

## Answer Key with Explanation

### UPSC Civil Services Examination Prelims 2024 General Studies-Paper I (GS-I)

Q No	Ans	Explanation
1	d	<p>The atmosphere is heated more by terrestrial (long-wave) radiation than by incoming solar (short-wave) radiation. Incoming solar radiation primarily heats the Earth's surface, which then emits long-wave infrared radiation. This terrestrial radiation is absorbed and re-emitted by greenhouse gases in the atmosphere, thereby warming it.</p> <p>Carbon dioxide (CO<sub>2</sub>) and other greenhouse gases like methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and water vapor (H<sub>2</sub>O) are good absorbers of long-wave infrared radiation. This absorption and re-emission of infrared radiation by greenhouse gases is what leads to the greenhouse effect, warming the Earth's atmosphere.</p>
2	a	<p>The troposphere, which is the lowest layer of the Earth's atmosphere, is thicker at the equator compared to the poles. At the equator, the troposphere extends up to about 17-18 kilometres, whereas at the poles it is about 7-8 kilometres thick. This difference is due to the greater intensity of solar heating at the equator, which causes more vigorous convection and a thicker tropospheric layer.</p> <p>At the equator, the intense solar heating causes strong convective currents. Warm air rises due to convection, transporting heat to higher altitudes in the troposphere. These strong updrafts contribute to the formation of tall cumulonimbus clouds and play a significant role in the vertical transport of heat.</p>
3	d	<p>Pyroclastic debris, Ash and dust, Sulphur compounds are products of volcanic eruptions. Nitrogen compounds are not produced in significant amount during volcanic eruptions, but there are some traces of it.</p>
4	a	<p>During winter (January), the landmasses cool down more quickly than the oceans due to the differences in specific heat capacities. As a result, the isotherms (lines of equal temperature) tend to bend northward over the relatively warmer oceans and southward over the colder continents.</p> <p>The Gulf Stream and the North Atlantic Drift are warm ocean currents, not cold ones. These currents actually warm the North Atlantic Ocean, causing the isotherms to bend northward in this region. The presence of these warm currents means that the temperatures are higher than they would be otherwise, leading to a northward deviation of the isotherms. Cold currents, on the other hand, would cause the isotherms to bend southward.</p>
5	c	<p>Cote d'Ivoire, also known as Ivory Coast, has been the largest producer of cocoa in the world, producing almost 40% of the world's cocoa production. Ghana is the second largest producer.</p>

		roducer of cocoa in the world, with a share of about 20% in the global production of cocoa.
6	b	River Gomati joins Ganga near Varanansi (UP), Ghaghara joins near Chhapra in Bihar, Gandak joins near Hajipur (Bihar) and Kosi joins near Kursela in Bihar.
7	a	Statement I is correct as rain results in weathering of rocks. Statement II is correct. It is true that carbon dioxide is dissolved in rain water and it plays important role in the process if weathering of rocks. Rainwater does contain dissolved oxygen. When rain falls through the atmosphere, it absorbs gases, including oxygen, from the air. The amount of dissolved oxygen in rainwater can vary based on factors such as temperature, atmospheric pressure, and the presence of other gases and also plays role in weathering of rocks.
8	b	Of the options given, only Norway and Germany border the North Sea.
9	a	Hundru waterfall is located in Chota Nagpur region near Ranchi on the river Suvarnrekha. Dhuandhar waterfall is near Jabalpur on the river Narmada and Goresoppa waterfall, which is more popularly known as Jog Falls is in the western ghats in Karnataka on the river Sharavathi and not river Netravati.
10	b	Option 3 and 4 are correct and option 1 and 2 are incorrect. Vosges mountains are in France and not in central Asia. Alps mountains are in Europe but they are Fold mountains. Appalachians mountains are in North America and are Fold mountains. Ande are in South America and are Fold mountains.
11	a	Donyi polo Airport in Itanagar, Arunachal Pradesh and it was developed on the undeveloped land as a new airport and hence it is a Greenfield Project. Kushinagar Airport is in Kushinagar in UP and it was developed as a Greenfield project as new airport was constructed on undeveloped land. However, Vijayawada International Airport which is near Vijayawada in Andhra Pradesh was developed as an expansion of the existing airfield and hence does not qualify to be a Greenfield project.
12	a	Only statement I is correct. The water vapour is a gas and generally, its amount reduces with altitude in the earth's atmosphere. It is not correct that the percentage on water vapour is maximum at the poles. Actually, the percentage of water vapour is more in tropical regions as these are warmer, resulting in more evaporation from the oceans, lakes and other surface water.
13	a	Bothe the Equatorial Climate and the Marine West coast Climate have low annual and daily range of temperatures and precipitation occurs thought the year. However, the precipitation in the equatorial climate is generally in excess of 200 cm. The range given in point 3 i. e. 50 cm -200 cm is more relevant for Marine West coast climate. Hence the answer is Marine West coast climate.
14	c	Both the statements are correct. The Coriolis force which is basically the apparent force that arises due to the rotation of the Earth, increases with the increase in the wind velocity. It is also true that the Coriolis force is maximum at the poles and is absent at the equator, primarily because the rotational speed of the earth is the highest at the poles because a point on the Earth's surface at the poles completes a full rotation in 24 hours, covering a much smaller circular path compared to a point anywhere else on the Earth.
15	d	21 <sup>st</sup> June of every year is also known as Summer Solstice in the Northern Hemisphere when the North Pole is tilted closest to the earth and hence the latitudes from the Tropic of Cancer to the Arctic circle see sunlight for more than 12 hours on that day.
16	b	Congo Basin in Africa has huge peatlands in the Republic of Congo. These peatlands are supposed to house large amounts of carbon, which could be as much as three year's of world's carbon emissions. They store a huge amount of cardon dioxide and

		if they are destroyed, they will release such humongous amount of carbon in the atmosphere that may cause great damage to the climate of the earth.
17	d	All the three statements are correct with reference to the Per and Polyfluoroalkyl Substances(PFAS).
18.	a	Only two of the options are correct. Wasps and Flies have certain of their species falling in the category of Parasitoids. Parasitoid are the organisms that lay eggs on or inside the body of other host organism and as the larvae develop, the host animal dies.
19.	c	All the three, namely, groundnut, horse-gram and soybean belong to the pea family.
20	c	Statement I is correct that the Indian Flying Fox, which is also known as Indian Fruit Bat has been kept in the category of ‘vermin’ in the Wildlife Protection Act, 1972. Vermin, as per the Wildlife Protection Act are the animals that are considered pests or nuisance to due to their impact on human interest such as agriculture, forestry, public health, etc. Statement II is incorrect. The Indian Flying Fox does not feed on blood of animals. In fact, it is frugivorous and feeds on fruits, nectar and flowers, etc.
21	c	The organisms Cicada, Frog hopper, Pond skater, all fall under the category of insects.
22	a	Both the statement I and Statement II are correct and the Statement II correctly explains Statement I. The chewing gums are considered detrimental to the environment as they are not properly disposed and many of the chewing gums have synthetic polymers such as polyethylene, polyvinyl acetate, etc. as the gum base.
23	d	All the matches are incorrect. The Indri is found on the island of Madagascar and not Brazil. Whereas, Elk also known as ‘wapiti’ are not found in Indonesia but in some parts of North America and Asia. Bonobo is found in Democratic Republic of Congo and not in Madagascar.
24	a	Only statement 2 is correct that the World Toilet Summit, World Toilet Day, and World Toilet College are initiatives of World Toilet Organisation, to inspire action to tackle the global sanitation crisis. World Toilet organisation is not one of the agencies of the United Nations. It is an independent non-governmental organisation. The main focus of its function is to grant funds to the least developed countries to achieve the end of open defecation.
25	a?	Statement 1 appears to be incorrect as the lions do have a breeding season, though they can breed at any time. Statement 2 is correct as the Cheetahs are unique among the big cats as they do not roar. Statement 3 is incorrect as the leopards do mark their territories by spraying urine and rubbing their cheeks against the trees or rocks, leaving scent marks. Thus, the answer should have been only 2. However, as such option is not given, the closest option is Only 1 and 2. That is ‘a’.
26.	b?	100 Million Farmers is an initiative of various organizations, governments, NGOs, and private sector entities who participate in or contribute to initiatives aligned with the goal of sustainable agriculture, food security, resilience to climate change, etc. Here, the sustainable agriculture includes organic farming and animal husbandry.  The option ‘a’ also mentions ‘farmers’ resilience’ as objective however, it also mentions it as a platform. 100 Million Farmers is an initiative and there is no specific platform as such.
27	d	All the four are correct. Distributed Energy Resources (DERs) are decentralized, small-scale energy resources or technologies that generate, store, or manage energy. DERs are typically located close to the point of consumption (e.g., homes, businesses, communities) and often integrate renewable energy sources.
28	a	Fig tree has unique relationship with the fig wasp. This relationship is a classic example of mutualism and coevolution. Fig trees and fig wasps have evolved together over millions of years, each species highly dependent on the other for reproduction.

29	c	Some species of frogs are known to produce toxins and are poisonous. Some fish may also be venomous even though they do not produce toxins. Butterflies are not known to produce toxins themselves but could be poisonous as they may get contaminated with toxins in larval stage or as caterpillar.
30	a	Only red Sanders is native to India, found primarily in the southern parts and western ghats. Cashew is Brazilian in origin and was introduced in India in the 16 <sup>th</sup> century by the Portuguese. Whereas, Papaya has its origin in Mexico and Central America.
31	b	It is incorrect that the RTGs are miniature fission reactors. In fact they are not fission reactors. They generate electricity thorough the decay of radioactive isotopes such as Plutonium-238. It is correct that the RTGs are used to power the onboard systems of spacecrafts as they are very reliable source of power in missions that are deep space or where sunlight is limited. It is also true that the RTGs commonly use plutonium-238 as their fuel source.
32	d	Statement I is incorrect but Statement II is correct. dwarf stars, particularly red dwarf stars, live much longer than giant stars. Giant stars have a much shorter lifespan because they burn through their nuclear fuel at a much faster rate. Dwarf stars, especially red dwarfs, can burn their fuel very slowly and can last for tens to hundreds of billions of years, whereas giant stars, due to their high mass and rapid nuclear fusion rates, typically live for only a few million to a few hundred million years. Giant stars have a much greater rate of nuclear reactions compared to dwarf stars. This is because giant stars are much more massive and have higher core temperatures and pressures, which accelerate the rate of nuclear fusion reactions. This high rate of fusion results in a higher energy output and a shorter lifespan for giant stars compared to the more stable and slower-burning dwarf stars.
33	a	Nitric Oxide is produced in the body by the enzyme nitric oxide synthase which converts the amino acid L-arginine into nitric oxide and citrulline. Nitric oxide acts as a vasodilator, meaning it relaxes the inner muscles of the blood vessels, causing them to widen and increase blood flow. This process is crucial for regulating blood pressure and ensuring adequate blood supply to various tissues and organs.
34	b	Radars are commonly used in meteorology to monitor precipitation. Weather radars emit radio waves that bounce off raindrops, snowflakes, or hailstones. By analysing the returned signals, meteorologists can determine the location, intensity, and movement of precipitation, which is essential for weather forecasting and tracking severe weather events like thunderstorms and hurricanes.  Radars can be used to track the migration of animals, particularly birds and bats. Wildlife researchers use radar technology to monitor the movement patterns of these animals, especially during migration seasons. Radars can detect the presence, number, speed, and direction of flying animals, providing valuable data for ecological studies and conservation efforts.  However, radars are not generally used in identification of narcotics on passengers at airports or in aircrafts.
35	d	None of the aircrafts given in the options are fifth generation aircrafts. Rafael is g.5 generation, and Mig-29 and Tejas MK1 both are fourth generation aircrafts.
36	d	Hydrogels are widely used in controlled drug delivery systems. Their high-water content, biocompatibility, and ability to respond to environmental stimuli make them ideal for delivering drugs at a controlled rate over a period of time. They are also used in mobile air-conditioning systems or in preparation of industrial lubricants.



37	d	The exhaust pipe emission from a fuel cell electric vehicle (FCEV) powered by hydrogen is water vapor (H <sub>2</sub> O).
38	c	Pumped-storage Hydropower serves as a large-scale energy storage system, allowing excess electricity generated during off-peak periods to be stored and used later during peak periods. Hence the correct answer is long duration energy storage.
39	d	The main use of Membrane Bioreactors (MBRs) is in wastewater treatment and water reuse processes. MBRs combine biological treatment (bioreactors) with membrane filtration to achieve high-quality effluent suitable for various purposes. Here's how MBRs are used and their main applications.
40	c	Collateral Borrowing and Lending Obligations (CBLO) are instruments used in the money market.
41	d	The total fertility rate (TFR) in an economy is defined as the average number of children that would be born to a woman over her lifetime if she were to experience the exact current age-specific fertility rates throughout her reproductive lifespan
42	d	<p>Statements 2 and 3 are correct. Non-Banking Financial Companies (NBFCs) cannot directly access the Liquidity Adjustment Facility (LAF) window of the Reserve Bank of India (RBI). The LAF window is primarily available to scheduled commercial banks for managing their day-to-day liquidity mismatches.</p> <p>Foreign Institutional Investors (FIIs), as per regulations set by the Securities and Exchange Board of India (SEBI), are allowed to invest in government securities (G-secs). FIIs can invest in G-secs through various routes such as the government securities market (G-Sec market), the Secondary Market Scheme (SML), or the Fully Accessible Route (FAR).</p> <p>In India, stock exchanges such as the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE) offer separate trading platforms for debt securities. These platforms allow trading in corporate bonds, government securities, and other debt instruments. For example, NSE has a platform called "NSE Debt Market" dedicated to debt instruments.</p>
43	d	<p>1, 2 and 3 are correct.</p> <p>Insurance companies can invest in both corporate bonds and government securities. They often invest a portion of their investable funds in these fixed-income securities to match their liabilities and ensure stable returns.</p> <p>Pension funds, including entities managing provident funds and retirement funds, can also invest in corporate bonds and government securities. These investments help pension funds generate income and preserve capital for meeting future pension obligations.</p> <p>Retail investors can participate in the bond market by opening RBI retail direct account by logging in to <a href="http://rbiretaildirect.org.in">rbiretaildirect.org.in</a>. They can also participate in primary issuances of treasury bills, trade in secondary markets and invest in sovereign gold bonds. Retail investors can now invest directly in G-Sec by opening gilt accounts with the banks and RBI</p>
44	d	ETFs are financial instruments that represent a collection of securities (such as stocks, bonds, commodities) and are traded on stock exchanges, similar to individual stocks. Investors can buy or sell ETF shares throughout the trading day at market prices.

		<p>Motor vehicle are not financial instruments.</p> <p>A currency swap involves two parties exchanging principal and interest payments in different currencies. a currency swap is a financial instrument. It is a type of derivative used by entities to manage exposure to currency risk or to obtain foreign currency funding at more favourable terms than directly borrowing in the foreign currency market.</p>
45	b	<p>Storage of agricultural produce – Tertiary activity</p> <p>Dairy Farm- Primary activity</p> <p>Mineral exploration – Primary activity</p> <p>Weaving cloth- Secondary activity</p>
46	c	All the materials mentioned can be used to produce sustainable aviation fuel.
47	b	<p>Working capital refers to the funds or resources that are used in day-to-day operations of a business or production process. It includes raw materials, components, goods in process, and finished goods that are constantly replenished or converted into cash through sales.</p> <p>Fixed capital, as mentioned earlier, refers to durable assets used repeatedly in production processes over a prolonged period. These assets are not completely consumed in one production cycle and include machinery, equipment, buildings, and infrastructure. Thus,</p> <p>Farmer’s plough- fixed capital</p> <p>Computer- Fixed capital</p> <p>Yarn used by weaver- Working capital</p> <p>Petrol – Working capital</p>
48	c	<p>Metaverse. The metaverse refers to a collective virtual shared space, created by the convergence of virtually enhanced physical reality and physically persistent virtual worlds. It allows users to interact with a computer-generated environment and other users, where they can engage in various activities, socialize, trade virtual goods, and own digital assets or property. In the metaverse, users can have persistent identities, create, buy, and sell virtual items or real estate, and participate in virtual economies. Companies and developers are exploring the concept of the metaverse as a next-generation internet platform that goes beyond traditional 2D browsing to immersive and interconnected 3D experiences.</p>
49	b	<p>There is indeed a minimum capital requirement for wholly owned banking subsidiaries in India. The RBI imposes specific capital requirements to ensure the financial stability and adequacy of operations of these subsidiaries.</p> <p>The RBI mandates that at least 50% of the board members of wholly owned banking subsidiaries in India must be Indian nationals.</p>

50	a	<p>Statement 1 is correct as the expenditure that directly benefits the company or its employees is not treated as CSR expenditure. Statement 2 is incorrect as the Companies Act, 2013 mandates that certain classes of companies must spend a specified amount on CSR activities if they meet certain financial criteria. These companies are required to spend at least 2% of their average net profits of the preceding three financial years on CSR activities.</p>
51	a	<p>If the United States were to default on its debt obligations, holders of US Treasury bonds (or Treasury securities) would not receive their expected payments as per the terms of the bonds. This is because US Treasury bonds are debt instruments issued by the US government, and defaulting means the government cannot meet its debt obligations to bondholders.</p> <p>US government debt (including Treasury bonds) is not backed by specific hard assets like gold or other commodities. Instead, it is backed by the full faith and credit of the US government. This means investors trust that the US government will honour its debt obligations and repay bondholders according to the terms of the bonds.</p>
52	c	<p>Syndicated lending involves a group of lenders collectively providing funds to a single borrower. By spreading the loan amount across multiple lenders, each lender takes on a portion of the credit risk associated with the borrower. This helps diversify and mitigate the risk for individual lenders compared to a single lender bearing the entire risk.</p> <p>Syndicated loans can indeed take different forms, including both fixed amount/lump sum loans and credit lines (revolving credit facilities).</p>
53	d	<p>Statement 1, 2 and 4 are correct.</p> <p>The digital rupee, if introduced, would be a sovereign digital currency issued by the Reserve Bank of India (RBI), aligned with its monetary policy objectives. It would serve as a legal tender in digital form.</p> <p>Like physical currency (banknotes and coins), the digital rupee would also appear as a liability on the RBI's balance sheet. This is because the RBI would be liable to redeem or exchange digital rupees for other forms of money (such as commercial bank money or cash) upon demand.</p> <p>Digital currencies, including the digital rupee, are not typically "insured" against inflation by design. Inflation is managed through monetary policy measures such as interest rates and reserve requirements rather than by design features of the currency itself.</p> <p>If designed similarly to other digital currencies or central bank digital currencies (CBDCs), the digital rupee could potentially be convertible against commercial bank money (such as deposits held in banks) and cash (physical currency).</p>
54	b	<p>Tathagata and Shakyamuni are the epithets used for Gautam Buddha. Nayaputta does not refer to the Buddha.</p>
55	b	<p>Inamgaon is a Chalcolithic site located in Maharashtra. It is known for its archaeological remains dating back to the Chalcolithic period, characterized by the use of copper alongside stone tools.</p> <p>Salihundam in Andhra Pradesh is known for Buddhist stupas dating back to ancient times. It is an important archaeological site with Buddhist relics and structures. But it is not known for rock Cut Shrines.</p>

		<p>Chandraketugarh is actually located in West Bengal, not Odisha. It is known for its archaeological remains and is believed to have been a significant urban settlement, possibly associated with trade and commerce.</p> <p>Mangadu, in Kerala is a newly discovered prehistoric site where megaliths are found in large numbers.</p>
56	a	Krishna Deva Raya was from the Tuluva dynasty of the Vijaynagar Empire and became ruler from 1509-1530. He is considered to be the greatest ruler of the Vijaynagar Empire. He gave permission to the Portuguese to erect a fort at Bhatkal.
57	b	<p>A key feature of the Permanent Settlement introduced by Lord Cornwallis in 1793 was that if the Zamindar failed to pay the fixed revenue to the state by the stipulated date, they would indeed be at risk of losing their Zamindari rights, as the land could be auctioned off to recover the dues.</p> <p>The first statement is incorrect because it describes the Ryotwari system inaccurately. The Ryotwari system, primarily introduced later by Thomas Munro and Alexander Read, did not exempt peasants from revenue payment in case of bad harvest or natural calamities. Under this system, peasants (ryots) were directly responsible for paying the land revenue to the government.</p>
58	b	There are parables and stories in the Upanishads which are used to convey philosophical insights. The Upanishads are the end part of the Vedic Literature and were composed earlier than the puranas.
59	a	India is a member of the International Grain Council. However, membership in the International Grain Council (IGC) is not a prerequisite for a country to export or import rice and wheat. The IGC is an intergovernmental organization that aims to enhance market transparency and encourage international cooperation in the grains sector, but countries can engage in the trade of grains irrespective of their membership status in the IGC.
60	c	Garba, a dance form primarily originated in the state of Gujarat was included in the list of Intangible Cultural heritage List of the UNESCO in the year 2023. Durga Puja was included in the List in the year 2021. Kumbh Mela was included in the list in 2017 and Chhau Dance in the year 2010.
61	d	The provisional president of the Constituent Assembly of India before Dr. Rajendra Prasad was Dr. Sachchidananda Sinha. He was the temporary chairman (provisional president) when the Constituent Assembly first met on December 9, 1946. Dr. Rajendra Prasad was later elected as the permanent president of the Constituent Assembly on December 11, 1946.
62	a	The Government of India Act, 1935 provided for the establishment of an All India Federation based on the union of the British Indian Provinces and Princely States. However, defence and foreign affairs were not kept under the control of the federal legislature; instead, they were reserved subjects under the control of the Governor-General and his executive council.
63	c	"Madhyama-vyayoga" (The Middle One) is a Sanskrit play attributed to the ancient Indian playwright Bhasa. It is a one-act play (ekankika) that is part of Bhasa's surviving works.
64	?	Sanghabhuti, the Indian Buddhist monk who travelled to China, wrote commentaries on the Maharatnakuta Sutra. This text is a collection of Mahayana Buddhist sutras that Sanghabhuti translated and elucidated through his commentarial work. Maharatnakuta Sutra is not one of the options.



65	b	Santiniketan and Sacred Ensembles of the Hoysalas were included in the World heritage sites list of UNESCO in the year 2023.
66	d	As per Article 368 of the Indian Constitution, Parliament can amend any provision of the constitution by way of Addition, Variation or Repeal. There is no restriction on the type of amendment that can be made. There are limitations on what can be amended and to what extent, primarily covered under the Basic Structure doctrine evolved by the Supreme Court of India.
67	a	<p>Italy is experiencing low birth rates and an aging population, leading to concerns about demographic decline.</p> <p>Japan has been grappling with a declining population and an aging society for several years. It has one of the lowest birth rates among developed nations.</p> <p>South Korea is also facing a low birth rate and rapid aging of its population, which has implications for its economy and social welfare system.</p> <p>Nigeria has a relatively high birth rate and a young population. It is not currently facing issues of low birth rates, aging population, or declining population in the same way as the other countries mentioned.</p> <p>South Africa's population dynamics are more stable compared to countries with low birth rates and aging populations. It has a moderate birth rate and varying demographic trends.</p>
68	c	Article 109 of the Indian Constitution specifies the special procedure that must be followed for the introduction and passage of Money Bills. According to Article 110 of the Indian Constitution, a Money Bill can only be introduced in the Lok Sabha (House of the People) and not in the Rajya Sabha (Council of States). The Rajya Sabha cannot reject a Money Bill; it can only suggest amendments. However, the Lok Sabha has the discretion to accept or reject these amendments. While the Lok Sabha must consider the amendments proposed by the Rajya Sabha, it is not obligated to accept them. The Lok Sabha has the authority to accept, reject, or modify the amendments suggested by the Rajya Sabha.
69	b	Brigadier- Air Commodore- Commander and other pair Major- Squadron Leader – Lieutenant Commander are correct. Other pairs are wrongly matched.
70	d	The NEC Act was amended by the Parliament in 2002 (Act No. 68 of 2002). The 'North Eastern Areas' now means the area comprising the States of Assam, Manipur, Meghalaya, Nagaland, Tripura, Arunachal Pradesh, Sikkim and Mizoram. The Council now has as its members the Governors of the States mentioned above, the Chief Ministers of the said States and three Members nominated by the President. The President will nominate the Chairman of the Council and he need not be nominated from amongst the other Members. The North Eastern Council (Amendment) Act, 2002 enjoined the NEC to act as a 'regional planning body'. Home Minister of India is the ex-officio Chairperson of the NEC.
71	d	<p>First Delimitation Commission: Constituted in 1952 under the Delimitation Commission Act, 1952.</p> <p>Second Delimitation Commission: Constituted in 1961 under the Delimitation Commission Act, 1961.</p>

		<p>Third Delimitation Commission: Constituted in 1973 under the Delimitation Act, 1972.</p> <p>Fourth Delimitation Commission: Constituted in 2002 under the Delimitation Act, 2002.</p>
72	a	The 71st Amendment Act of 1992 added Konkani, Manipuri and Nepali languages to the list of Official Languages of India.
73	b	Dr Shyama Prasad Mukharjee was founder and prominent leader of Bharatiya jana Sangh established in 1951. Congress for Democracy was founded by Babu Jagjiwan Ram, breaking away from Indian National Congress in 1977. Other two pairs are wrongly matched.
74	d	<p>The provisions related to the powers of municipalities are primarily found in Part IXA (Article 243P to 243ZG). Part IXA deals specifically with municipalities in rural areas, urban areas, and metropolitan areas. It was inserted into the Constitution through the 74th Constitutional Amendment Act, 1992.</p> <p>The provisions related to emergency situations are primarily found in Part XVIII (Article 352 to 360). This part of the Constitution deals with the President's Rule, proclamation of Emergency, and the effects and limitations of emergencies declared under various circumstances.</p> <p>The provisions related to the amendment of the Constitution are primarily found in Part XX (Article 368). Article 368 outlines the procedure for amending the Constitution, specifying the types of amendments, the requirements for passing amendments, and the involvement of both Houses of Parliament and, in some cases, the state legislatures.</p>
75	c	Inter-State Quarantine is in the Union List at No 81. Inter-State migration is also under the union List at No. 81. Corporation tax is under the Union List at No. 85. And interstate Trade and Commerce is under the Union List at No. 42.
76.	d	The Supreme Court of India recognized the right to privacy as a fundamental right under Article 21 (Right to Life and Personal Liberty) of the Indian Constitution. This landmark judgement was delivered in the case Justice K.S. Puttaswamy (Retd.) and Another v. Union of India and Others, commonly known as the Puttaswamy case, in 2017.
77	d	<p>he CDS acts as the principal military advisor to the Government of India on all military matters, integrating the inputs from the three services (Army, Navy, Air Force) and providing cohesive military advice to the government.</p> <p>The Chief of Defence Staff (CDS) serves as the permanent Chairman of the Chiefs of Staff Committee (COSC) in India. This role was formalized with the establishment of the position of CDS in December 2019. The Chiefs of Staff Committee comprises the chiefs of the three armed services — Army, Navy, and Air Force. As the permanent Chairman of COSC, the CDS plays a crucial role in promoting jointness and integration among the armed forces, coordinating tri-service matters, and advising the government on military issues from a unified perspective.</p> <p>The Chief of Defence Staff (CDS) in India does not exercise direct military command over the three Service Chiefs (Army, Navy, and Air Force).</p>
78	c	The operation undertaken by the Indian Army towards upliftment of the local population in remote areas, including addressing their basic needs, is known as

		Operation Sadbhavana. The objective of Operation Sadbhavana is to foster a conducive environment for peace and stability in remote and conflict-affected areas, particularly in regions affected by insurgency or unrest. The Indian Army has implemented this operation in various states to support local communities and build trust between the army and civilians.
79	a	The two countries that share the longest border with each other in the world are Canada and the United States. Their international border is approximately 8,891 kilometres long, making it the longest border between two countries in the world.
80	c	<p>The Ethics Committee in Lok Sabha was formed as an ad hoc ethics panel in 2000 and has been operating as one until August 2015 when it was given a permanent standing committee status</p> <p>As per rule 233A (1) of the Ethics Committee, any person or member may make a complaint relating to unethical conduct of a member of Lok Sabha.</p> <p>The Ethics Committee generally does not take up matters that are sub judice (under judicial consideration), as it respects the principle of separation of powers between the judiciary and the legislature.</p>
81	c	<p>The proposed legislation defines the 33% women reservation to continue for 15 years. Additionally, it mandates that a quota for individuals belonging to the Scheduled Castes and Scheduled Tribes be established within the reserved seats designated for women in Parliament and Legislative assembly.</p> <p>However, it does not state that it will come in effect in the 18<sup>th</sup> Lok Sabha. It's coming into effect is subjected to two major conditions, namely, the conduct of the General Census and Delimitation of the Constituencies of the Lok Sabha and State Assemblies.</p>
82	d	<p>Mitra Shakti Exercise is a bilateral joint military exercise between the armies of India and Sri Lanka.</p> <p>The 9th edition of the India-Sri Lanka joint military exercise, "Mitra Shakti-2023," commenced on November 16, 2023, in Aundh (Pune). The joint military exercise between India and Sri Lanka is being conducted from 16 to 29 November 2023</p> <p>The exercise encompasses joint responses in counter-terrorism operations, involving tactical manoeuvres such as raids, search and destroy missions, heliborne operations, and more</p> <p>In this military exercise, 15 soldiers of the Indian Air Force and five soldiers of the Sri Lankan Air Force are also participating in the exercise</p>
83	c	The writ of prohibition is issued by the Supreme Court or a High Court to lower courts or tribunals to prevent them from exceeding their jurisdiction or acting contrary to the principles of natural justice. It is not issued against Government of purely administrative authorities.
84	b	The recognition and declaration of any community as a Scheduled Tribe (ST) is done by the President of India. This is typically based on the advice of the Governor of the concerned state or states, after consultation with the Tribal Advisory Councils (where they exist) and other relevant authorities. The process involves considering various criteria such as social, educational, and economic backwardness, distinctiveness of

		<p>culture, language, and traditional practices, geographical isolation, and overall backwardness.</p> <p>A community declared as a Scheduled Tribe (ST) in one state of India may not necessarily be recognized as an ST in another state</p>
85	b	<p>The Union Finance Minister, on behalf of the President of India (not the Prime Minister), lays the Annual Financial Statement (Union Budget) before both Houses of Parliament.</p> <p>At the Union level in India, no demand for a grant can be made except on the recommendation of the President of India.</p>
86	d	<p>The book 'The India Way' is written by Dr. S. Jaishankar. He is an Indian diplomat and politician who served as the Minister of External Affairs of India. In 'The India Way', Dr. S. Jaishankar discusses India's approach to global affairs, foreign policy challenges, and its strategic positioning in the world.</p> <p>Why Bharat Matters is a 2024 non-fictional book written by Indian politician and author S Jaishankar.</p>
87	b	<p>Argentina has been facing significant economic challenges, including high inflation, currency devaluation, and debt issues, which have been widely reported in international news.</p> <p>Sudan has been experiencing internal conflicts, including clashes between the regular army and paramilitary forces aligned with different factions within the country. This conflict has resulted in significant casualties and humanitarian concerns.</p> <p>Turkey has not rescinded its membership in NATO. While there have been strained relations and geopolitical tensions involving Turkey and its NATO allies, Turkey remains a member of the alliance.</p>
88	a	<p>The Suez Canal, the SUMED pipeline, and the Bab el-Mandeb Strait are strategic routes for Persian Gulf oil and natural gas shipments to Europe and North America.</p> <p>The Sumed pipeline is a major oil pipeline in Egypt that runs from the Ain Sukhna terminal on the Red Sea coast to the Sidi Kerir terminal on the Mediterranean coast. It provides a crucial transportation route for oil exports from the Gulf countries to the Mediterranean region and beyond.</p>
89	c	<p>The Red Sea region is characterized by arid and semi-arid climates, and precipitation in the form of rain is limited. The amount of rainfall is minimal compared to other regions, and the Red Sea itself does not contribute significantly to precipitation.</p> <p>The Red Sea is mostly isolated from significant river inputs. While there are small seasonal streams and wadis that drain into the Red Sea, these contribute very little freshwater compared to the overall volume of the sea. The primary sources of water for the Red Sea are from the Gulf of Aden through the narrow Bab-el-Mandeb strait and from the Gulf of Aqaba in the north.</p>
90	d	<p>According to the Environmental Protection Agency (EPA) in the United States, the largest source of sulphur dioxide (SO<sub>2</sub>) emissions is typically from combustion of fossil fuels at electric power plants. These power plants burn coal or oil containing sulphur compounds, which are released into the atmosphere as SO<sub>2</sub> during combustion.</p>



91	a	<p>he Sahel region of Africa, which spans across several countries including Mali, Niger, Burkina Faso, Chad, and others, has been experiencing significant instability and a deteriorating security situation. Factors contributing to this include jihadist insurgencies, inter-communal violence, weak governance, economic challenges, and environmental stresses such as droughts and food insecurity.</p> <p>Several countries in the Sahel region have witnessed military takeovers or coups d'état in recent years. For example, Mali experienced coups in 2012, 2020, and 2021. Chad also saw a military takeover following the death of President Idriss Déby in 2021. These political upheavals have added to the region's instability and governance challenges.</p>
92	d	<p>India imports apples from various countries including the United States of America. The USA is one of the major exporters of apples to India.</p> <p>India has regulations in place regarding the import of genetically modified organisms (GMOs) and genetically modified (GM) foods. The import of GM foods into India requires approval from the Genetic Engineering Appraisal Committee (GEAC), which is the competent authority for evaluating and approving GM organisms and products in India.</p>
93	a	<p>As per Article 181 of the Constitution of India, the Speaker shall not preside over the Lok Sabha while the resolution for their removal is under consideration. However, the Speaker can participate in the proceedings and also has right to speak. The Speaker can vote at the first instance but not in case of equality of votes.</p>
94	b	<p>A Bill that originates in the Lok Sabha and remains pending in the Lower House itself is considered lapsed with the dissolution of the House.</p> <p>Bills that originate and are passed in the Lok Sabha but are pending in the Rajya Sabha are also considered lapsed.</p>
95	c	<p>Prorogation of the House in the Parliament is a process by which a session of Parliament comes to an end. Prorogation is done by the President of India. The President, acting on the advice of the Cabinet or Prime Minister, issues a notification proroguing the session of Parliament. The power to dissolve the Lok Sabha lies with the President of India. The President acts on the advice of the Prime Minister and the Union Council of Ministers in this matter.</p>
96	c	<p>European Parliament approved the Net-Zero industry Act to bolster EU production in technologies needed for decarbonisation in 2024. The EU aims to be climate-neutral by 2050 – an economy with net-zero greenhouse gas emissions.</p>
97	d	<p>Statement 1 is incorrect. Venezuela has been able to grow at about 5 to 8 percent of GDP but has not been able to grow rapidly or prevent fleeing of its people to other countries.</p> <p>Having more than 300 billion barrels of oil reserves, Venezuela has the most oil reserves in the world. Saudi Arabia has the second-largest oil reserves globally. Venezuela still faces economic difficulties in spite of its enormous natural resource base.</p> <p>Venezuela economy has not recovered substantially, despite the claims of 8% growth in GDP in 2023. Migration from the country has not stopped even in the</p>

		recent times, though there are reports claiming reduction the amount of people migrating to other countries.
98	d	<p>The funding for DILRMP is 100% central.</p> <p>One of the key components of the DILRMP is the digitization of cadastral maps. Cadastral maps are detailed maps that show the boundaries and ownership of land parcels. Digitizing these maps helps in improving land record management and accessibility.</p> <p>As part of the DILRMP, efforts are being made to transliterate and digitize land records, including the Records of Rights (RoR), into languages recognized by the Constitution of India. This helps in ensuring standardization and accessibility across different regions and languages.</p>
99	b	<p>The PMSMA scheme guarantees a minimum package of antenatal care services to pregnant women in their second and third trimesters of pregnancy. However, it does not explicitly extend to six months post-delivery health care services under this specific scheme. The focus is primarily on antenatal care to ensure safe pregnancies and deliveries.</p> <p>One of the unique features of the PMSMA is that it encourages private sector healthcare providers, including obstetricians, radiologists, and physicians, to volunteer their services at government health facilities on the 9th of every month. This public-private partnership aims to improve the quality and reach of antenatal care services.</p>
100	b	<p>The entry age group for enrolment in the PM-SYM scheme is 18 to 40 years, not 21 to 40 years.</p> <p>Beneficiaries under the PM-SYM scheme are required to make age-specific monthly contributions until they reach the age of 60. The contribution amount varies depending on the age at which they join the scheme.</p> <p>Under the PM-SYM scheme, each subscriber is entitled to receive a minimum monthly pension of Rs 3000 after attaining the age of 60 years.</p> <p>The PM-SYM scheme provides for a family pension that is applicable only to the spouse in the event of the subscriber's death. The spouse will receive 50% of the pension that the subscriber was receiving. There is no provision for unmarried daughters under the family pension benefit in this scheme.</p>