The expression 'executive power' is not defined in the Constitution. Article 73 merely defines the matters with respect to which the executive authority of the Union extends. Executive authority can be said to be the authority to carry out the executive functions of the government. Ordinarily, it refers to the residue of governmental functions after legislative and judicial functions are taken away.

Hence, statement 1 is incorrect.

The executive functions comprise both the determination of the policy as well as carrying it into execution.

Hence, statement 2 is correct.

Ordinarily, one of the executive's functions is to execute laws, but proper legislation is not always necessary for exercising executive power, such as entering into any trade or business or making a treaty that does not affect an individual's rights.

Hence, statement 3 is incorrect.

8. Ans: d

Explanation:

Section 68, Representation of People Act, 1951 deals with the scenario when the person is chosen as a member of both the Houses of Parliament and has not taken his seat in either of them; such a **person has a choice to decide within 10 days as to which House's membership he wishes to retain**, and upon intimation of such a decision by him, he automatically vacates the membership in other House. However, if he fails to intimate within the stipulated time, then he ceases to be a member of the Council of States.

Hence statement 1 is incorrect.

Till 1966, there was no embargo on contesting the Elections on a number of seats. For example, in 1971, Biju Patnaik simultaneously contested elections from four Legislative Assembly seats and one seat in the Lok Sabha.

Recognizing the abuse of process and wasteful expenditure of re-election, **Section 33 of ROPA was amended in 1966, and clause 7 of the same limits the contesting of elections to only two seats at a time both in parliament and state Legislature.**

Hence statement 2 is incorrect

9. Ans c

Explanation:

Many issues in our constitutional jurisprudence evolved out of the doctrine of constitutional silence. **The basic structure doctrine vis-a-vis Article 368 of the Constitution emerged out of the concept of constitutional silence.**

Hence, statement 1 is correct.

A Constitution that professes to be democratic and republican in character and which brings about a **revolutionary change by the 73rd Constitutional Amendment by making detailed provision for democratic decentralization** and self-government on the principle of grass-root democracy **cannot be interpreted to exclude the provision of a no-confidence motion in the respect of the office of the Chairperson of the panchayat, just because of its silence on that aspect.**

Hence, statement 2 is correct.

10. Ans: d

Explanation:

Pardon: a pardon completely absolves the offender from all sentences, punishments,, and disqualifications and places him in the same position as if he had never committed the offenses.

Reprieve: temporary suspension of a death sentence.

Respite: means awarding a lesser punishment on some special Grounds.

Remission: means reduction of the amount of sentence without changing its character.

Commute means the substitution of one form of punishment for another of a lighter character.

Article 72. Power of the President to grant pardons, etc., and to suspend, remit, or commute sentences in certain cases.—

(1) The President shall have the power to grant pardons, reprieves, respites, or remissions of punishment or to suspend, remit, or commute the sentence of any person convicted of any offense —

- (a) in all cases where the punishment or sentence is by a Court Martial;
- (b) in all cases where the punishment or sentence is for an offense against any law relating to a matter to which the executive power of the Union extends;
- (c) in all cases where the sentence is a sentence of death.

(2) Nothing in sub-clause (a) of clause (1) shall affect the power conferred by law on any officer of the Armed Forces of the Union to suspend, remit, or commute a sentence passed by a Court Martial.

(3) Nothing in sub-clause (c) of clause (1) shall affect the power to suspend, remit, or commute a sentence of death exercisable by the Governor of a State under any law for the time being in force.

Hence, none of the correct.

11. Ans: a

Explanation:

As a result of depreciation or devaluation, there will be **an increase in exports**, and a decrease in imports consequently there will be an increase in net Exports as the net exports increase the net aggregate demand for domestically produced goods increases.

In Case of devaluation the prices of imported goods increases, thus it is inflationary

12. Ans: b

Explanation:

Inflation leads to a decrease in exports and an increase in imports, this raises the demand for the dollar, consequently, the dollar appreciates and the rupee depreciates.

Higher interest rate leads to capital inflows from foreign countries, which raises the demand for the rupee and it appreciates

13. Ans: b

Explanation:

The Gini - coefficient for the post-of-tax distribution of income should be **less** than the pre-tax distribution

14. Ans: c

Explanation:

The interest rate is the amount a lender charges expressed as a percentage of the principal.

A bond is a fixed-income instrument that represents a loan made by an investor to a borrower (typically corporate or governmental).

Most bonds pay a fixed interest rate that becomes more attractive if interest rates fall, driving up demand and the price of the bond. Conversely, if interest rates rise, investors will no longer prefer the lower fixed interest rate paid by a bond, resulting in a decline in its price.

15. Ans: c

Explanation:

Capital Receipts: The government receives money by way of loans or from the sale of its assets

Revenue Receipts: Revenue receipts are those receipts that do not lead to a claim on the government. They are divided into tax and non-tax revenues

Non-tax revenue of the central government mainly consists of interest receipts on account of loans by the central government, dividends and profits on investments made by the government, fees, and other receipts for services rendered by the government. Cash grants-in-aid from foreign countries and international organizations are also included.

16. Ans: d

Explanation

Direct taxes like wealth tax, gift tax, and estate duty (now abolished) have never brought in large amount of revenue and thus have been referred to as 'paper taxes'.

17. Ans: a

Explanation:

Gender Budgeting, is a powerful tool for achieving gender mainstreaming, so as to ensure that the benefits of development reach women as much as men. It is not an accounting exercise but an ongoing process of keeping a gender perspective in policy/program formulation, its implementation, and review. Gender Budgeting entails the dissection of the Government budgets to establish its gender differential impacts and to ensure that gender commitments are translated in to budgetary commitments.

Hence, statement 2 is incorrect.

The 2005-06 Indian Budget introduced a statement highlighting the gender sensitivities of the budgetary allocations. Gender budgeting is an exercise to translate the stated gender commitments of the government into budgetary commitments, involving special initiatives for empowering women and examination of the utilization of resources allocated for women and the impact of public expenditure and policies of the government on women.

The gender budget includes allocations made by different ministries for schemes that fully or partially benefit women.

18. Ans: b

Explanation:

Procedures relating to the agricultural market-access provision in which all non-tariff measures are converted into tariffs. Almost all import restrictions that did not take the form of tariffs, such as quotas, have been converted to tariffs — a process known as “tariffication”.

19. Ans: c

Explanation:

External Debt – Outstanding (US\$ billion)

Commercial borrowings remained the largest component of external debt, with a share of 38.1 per cent, followed by non-resident deposits (23.9 per cent) and short-term trade credit (18.2 per cent).

The share of short-term debt (with original maturity of up to one year) in total external debt declined to 18.9 percent at end-June 2020 from 19.1 percent at end-March 2020

20. Ans: b

Explanation:

A swap is an agreement between two or more parties to exchange sets of cash flows over a period in the future. For example, Party A might agree to pay Party B a fixed rate of interest of \$1 million each year for five years. In return, Party B might pay a floating rate of interest on \$1 million each year for five years.

There are five basic kinds of swaps, interest rate swaps, currency swaps, equity swaps, commodity swaps, and credit swaps.

21. Ans: a

Explanation:

An important sect of **Buddhism**, named “**Sarvastivadins**,” was strong in the region of Mathura and Kashmir. In Kashmir, under the patronage of Kanishka [1st - 2nd century A.D.], the fourth great council was held, at which Sravastivadin doctrines were codified in a summary, the “Mahavibhasa.”

New ideas developed chiefly among the Sravastivadinis but also in the old schism of the Mahasanghikas, which were to form the basis of Buddhism's division into the "Great" and "Lesser Vehicle" [Mahayana and Hinayana].

Hence, option a is correct.

22. Ans: b

Explanation

BUDDHIST LITERATURE

Tripitakas, Niyakas, Theragatha, Therigatha, Milindapanha, Nettigandha or Nettipakarana, Nidanakatha, Dipavamsa, Mahavamsa, Buddha Charita, Avadanashataka, Divyavadana, **Ashtasahasrika-prajnaparamita**, and **Saddharma Pundarika**.

JAIN LITERATURE

Adipurana, **Harivamsapurana**, Trishastilakshana, Mahapurana and **Parishista parvan**.

Hence, option b is correct.

23. Ans: a

Explanation:

Most of the inscriptions are in the Prakrit language and Brahmi script. Those at Mansehra and Shahbazgarhi are in the Prakrit language and Kharoshthi script. There are a **few inscriptions in Greek and Aramaic as well**.

Hence, statement 1 is incorrect.

The Major Pillar Edicts are located in North India. **The minor rock edicts have the widest distribution, with a noticeable clustering in the Andhra-Karnataka area**. The inscriptions were located along ancient trade and pilgrimage routes.

Hence, statement 2 is incorrect.

Ashokan's inscription mainly contains an explanation of Dhamma and the king's efforts to propagate it. Some **directly indicate his allegiance to the Buddha's teaching and his close relationship with the Sangha**.

Hence, statement 3 is correct.

24. Ans: a

Explanation:

Sangam poems are pervaded with warrior ethics. The goal of the hero of the Puram poems was *pukal* [glory, fame], and a heroic death was greatly valued. It was believed that the spirit of a warrior who died in a battle dwelt in paradise.

Hence, statement 1 is correct.

There was an important social classification termed *Kutti*. The *Kutti* were clan-based descent groups and were central to the early Tamil system of agricultural production. Although associated with lineage and hereditary occupation, there were **no real restrictions on inter-dining and social interaction among the *Kutti* groups.**

Hence, statement 2 is incorrect.

There are different kinds of **funerary practices mentioned in the Sangam poetries.** In *Purananuru* 228, the poet addresses a potter who must urns for the dead *Valavan*. There are several references to cremation.

Hence, statement 3 is correct.

25. Ans: d

Explanation:

The **Pravrajya ceremony** marked a person's going forth from home into homelessness and his/her becoming a novice under a preceptor. It involves shaving the head and donning ochre robes. The novice recited the formula of taking refuge in the **Budhha, Dhamma, and Sangha.** The *upasampada* was the ordination ceremony when the novice became a full-fledged member of the monastic community.

Hence, option d is correct.

26. Ans: c

Explanation:

The most important epigraph of **Samudragupta's** reign is the Allahabad pillar, whose surface also carries inscriptions of **Ashoka** and the **Mughal emperor Jahangir.**

Hence, statement 1 is correct.

The script of Samudragupta's inscription was inscribed in **Bhrami script.**

Hence, statement 2 is correct.

27. Ans: a

Explanation:

There were various important western ports of India mentioned as:- Calliena [Kalyan], **Sibor** [Chaul], and the market of Male [Malabar], Parti, **Mangarouth [Mangalor], Solpatana, Nolpatana [Necynda], and Pandopatana**. Faxiin refers to Tamralipti in Bengal as an important center of trade on the eastern coast.

Hence, option a is correct.

28. Ans: c

Explanation:

GURU NANAK DEV [1469-1539]

Guru Nanak Dev worked with his brother-in-law, Jai Ram, a diwan in the service of Nawab Dault Khan Lodhi, a relative of the emperor **Sultan Bahlul Khan Lodhi**. Nanak decried the caste system, ritualism, and the supremacy of the Brahman and Mullas. He was absolutely against idol worship.

Hence, statement 1 is correct.

He **believed 'in the doctrine of karma' and the theory of transmigration of souls**. His teachings were included in the Adi Granth compiled by the fifth guru, **Arjan Dev..**

Hence, statement 2 is correct and statement 3 is incorrect.

29. Ans: d

Explanation:

The main classical styles of Indian dancing that flourished in different regions were Bharat Natayal [Tanjore, Madurai, Madaras, and Belur], Kathakali [Kerala], **Kathak [Lucknow, Jaipur and Delhi]**, and Odissi [Orissa]

Hence, statement 1 is correct.

Kathak was one of the major classical dances that received an impetus in medieval India. It was, in fact, a folk art performed by Kathak's community of dancers and musicians, who wandered around the countryside, using music and dance to **recite episodes from the Ramayana and Mahabharata**.

Hence, statement 2 is correct.

During the Mughal era, Muslim rulers brought musicians and dancers from **Persia and Central Asia** with them. These dancers adopted some of the features of Indian dance. Similarly, some of the Hindu dancers were influenced by the new style and absorbed some features. This **process of mutual influence and adjustment resulted in complete synthesis during Akbar's reign**.

Hence, statement 3 is correct.

30. Ans: d

Explanation:

During Akbar's reign, there were 12 provinces.

Nizams or Subedar:- They were the head of the province known as the Sahib-i-Subah, Subedar, or Nazim. He was assisted by the Diwan, Bakshi, Faujdar, Kotwal, and Qazi.

Diwan:- He was the second officer in the province. His function is to collect revenue from the province.

Faujdar:- He was responsible for the maintenance of law and order.

Sadar:- He was appointed by the Central Government and his main duty was **to supervise the Sayurghals or rent-free lands** granted for religious and charitable purposes.

Amil: He was the main revenue collector and had many duties to perform. He was required to deal with Zamindar and check the quality of improved and wasteland land.

Hence option d is correct.

31. Ans a

Explanation:

The fact that **land surfaces require one-third of energy to raise the temperature** of a given volume of land as compared to an equal volume of water, **accounts for the warmer summers, colder winters, and a greater range of temperature of continental interiors as compared with maritime districts.**

Hence, statement 1 is correct.

Land surfaces are heated more quickly than water surfaces, because of the higher specific heat of water. In other words, **it requires only one-third as much energy to raise the temperature of a given volume of land by 1°F; as it does for an equal volume of water.**

Hence, statement 2 is correct.

32. Ans: c

Explanation:

Igneous rocks

Igneous rocks are formed by the cooling and solidification of Molten rock (magma) from beneath the earth's crust. They are normally crystalline in structure. They do not occur in strata (layers) nor do they contain fossils.

Most Igneous rocks are extremely hard and resistant. For this reason, they are quarried for road-making and polished as monuments and gravestones.

Hence option c is correct.

Mechanically formed Sedimentary rock

These rocks have been formed from the accumulation of materials derived from other rocks which have been cemented together.

For example: Sandstones are probably the most familiar sedimentary rocks. They are made from sand grains, often quartz fragments derived from granite.

Chemically formed sedimentary rocks

Such rocks are precipitated chemically from solutions of one kind or another.

For example: Rock salts are derived from strata that once formed the beds of seas or lakes.

Metamorphic rocks

All rocks whether igneous or sedimentary may become metamorphic or changed rocks under great heat and pressure.

For example: Clay may be metamorphosed into slate, limestone into marble, sandstone into quartzite, granite into gneiss, shale into schist, and coal into graphite.

33. Ans. d

Explanation:

Four Indian states, namely Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh, and one Union Territory of Ladakh touch the Indian boundary with China.

Hence statement 1 is incorrect.

The 2,152 km long sector of the Sino-Indian border **separates the Union Territory of Ladakh of India from the Sinkiang province of China**. The Sinkiang province (now known as Xinjiang Uyghur Autonomous Region) is located in the northwest of China. **Zhejiang**, a province in eastern China, encompasses a rural interior and urban centres along the East China Sea.

Hence, statement 2 is incorrect.

34. Ans. b

Explanation:

Moist deciduous forests: Moist deciduous forests are more pronounced in regions that record rainfall between 100 and 200 cm. These forests are found in northeastern states along the foothills of the Himalayas, the eastern slopes of the Western Ghats, and Odisha. Teak, sal, shisham, hurra, mahua, amla, semul, kusum, and sandalwood are the main species of these forests.

Dry deciduous forests: Dry deciduous forest covers vast areas of the country, where rainfall ranges between 70 -100 cm. On the wetter margins, it has a transition to the moist deciduous, while on the drier margins to thorn forests. These forests are found in rainier areas of the Peninsula and the plains of Uttar Pradesh and Bihar. In the higher rainfall regions of the Peninsular plateau and the northern Indian plain, these forests have a parkland landscape with open stretches in which teak and other trees interspersed with patches of grass are common. As the dry season begins, the trees shed their leaves completely and the forest appears like a vast grassland with naked trees all around. **Tendu, palas, amaltas, bel, khair, axlewood, etc. are the common trees of these forests.**

Hence option b is correct.

Tropical thorn forests: Tropical thorn forests occur in areas that receive rainfall less than 50 cm. These consist of a variety of grasses and shrubs. It includes semi-arid areas of southwest Punjab, Haryana, Rajasthan, Gujarat, Madhya Pradesh and Uttar Pradesh. In these forests, plants remain leafless for most part of the year and give an expression of scrub vegetation. Important species found are babool, ber, wild date palm, khair, neem, khejri, palas, etc. Tussocky grass grows up to a height of 2 m as the undergrowth.

Semi-evergreen forests: Semi-evergreen forests are found in the less rainy parts of these regions. They consist of a mixture of evergreen and moist deciduous trees. The undergrowing climbers provide an evergreen character to these forests. The main species are white cedar, hollock, and kail.

35. Ans: c

Explanation

CHILIKA LAKE

It is considered to be the **largest lagoon** in India

Hence, statement 1 is incorrect.

Chilika Lake is a brackish water lake and a shallow lagoon with estuarine character spread across **three districts of Puri, Khurda, and Ganjam in the state of Odisha** in eastern India.

Hence, statement 2 is incorrect.

A number of islands are present in the lagoon with habitation and without habitation, prominent among which are Krushnaprasad, Nalaban, Kalijai, Somolo, Honeymoon, Breakfast, and Birds Island.

The **Nalaban Island** within the lake is notified as a **Bird Sanctuary** under the Wildlife (Protection) Act, 1972.

Hence, statement 3 is correct.

It is the largest wintering ground for migratory waterfowl on the Indian subcontinent. The fauna at Chilika includes a number of rare, threatened, and endangered species, including the Barakudia limbless skink. On account of its rich bio-diversity and ecological significance, Chilika was designated as the 1st "Ramsar Site" of India.

36. Ans c

Explanation:

The Gondwanas consist of **sandstones with some shales and clays**. They are of continental origin, fluviatile and lacustrine deposits laid down in geosynclinal troughs on ancient plateau surfaces. As the sediments accumulated, the loaded troughs subsided which led to thick deposits of fresh water and subaerial sediments into which were embedded the terrestrial plants and animals. These **flat sedimentary strata**, some 6,000 m thick, are laid down from the start of the Permian period some 250 million years ago.

Hence, statement 1 is incorrect.

The Gondwana rocks have rich deposits of iron ore, copper, **uranium**, and antimony.

Hence statement 2 is correct.

In the extra-peninsular region, the Gondwana rocks are found in Kashmir, Darjeeling, and **Sikkim**.

Hence, statement 3 is correct.

37. Ans: b

Explanation:

Aghil pass: Lying in the north of K2 Peak. this pass is situated at an elevation of about 5000m above sea level and joins the Ladakh region of India with the Xinjiang (Sinkiang) province of China. being located at a high altitude and surrounded by lofty mountains, it remains snow-covered during the winter season and is closed from November to May.

Bara Lacha La: this mountain pass is situated at an altitude of 4883m and provides passage between Himachal Pradesh and Ladakh. The national highway connecting Mandi in Himachal Pradesh with Leh in Ladakh passes through this pass. Being situated at a high altitude, it remains snow-covered in winter and is not used as a transport route.

Rohtang Pass: It is located at an altitude of 3979 m and provides a road link between the Kullu, Lahul and Spiti valleys. Border Roads organization is responsible for constructing and maintaining roads in this area. Rohtang Pass is a great tourist attraction and traffic jams are very common because this route is widely used by military, public and private vehicles.

Nathu La: situated at an altitude of 4310m on the Indo-china border. it forms part of an offshoot of the ancient Silk Route. It connects Sikkim with Tibet and is an important trade route b/w India and China.

Hence option b is correct.

38. Ans: d

Explanation:

THAR DESERT

The western extremity of the Great Plain of India consists of the Thar or the Great Indian Desert. About two-thirds of the Indian desert lies in **Rajasthan**, west of the Aravali Range, and the remaining one-third is in the neighboring states of **Haryana, Punjab, and Gujarat**

Hence, statement 1 is incorrect.

The eastern part of the desert is rocky while its **western part is covered by shifting sand dunes locally known as Dhrian.**

Luni River. is a seasonal stream that flows southwest to the Rann of Katchh. The track north of the Luni is known as **Thali** or sandy plain.

Hence, statement 2 is incorrect.

39. Ans c

Explanation:

The Tapi (also known as the Tapti) is the second largest west-flowing river of Peninsular India and is known as **'the twin' or 'the handmaid'** of the Narmada. **It originates from the sacred tank of Multai on the Satpura Plateau in the Betul district of Madhya Pradesh.**

Hence, option c is correct.

40. Ans c

Explanation:

Mahua tree is native to India, but not endemic to India. Because it is also found in other countries like Nepal, Myanmar, Sri Lanka etc. Mahua is one of the important tree species in central India, as it produces abundant delicious, and nutritive flowers. This is used for edible

purposes either fresh or dried and stored for an indefinite period. It is fast growing with 20 m in height, an evergreen tree cultivated in warm regions for its oleaginous seeds. **Its oil is used by tribal as vegetable butter in addition it is used in skincare products, soaps, detergents, etc. It serves as an important fuel oil, hence a good source of biodiesel.** The seed cake is used as manure. The flowers are used to produce an alcoholic drink in several parts of India.

Hence, option c is correct.

41. Ans: b

Explanation:

The countries surrounding the Mediterranean and its marginal seas in clockwise order are- Spain, France, Monaco, Italy, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, **Albania**, Greece, Turkey, Syria, Lebanon, Israel, Palestine, Egypt, Libya, Tunisia, **Algeria**, and Morocco; Malta and **Cyprus** are island countries in the sea.

Hence, option b is correct.

42. Ans: a

Explanation:

The Budget in the Legislature:

The budget goes through the following stages before it is passed finally by the Parliament.

- Presentation to the legislature.
- General discussion
- Discussion and voting of Demands for Grants
- Consideration and passing of Appropriation Bill and
- Consideration and passing of the Finance Bill

Hence, option d is correct.

43. Ans: a

Explanation:

How fast is 5G?

5G is 10 to x 100 faster than what we get with 4G

According to communication principles, the shorter the frequency, the larger the bandwidth.

The use of **shorter frequencies** (millimeter waves between 30GHz and 300GHz) for 5G networks is the reason why 5G can be faster.

What is 5G low latency?

5G technology offers an extremely low latency rate, the delay between the sending and receiving of information. From 200 milliseconds for 4G, we go down to 1 millisecond (1 ms) with 5G.

5G Features

- Up to 10Gbps data rate - > 10 to 100x improvement over 4G and 4.5G networks
- 1-millisecond latency
- 1000x bandwidth per unit area
- Up to 100x number of connected devices per unit area (compared with 4G LTE)
- 90% reduction in network energy usage
- Up to 10-year battery life for low-power IoT device

Hence, option a is correct.

44. Ans: c

Explanation:

Interferons are a family of naturally-occurring proteins that are made and secreted by cells of the immune system like white blood cells, natural killer cells, fibroblasts, and epithelial cells. There are three classes of interferons alpha, beta, and gamma.

Hence, statement 1 is incorrect.

Interferons modulate the response of the immune system to viruses, bacteria, cancer, and other foreign substances that invade the body. **Interferons do not directly kill viral or cancerous cells;** they boost the immune system response and reduce the growth of cancer cells by regulating the action of several genes that control the secretion of numerous cellular proteins that affect growth.

Hence, statement 2 is incorrect.

Commercially available **interferons are human interferons manufactured using recombinant DNA technology.**

Hence, statement 3 is correct.

45. Ans c

Explanation:

Lynparza (olaparib) has been approved by the US Food and Drug Administration (FDA) for use in US patients with homologous recombination repair (HRR) **gene-mutated metastatic castration-resistant prostate cancer (mCRPC).**

Hence, option c is correct.

46. Ans: c

Explanation:

CRISPR” is an acronym for the Clustered Regularly Interspaced Short Palindromic Repeats of genetic information that some bacterial species use as part of an antiviral mechanism.

Cas9: a CRISPR-associated (Cas) endonuclease, or enzyme, that **acts as “molecular scissors” to cut DNA at a location specified by a guide RNA**

Hence, statement 1 is correct

CRISPR/Cas9 edits genes by precisely cutting DNA and then letting natural DNA repair processes take over. The system consists of two parts: the Cas9 enzyme and a guide RNA.

Guide RNA (gRNA): a type of RNA molecule that binds to Cas9 and specifies, based on the sequence of the gRNA, the location at which Cas9 will cut DNA

Cas9 gene editing of cells can be either *ex vivo* (outside the body) or *in vivo* (inside the body).

Hence, statement 2 is correct

47. Ans: c

Explanation:

Most reef-building corals contain photosynthetic algae, called zooxanthellae, that live in their tissues. The corals and algae have a mutualistic relationship. The coral provides the algae with a protected environment and compounds they need for photosynthesis. In return, the algae produce oxygen and help the coral to remove waste. Most importantly, zooxanthellae supply the coral with glucose, glycerol, and amino acids, which are the products of photosynthesis. The coral uses these products to make proteins, fats, and carbohydrates, and produce calcium carbonate

In addition to providing corals with essential nutrients, zooxanthellae are responsible for the unique and beautiful colors of many stony corals. Sometimes when corals become physically stressed, the polyps(units of corals) expel their algal cells and the colony takes on a stark white appearance. This is commonly described as “coral bleaching”. If the polyps go for too long without zooxanthellae, coral bleaching can result in the coral's death.

Hence, statement 1 is correct.

Coral reefs are some of the most diverse and valuable ecosystems on Earth. **Coral reefs support more species per unit area than any other marine environment,** including about 4,000 species of fish, 800 species of hard corals, and hundreds of other species.

Hence, statement 2 is correct.

48. Ans: a

Explanation:

Gopal Baba Valangkar 'reformulated and radicalized' compositions of fourteenth & fifteenth-century saints Tukaram and Chokhamela

Hence, statement 1 is correct.

Phule work Shetkaryaca Asud ("The Whipcord of the Cultivators") was published in 1881, his major critique of the joint exploitation of the Shudra and Ati-Shudra peasantry by the British and Brahman alliance in the bureaucracy.

Hence, statement 2 is incorrect.

49. Ans b

Explanation:

Parliamentary Sovereignty is not a feature of the Indian Constitution. We have a written Constitution, and the powers and functions of every organ are defined and delimited by the Constitution. There is no question of any organ, not even parliament, being sovereign.

Hence, option b is correct.

50. Ans b

The high growth rate in the post-reform period can be attributed to a High rate of savings, Low gross fixed capital formation, Decrease in ICOR

Hence, option b is correct.

51. Ans: a

Explanation:

Pin Valley National Park and surroundings; Chandratol and Sarchu&Kibber Wildlife Sanctuary **is located in the Cold Desert biosphere reserve.**

Hence, option a is correct.

It is part of Wayanad, Nagarhole, Bandipur, Madumalai, Nilambur, Silent Valley, and Siruvani hills and is located in the **Nilgiri biosphere reserve.**

Part of the delta of the Ganges and Brahmaputra river system is located in the **Sunderban biosphere reserve.**

Part of Siang and Dibang Valley in Arunachal Pradesh is located in the **Dehanhg-Dibang biosphere reserve.**

52. Ans: b

Explanation:

Assam : Deepor Beel

Bihar : Kabartal Wetland

Goa : Nanda Lake

Gujarat : Khijadia Wildlife Sanctuary

Hence, option b is correct.

The Ramsar Convention is an international treaty for the conservation and sustainable utilization of wetlands, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational value.

53. Ans .b

Explanation:

Brow-antlered deer

Common Name - Sangai, Brow antlered deer, **Dancing Deer**

The brow-antlered deer is found in Keibul Lamjao National Park in Manipur. It is largely seen over the floating biomass, locally called “phumdi” in the South Eastern part of Loktak Lake inside the park

Hence, option b is correct.

54. Ans .d

Explanation:

Out of the 47 species of Mahseer in the world, India is home to fifteen. **Tor remadevi** is one of the newest species identified, while Tor moyarensis, confined to the Moyar River of Tamil Nadu, is reported to be another.

Hence, option a is incorrect.

The Golden Mahseer inhabits **the Himalayan foothills, the Indus, Ganga, and Brahmaputra basins** and can also be found down south in the Balamore, Cauvery, Tambraparini, and Kosi Rivers.

Hence, option b is incorrect.

55. Ans .b

THE HIMALAYAN QUAIL

Listed in Schedule I of the Wildlife (Protection) Act, 1972, and as Critically Endangered on the IUCN Red List

A possible sighting of this species was reported in Nainital in 2003.

Hence, option a is incorrect.

The Himalayan Quail (*Ophrysia superciliosa*) is presumed to be extinct, The Himalayan quail is native to India, found only in the mountains of Uttarakhand in the north-west Himalayas.

Hence, option b is correct.

56. Ans: d

Explanation:

NILGIRI THAR

A state animal of Tamil Nadu, an **endemic species of the Western Ghats**, is protected under Schedule I of the Wildlife (Protection) Act of India, 1972.

Hence, option a is correct.

The major population is confined to Eravikulam National Park in **Kerala and the Grizzled Giant Squirrel Wildlife Sanctuary in Tamil Nadu.**

Hence, option b is incorrect.

Plantation activities affect the Nilgiri tahr habitat, which includes grasslands and sholas.

Hence, option c is correct.

57. Ans .b

Explanation:

The average life span of a tiger in the wild is about 14 to 16 years.

Hence, option a is incorrect.

The Indian Tiger is an endangered animal listed in Schedule I of the Wildlife (Protection) Act, of 1972.

Hence, option b is correct.

This act gives it protection against hunting/poaching and trade for skins, bones, and body parts

58. Ans .c

Explanation:

No human activity is permitted inside the national park except for the ones permitted by the Chief Wildlife Warden of the state under the conditions given in CHAPTER IV, WPA 1972.

Hence, option a is incorrect.

No person shall destroy, exploit, or remove any Wildlife, including forest produce, from a National Park. Provided that where forest produce is removed from a National Park, it may be used to meet the personal bona fide needs of the people living in and around the National Park and shall not be used for any commercial purpose.

Hunting, killing or capturing of fauna, or deprivation of any wild animal of its habitat, or destruction and collection of flora, and weapons are all prohibited.

Hence, option b is correct.

No grazing of any live-stock shall be permitted in a National Park and no live-stock shall be allowed to enter therein except where such live-stock is used as a vehicle by a person authorized to enter such National Park.

Hence, option c is incorrect.

59. Ans d

Explanation:

Telangana state does not have RAMSAR wetland site.

Hence, option d is correct.

60 ans .c

Explanation:

Explanation:

Nilgiri - 5520 (Core 1240 & Buffer 4280 sq. km)

Great Nicobar - 885 (Core 705 & Buffer 180 sq.km)

Dehang-Dibang - 5111.50 (Core 4094.80 & Buffer 1016.70 sq.km)

Achanakamar - Amarkantak - 3835.51 (Core 551.55 & Buffer 3283.86 sq.km)

Hence, option c is correct.

61. Ans: d

Explanation:

Explanation:

Bacterial infections may be treated with antibiotics, which are classified as bactericidal if they kill bacteria, or bacteriostatic if they just prevent bacterial growth.

Hence, statement 1 is incorrect.

The **World Health Organization [WHO] AWaRe** (Access, Watch, Reserve) antibiotic book provides concise, evidence-based guidance on the choice of antibiotic, dose, route of administration, and duration of treatment for more than 30 of the most common clinical infections in children and adults in both primary health care and hospital settings.

Hence, statement 2 is incorrect.

62. Ans: d

Explanation:

Explanation:

GENETIC USE RESTRICTION TECHNOLOGY

Genetic use restriction technology (GURT), also known as terminator technology, is the name given to proposed methods for restricting the use of GM plants by causing second-generation seeds to be sterile.

Hence, statement 1 is correct.

V-GURT technology- GURT produces sterile seeds, which means that a farmer who had purchased seeds containing V-GURT technology could not save the seed from this crop for future planting. The technology is restricted at the plant variety level, hence the term V-GURT.

Hence, statement 2 is correct.

T-GURT: This type of GURT modifies a crop in such a way that the genetic enhancement engineered into the crop does not function until the crop plant is treated with a

chemical that is sold by the biotechnology company. Farmers can save seeds for use each year. However, they do not get to use the enhanced trait in the crop unless they purchase the activator compound. The technology is restricted at the trait level, hence the term T-GURT.

Hence, statement 3 is correct.

63. Ans: c

Explanation.

Microorganisms may be single-celled like bacteria, some algae and protozoa, or multicellular, such as many algae and fungi.

Viruses are also microscopic but are different from other microorganisms. **They, however, reproduce only inside the cells of the host organism, which may be a bacterium, plant, or animal.**

Hence, statement 1 is correct.

Microorganisms are used for the large-scale production of alcohol, wine, and acetic acid (vinegar). Yeast is used for the commercial production of alcohol and wine. For this purpose, yeast is grown on natural sugars present in grains like barley, wheat, rice, crushed fruit juices, etc.

Yeast reproduces rapidly and produces carbon dioxide during respiration. Bubbles of the gas fill the dough and increase its volume. This is the basis for the use of yeast in the baking industry to make breads, pastries, and cakes.

Hence, statement 2 is correct.

64: Ans: a

Explanation:

The **XENON dark matter research project**, operated at the Italian Gran Sasso National Laboratory, is a deep underground research facility **aiming to detect dark matter particles.**

Hence, option a is correct.

65. Ans d

Explanation:

On March 27, 2019, India conducted Mission Shakti, an anti-satellite missile test

With this test, India joins an exclusive group of space-faring nations consisting of the USA, Russia, and China.

Hence, statement 1 is incorrect.

The principal international Treaty on space is the 1967 Outer Space Treaty. India is a signatory to this treaty, and ratified it in 1982. The Outer Space Treaty prohibits only weapons of mass destruction in outer space, not ordinary weapons.

India is not in violation of any international law or Treaty to which it is a Party or any national obligation.

Hence, statement 2 is incorrect.

66. Ans: d

Explanation:

A traditional hard drive contains a circular disc – known as a platter – that stores data. The disc spins, allowing the read-write arm to read data on the disc (or write data to it) as it passes.

The faster the platter spins, the faster the hard drive works. Older hard drives use an IDE port to connect to the motherboard of a PC, but most modern hard drives use a SATA connection. The most recent version of SATA, SATA III, is found on modern motherboards and enables the fastest possible data transfers for an HDD.

A solid-state drive (SSD) unlike a traditional hard drive – has no moving parts. Instead, it uses NAND flash memory. The more NAND (Negative-AND) memory chips an SSD has, the more storage capacity it has.

Many SSDs come with SATA III ports

NVMe (Non-Volatile Memory Express) is the newest SSD technology

NAND flash memory is a type of nonvolatile storage technology that does not require power to retain data. MP3 players, digital cameras, and USB flash drives use NAND technology.

Hence, option d is correct.

67. Ans: b

Explanation:

'HD Ready', 'Full HD', Quad-HD, Ultra HD

HD/ HD Ready: 720p image resolution (1,280 x 720 pixels – approximately 1 million total pixels)

Full HD: 1080p image resolution (1,920 x 1,080 pixels – approximately 2 million total pixels)

Ultra HD: 4K image resolution (3,840 x 2,160 pixels – approximately 8 million total pixels)

Quad-HD is quadruple the resolution of standard 720p high definition, With a screen resolution of 2560x1440 pixels.

The more pixels in an image, the better the picture. With more pixels, an image can be displayed at larger sizes without suffering picture degradation.

The term 4K is derived from the width of an Ultra HD picture, which at 3,840 pixels, is nearly 4,000 in total.

Hence, statement 1 is correct.

In a retina display, there are more pixels in a specific area than can be individually seen by the human eye. The pixel density of Retina displays is so high that eyes can't detect individual pixels at a normal viewing distance.

A Retina Display smooths the jagged edges of the screen's pixels and makes images seem more natural.

Hence, statement b is correct.

68. Ans: d

Explanation:

Machine Learning is said as a subset of artificial intelligence that is mainly concerned with the development of algorithms that allow a computer to learn from the data and past experiences on their own.

A Machine Learning system learns from historical data, builds the prediction models, and whenever it receives new data, predicts the output for it.

Applications of Machine Learning:

1. **Image Recognition** and face detection like Automatic friend tagging suggestion
2. **Speech Recognition**—Speech recognition is the process of converting voice instructions into text. Google Assistant, Siri, Cortana, and Alexa use speech recognition technology to follow voice instructions.
3. **Traffic prediction**
 - Real-time location of the vehicle from the Google Maps app and sensors
 - Average time has taken on past days at the same time.
4. **Product recommendations**—These are used by various e-commerce and entertainment companies, such as Amazon, Netflix, etc., to recommend products to users.
5. Self-driving cars
6. Email Spam and Malware Filtering

7. Virtual Personal Assistant

8. Online Fraud Detection

9. Stock Market trading

10. Medical Diagnosis

11. Automatic Language Translation

Hence, option d is correct.

69. Ans: c

Explanation:

India shall have the same constitutional status in the community of nations, known as the British Empire, as the Dominion of Canada, the Commonwealth of Australia, the Dominion of New Zealand, the Union of South Africa, and the Irish Free State, with a Parliament having powers to make laws for the peace, order and good government of India, and an executive responsible to that Parliament; and shall be styled and known as the Commonwealth of India.

Hence, statement 1 is incorrect.

All powers of government and all authority, legislative, executive, and judicial, are derived from the people and the same shall be exercised in the Commonwealth of India through the organizations established by or under, and due process of this constitution.

Hence, statement 2 is correct.

The language of the Commonwealth shall be Hindustani, which may be written in Nagri or Urdu. The use of the English language shall be permitted.

In provinces, the principal language of a province shall be the official language of that province. The use of Hindustani and English shall be permitted.

Hence, statement 3 is correct.

Men and women shall have equal rights as citizens.

Hence, statement 4 is correct.

70. Ans. c

Explanation:

The first state to be annexed under the Doctrine of Lapse was Satara, which was annexed in 1848. Jhansi was annexed in 1853, Berar in 1853, and Nagpur in 1854.

Hence, option c is correct.

71. Ans. a

Explanation:

August Declaration, 1917- “The policy of His Majesty’s Government, with which the Government of India is in complete accord, is that of increasing association of Indians in every branch of the administration and the gradual development of self-governing institutions, with a view to the progressive realization of responsible government in India as an integral part of the British Empire”.

Hence, option a is correct.

72. Ans: b

Explanation:

Subhas Chandra Bose could not get the support of the congress Socialists and the communists at Tripuri or after for they were not willing to divide the national movement and felt that its unity must be preserved at all costs.

Hence statement, 1 is correct.

Explaining its position, **the CPI declared after Tripuri that the interests of the anti-imperialist struggle ‘ demanded not the exclusive leadership of one wing but a united leadership under the guidance of Gandhi ji.**

Subsequently, in May 1939, Subhas Bose and his followers formed the forward block as a new party within the Congress.

Hence statement, 2 is correct.

Subhas Chandra Bose was elected as the president of the Tripuri session.

Hence statement, 3 is incorrect.

73. Ans: c

Explanation:

The best-known tribal rebellion is the Ulgulan (Great Tumult) of Birsa Munda in the region of south Ranchi in 1899-1900, also known as the **Munda Revolt**. During the nineteenth century, the Mundas saw their **traditional khuntkatti land system (joint holdings by khunts or tribal lineages)** being eroded by jagirdars and thikadars coming from the northern plains as merchants and moneylenders.

Hence, option c is correct.

74. Ans: c

Explanation:

The government of India appointed an education commission in July 1964 named as **Kothari Commission** to “advise the government on the national pattern of education and on the general principles and policies for the development of education in all states and in all aspects.”

Strenuous efforts should be made for the early fulfillment of the Directive Principle under Article 45 of the Constitution seeking to provide free and compulsory education **for all children up to the age of 14.**

Hence, option 1 is incorrect.

In 1882, Lord Ripon appointed **Hunter Commission** “ to enquire into the manner in which effect had been given to the principles of the Dispatches of 1854 and the suggest such measures as it may think desirable in order to the further carrying out of the policy therein laid down.”

Hence, option 2 is incorrect.

This scheme was prepared by Sir John Sergeant, the Educational Adviser to the government of India, and named **the Sergeant Scheme of Education**. It sought to **introduce universal, free, and compulsory education for boys and girls between the ages of 6 and 14.**

Hence, statement 3 is correct.

Sir Charles **Wood’s Despatch** to the Court of Directors has been described as, “The Magna Carta of English Education in India.” It set forth a scheme of education far wider and more comprehensive than any one which had been suggested so far. It enunciated the aim of education as the diffusion of Arts, Science, Philosophy, and the literature of Europe. The study of Indian languages was to be encouraged. The English language was to be taught wherever there was a demand for it. Both the English language and the Indian languages were to be regarded as the media for the diffusion of European knowledge.

Hence, statement 4 is incorrect.

75. Ans: d

Explanation:

Foreign Currency Assets comprise:

- i. **Cash Balance in Nostro accounts maintained with various Central Banks**

ii. **Deposits with**

- Central Banks
- **Foreign Commercial Banks**
- Bank for International Settlements
- International Bank for Reconstruction and Development (IBRD)

iii. **Treasury Bills - Sovereign**

iv. Securities and bonds (Foreign Securities) – Sovereign and supranational

Hence, option d is correct.

76. Ans: a

Explanation:

FDI has three components, viz., equity capital, reinvested earnings and other direct capital. India reports FDI inflows in accordance with the IMF definition, which includes reinvested earnings and other direct capital flows, besides equity capital.

Portfolio Investment includes investment in **equity and debt securities** in the form of bonds and notes, money market instruments, and other instruments such as **American Depository Receipts (ADRs)/Global Depository receipts**, which usually denote ownership of equity.

Hence, option a is correct.

77. Ans: a

Explanation:

The highest contribution to the capital account is through **Foreign direct investment**.

Hence, option a is correct.

78. Ans: c

Explanation:

Washington Consensus advocates, free trade, floating exchange rates, free markets, and macroeconomic stability.

The ten principles originally stated by John Williamson in 1989, include ten sets of relatively specific policy recommendations.

1. Low government borrowing. Avoidance of large fiscal deficits relative to GDP;
2. Redirection of public spending from subsidies (“especially indiscriminate subsidies”) toward broad-based provision of key pro-growth, pro-poor services like primary education, primary health care and infrastructure investment;
- 3. Tax reform, broadening the tax base and adopting moderate marginal tax rates;**
4. Interest rates that are market-determined and positive (but moderate) in real terms;
5. Competitive exchange rates;
6. **Trade liberalization:** liberalization of imports, with particular emphasis on elimination of quantitative restrictions (licensing, etc.); any trade protection to be provided by low and relatively uniform tariffs;
7. Liberalization of inward foreign direct investment;
- 8. Privatization of state enterprises;**
9. Deregulation: abolition of regulations that impede market entry or restrict competition, except for those justified on safety, environmental, and consumer protection grounds, and prudential oversight of financial institutions;
10. Legal security for property rights.

Hence, option c is correct.

79. Ans: d

Explanation:

TRIPS covers **copyrights**, patents, geographical indications, industrial designs, trademarks, **integrated circuit layouts**, **trade secrets**

Hence, option d is correct.

80. Ans: d

Explanation:

The main objectives or aims of deficit financing are as follows:

- **To Exploit Natural Resources:** Every country, especially developing countries has unexploited natural resources that require huge investments. Such huge investments are financed by deficit financing. These exploited natural resources, in turn, will serve as raw materials for industries. Thus, deficit financing accelerates industrialization.
- **To Finance Development Projects:** Governments borrow to finance developmental projects to improve infrastructure, such as roads, railways, irrigation works, etc.
- **To Prevent Unemployment:** Growing unemployment is a universal phenomenon. Deficit financing, through public borrowing, is used to maintain a full employment level. According to Prof. J.M. Keynes, the only remedy for eradicating unemployment is deficit financing. Prof. Keynes advocates the theory of public spending during the Great Depression period.

- **To uplift the Economy out of Depression:** Prof. J.M. Keynes advocated the use of deficit financing as an instrument of economic policy to uplift the economic depression and also to raise the level of output and employment. During a depression or recession there is a lack of private investment due to pessimism scattered in the economy under such conditions Keynes looked upon public investment. Public spending would result in an increase in income, demand, production, and employment. According to Prof. J.M. Keynes, Deficit financing or deficit spending is the only way to come out of the depression and raise the level of output and employment.
- **War:** Generally, Governments resort to deficit financing rather than taxation to fund war. During the first and second world wars, most governments resorted to deficit financing as the primary tool to finance the war, but this resulted in an inflationary spiral and ruined the world economies. So, economists suggest that deficit financing must be the last and not the first measure to finance war.
- **To Provide Social Services:** In developing countries where there is a lack of social and economic development, public debt is used to provide services like education, infrastructure, transport, etc.
- **Control of Inflation:** Deficit financing may be used to control inflation if it is resorted to for productive purposes, especially for the production of consumer goods. Inflation can be controlled by withdrawing a lot of money from the public.
- **To Finance Public Enterprises:** Governments may borrow for establishing public sector undertakings and expand the existing units

Hence, option d is correct.

81. Ans .a

Western Ghats has an **exceptionally high level of biological diversity and endemism** and is recognized as one of the world's eight 'hottest hotspots' of biological diversity.

Ghats are key to the conservation of several threatened habitats, such as unique seasonally mass-flowering wildflower meadows, **Shola forests, and Myristica swamps.**

Hence, option a is correct.

82. Ans. c

The Sundarbans is the largest area of mangrove forest in the world and **the only one that is inhabited by the tiger**

Hence, statement 1 is correct.

The Sundarbans support a wealth of animal species including the single largest population of tiger and Irrawaddy and Ganges River dolphins, as significant populations of **the endemic river terrapin which was once believed to be extinct**

Hence, statement 2 is correct.

83. Ans d

Metallic minerals - Bauxite, Laterite, Haematite.

Nonmetallic minerals - Feldspar, quartz, Diamond, Graphite.

Hence, option d is correct.

84. Ans: a

Explanation:

Gasohol is a mixture of **Ethanol and gasoline**

Hence, option a is correct.

85. Ans: a

Explanation:

Anthracite has maximum carbon(90%) and calorific value of 8700 kilo cal/ kg

Carbon content - Bituminous(80%) > Lignite(70%) > Peat(60%)

Hence, option a is correct.

86 . Ans: d

Explanation:

TILL FARMING

Special tillers break up and loosen the subsurface soil without turning the topsoil, it causes minimum disturbance of topsoil. The tilling machines make slits in the unploughed soil and inject seeds, fertilizers, herbicides, and little water in the slit so that the seed germinates and the crop grows successfully **without competition from weeds.**

Hence, statements 1 and 2 are correct, and statement 3 is incorrect.

87 . Ans a

Explanation:

Ostwald process is used in the production of **Nitric Acid.**

Hence, option a is correct.

88. Ans a

Explanation:

The World Health Organization's International Agency for Research on Cancer published a study that found glyphosate is "probably carcinogenic to humans".

It is applied to the leaves of plants to kill weeds. It is also widely used in India. The weedkiller is sold in India under various brand names: Roundup, Glycel, and Brake.

Many countries have issued outright bans on glyphosate or imposed restrictions on **glyphosate-based herbicides**. The government of Punjab banned the sale of glyphosate in the state, and Kerala banned the sale, distribution, and use of glyphosate.

Hence, option a is correct.

89. Ans: b

Explanation:

Sorghum or Jowar is a tropical grain grown primarily in semi-arid parts of the world. It is an important crop in India, Pakistan, Thailand in central and northern China, Australia, the drier areas of Argentina and Brazil, Venezuela, the USA, France, and Italy. **The United States of America is the largest producer of sorghum**

Table 3: Country-wise production of sorghum in the world

S. No.	Country	Average Production (1994-11)	Share in World Production (%)	Growth (%)
1	United States of America	11.91	20	-4.3
2	India	7.81	13.1	-1.7
3	Nigeria	7.68	12.9	0.6
4	Mexico	5.94	10	1.7
5	Sudan (former)	3.47	5.8	0.2
6	China	3.13	5.3	-6.8
7	Argentina	2.77	4.7	1.5
8	Ethiopia	1.92	3.2	6.9
9	Australia	1.84	3.1	3.4
10	Burkina Faso	1.39	2.3	3.2
11	Brazil	1.16	2	12.5
12	Egypt	0.83	1.4	0.6
13	Mali	0.79	1.3	4.4
14	Chad	0.53	0.9	3.1
15	World	59.42		-0.3

Hence, statement 1 is correct.

Sorghum is India's third-most important cereal after rice and wheat. It is cultivated mainly in two seasons: **kharif and rabi**.

Hence, statement 2 is correct.

Maharashtra is the largest producer of sorghum in India. The state occupies almost 35% of the total cultivated area and 41.5% of the total production of sorghum in the country. Karnataka and Madhya Pradesh are the second and third-largest producers of sorghum in the country respectively. These three states together contribute around 62% of the total production. Andhra Pradesh, Rajasthan, and Tamil Nadu are the other major sorghum-producing states in India

Hence, statement 3 is incorrect.

90. Ans: a

Explanation:

The seeds of coffee were brought to India from Arabia by Baba Budan in the 17th century and were raised in the Baba Budan Hills of Karnataka.

Hence, statement 1 is incorrect.

Conditions of Growth:

(i) **Temperature:** The most suitable temperature for proper growth of coffee varies from 15 to 28 C.

(ii) **Rainfall:** It requires annual rainfall varying from 150 to 250 cm. Dry weather is necessary at the time of berry ripening.

(iii) **Soil:** Well-drained, rich, friable loams containing humus and minerals like iron and calcium are ideal for coffee cultivation.

Hence, statement 2 is incorrect.

Karnataka is the largest producer, accounting for over 71 percent of total coffee production and 59 percent of the coffee-growing area in India.

Hence, statement 3rd is correct.

91. Ans: d

Explanation:

Dasht-e-Margo : Afghanistan

Dasht-e-kavir : Iran

Tanami desert : Australia



Hence, all the pairs are incorrectly matched.

92. Ans: b

Explanation:

KANCHENJUNGA

Kanchenjunga is situated in the northern Indian State of Sikkim, Kanchenjunga National Park (KNP). **The mountain is part of the Great Himalayan Range.** It has numerous lakes and glaciers, including the 26 km-long Zemu Glacier

Hence, statement 1 is incorrect.

It contains the widest and most extensive zone of krummholz (stunted forest) in the Himalayan region

Hence, statement 2 is correct.

A remarkable six cat species have been confirmed (Leopard, Clouded Leopard, Snow Leopard, Jungle Cat, Golden Cat, Leopard Cat) within the park. Flagship species include the Snow Leopard the largest Himalayan predator, Jackal, Tibetan Wolf, large Indian Civet, Red Panda, Goral, Blue Sheep, Himalayan Tahr, Mainland Serow, two species of Musk Deer, two primates, four species of pika and several rodent species, including the parti-colored Flying Squirrel.

93. Ans: b

Explanation:

Some Famous Local Storms of Hot Weather Season

(i) Mango Shower: Towards the end of summer, there are pre-monsoon showers which are a common phenomenon in Kerala and coastal areas of Karnataka. Locally, they are known as mango showers since they help in the early ripening of mangoes.

(ii) Blossom Shower: With this shower, coffee flowers blossom in Kerala and nearby areas.

(iii) Nor Westers: These are dreaded evening thunderstorms in Bengal and Assam. Their notorious nature can be understood from the local nomenclature of 'Kalbaisakhi', a calamity of the month of Baisakh. These showers are useful for tea, jute, and rice cultivation. In Assam, these storms are known as "Bardoli Chheerha".

(iv) **Loo: Hot, dry, and oppressing winds blowing in the Northern plains from Punjab to Bihar with higher intensity between Delhi and Patna.**

Hence, option b is correct.

94. Ans: b

Explanation:

Anaimudi, the highest peak of the Peninsular plateau is located on **the Anamalai Hills** of the western ghats followed by Dodabetta on the Nilgiri hills.

Hence, option b is correct.

95. Ans: a

Explanation:

SPECIAL MAJORITY

A special majority is the total membership of each house of parliament as well as a majority of not less than two-thirds of the members of that house present and voting. Technically, a special majority means at least 50 percent of the total members of the house must be present, and the amendment has to be accepted and voted in favour of by two-thirds of the total number of members present and voting. **Whether abstinence is voting is a moot question.**

Hence, statement 1 is correct

Hence, statement 2 is incorrect

For example: if 545 members are present in Lok Sabha, then at least 363 ($\frac{2}{3}$ rd of 545) members should vote in favor of the amendments. On the other hand, **if 300 members are present in the Lok Sabha, then it should be accepted and voted by at least 273 members** (more than 50 percent of 545). In this case, $\frac{2}{3}$ rd of 300 members is not considered because $\frac{2}{3}$ rd of 300 = 200 which is less than 50 percent of the total MPs of Lok Sabha, i.e. 273.

Hence, statement 3 is incorrect.

96. Ans: b

Explanation:

Article 100. Voting in Houses, power of Houses to act notwithstanding vacancies and quorum.—

(1) Save as otherwise provided in this Constitution, **all questions at any sitting of either House or joint sitting of the Houses shall be determined by a majority of votes of the members present and voting, other than the Speaker** or person acting as Chairman or Speaker.

The Chairman or Speaker, or person acting as such, shall not vote in the first instance but shall have and exercise a casting vote in the case of an equality of votes.

Hence, statement 1 is correct.

Xth Schedule: Section 5

Notwithstanding anything contained in this Schedule, a person who has been elected to the office of the Speaker or the Deputy Speaker of the House of the People or the Deputy Chairman of the Council of States or the Chairman or the Deputy Chairman of the Legislative Council of a State or the Speaker or the Deputy Speaker of the Legislative Assembly of a State, shall not be disqualified under this Schedule,— **(a) if he, by reason of his election to such office, voluntarily gives up the membership of the political party to which he belonged immediately before such election and does not, so long as he continues to hold such office thereafter, rejoin that political party or become a member of another political party; or (b) if he, having given up by reason of his election to such office his membership of the political party to which he belonged immediately before such election, rejoins such political party after he ceases to hold such office.**

Hence, statement 2 is correct.

The Deputy Speaker is not subordinate to the Speaker but holds an independent position and is answerable only to the House.

Hence, statement 3 is incorrect.

97. Ans: c

Explanation:

Fifth Schedule Section 5 (2): Administration and control of scheduled areas and scheduled tribes

The Governor may make regulations for the peace and good government of any area in a State which is for the time being a Scheduled Area. In particular and without prejudice to the generality of the foregoing power, such regulations may:—

- (a) prohibit or restrict the transfer of land by or among members of the Scheduled tribes in such area;
- (b) regulate the allotment of land to members of the Scheduled Tribes in such areas;
- (c) regulate the carrying on of business as a money-lender by persons who lend money to members of the Scheduled Tribes in such area.

Hence option c is correct.

98. Ans: a

Explanation:

Termination of a session of the House by an order made by the President under article 85(2) is called 'prorogation'.

The end of the life of Lok Sabha either by an order made by the President under article 85(2)(b) or on the expiration of the period of five years from the date appointed for its first meeting is termed as '**dissolution of the House**'

Hence, option a is correct.

The word 'Adjourn' applies to the action of a deliberative body, etc., in concluding a sitting with the **intention of resuming** on the next working day or a **specified** later date.

In Lok Sabha, the Speaker determines when the sitting of a House is to adjourn sine die to a particular day or to an hour or part of the same day.

Adjournment sine die- Termination of a sitting of the House without any definite date being fixed for the next sitting.

99. Ans: a

Explanation:

The Leaders of the Opposition in the Rajya Sabha and the Lok Sabha are accorded statutory recognition. A separate legislation brought into force on November 1, 1977, extends their salary and other suitable facilities.

Hence, statement 1 is correct.

The Minister of Parliamentary Affairs is entrusted with coordinating, planning, and arranging government business in both Houses of Parliament. In the discharge of this function, he is assisted by two Ministers of State. The Minister also keeps close and constant contact with the presiding officers, the leaders as well as chief whips of various parties and groups in both Houses of Parliament.

Hence, statement 2 is incorrect.

100. Ans: a

Explanation:

Article 1. Name and territory of the Union

(1) **India, that is Bharat, shall be a Union of States.**

(2) The States and the territories thereof shall be as specified in the First Schedule.

(3) The territory of India shall comprise—

- (a) the territories of the States;
- (b) the Union territories specified in the First Schedule;
- (c) such other territories as may be acquired.

Hence, statement 1 is correct.

The constitution of India establishes a dual policy in the country, consisting of the union government and the state governments. **The states are the regional administrative units into which the country has been divided** and, thus India has been characterized as a union of states [Article 1(1)]

Hence, statement 2 is correct.

