

1. **Ans: b**

World's first solar highway in Jinan, the capital city of China's Shandong province was recently opened for testing. The new solar road consists of an insulating layer on the bottom, photovoltaic panels in the middle, and transparent concrete on top. It can generate 1 million kilowatt-hours of power in a year and saves the space for building solar farms and shorten the transmission distance.

Last year, the world's first so-called **solar road** for cars and trucks opened in **Normandy, France**.

Netherlands also opened a **solar bike path** with an estimated cost of \$3.7 million.

2. **Ans: d**

Disguised unemployment is the condition in which people appear to be employed contribution to productivity zero. Eg: 8 people employed in agriculture which requires only 5 if 3 are removed nothing happened to production. The surplus labors moved to territory and secondary sector

3. **Ans: d**

Lidar (also called LIDAR, LiDAR, and LADAR) is a surveying method that measures distance to a target by illuminating that target with a pulsed laser light, and measuring the reflected pulses with a sensor. Differences in laser return times and wavelengths can then be used to make digital 3D-representations of the target. The name Lidar, sometimes considered an acronym of **Light Detection and Ranging** (sometimes Light Imaging, Detection, And Ranging), was originally a portmanteau of light and radar. Recently it was in news for using in survey for potential solar rooftops in Bangalore.

Lidar is commonly used to make high-resolution maps, with applications in geodesy, geomatics, archaeology, geography, geology, geomorphology, seismology, forestry, atmospheric physics, laser guidance, airborne laser swath mapping (ALSM), and laser altimetry. The technology is also used for control and navigation for some autonomous cars. Lidar sometimes is called laser scanning and 3D scanning, with terrestrial, airborne, and mobile applications.

Lidar originated in the early 1960s, shortly after the invention of the laser, and combined laser-focused imaging with the ability to calculate distances by measuring the time for a signal to return using appropriate sensors and data acquisition electronics.

Its first applications came in meteorology, where the National Center for Atmospheric Research used it to measure clouds. The general public became aware of the accuracy and usefulness of Lidar systems in 1971 during the **Apollo 15 mission**, when astronauts used a laser altimeter to map the surface of the moon.

4. **Ans: c**

5. **Ans: b**

The National Audubon Society (Audubon) is a non-profit environmental organization dedicated to conservation.

Located in the United States and incorporated in 1905, Audubon is one of the oldest of such organizations in the world and uses science, education and grassroots advocacy to advance its conservation mission. It is named in honor of John James Audubon, a Franco-American ornithologist and naturalist who painted, cataloged, and described the birds of North America in his famous book *Birds of America* published in sections between 1827 and 1838.

It also coordinates the **Christmas Bird Count** held each December in the U.S., a model of citizen science, in partnership with Cornell Lab of Ornithology, and the Great Backyard Bird Count each February. Together with Cornell, Audubon created e-Bird, an online database for bird observation. The National Audubon Society also has many global partners to help birds that migrate beyond the U.S.'s borders, including Birdlife International based in Great Britain, Bird Studies Canada, and many partners in Latin America and in the Caribbean. Audubon's International Alliances Program (IAP) brings together people throughout the Western Hemisphere to work together to implement conservation solutions at Important Birds Areas (IBA's).

6. **Ans: a**

Definition of poverty, BPL, relative poverty absolute poverty

Quintile income ratio-option b

7. **Ans: d**

Defence Research and Development Organisation (DRDO) developed Quick Reaction Surface to Air Missile (QRSAM). The QR-SAM weapon system has been jointly developed by the DRDO and Bharat Electronics Ltd.

It is a quick reaction, all-weather, network-centric missile system **capable of search-on-the-move**.

The missile system **can also engage multiple targets within a range of around 30 km with two vehicle configurations for area air defence**.

It is a **truck-mounted missile with a 360° rotatable, electro-mechanically operated, turret-based launch unit**.

8. **Ans: c**

Fragile Five is a term coined in August of 2013 by a financial analyst at Morgan Stanley

It represent emerging market economies that have become too dependent on unreliable foreign investment to finance their growth ambitions.

As capital flows out of emerging markets to developed markets, many of their currencies experienced significant weakness and made it difficult to finance current account deficits. The lack of new investment also made it impossible to finance many growth projects, which contributed to a slowdown in their respective economies

The five members of the Fragile Five include:

- Turkey
- Brazil
- India
- South Africa
- Indonesia

9. **Ans: a**

With China increasing its naval presence in the Indian Ocean Region, the Indian Navy is keeping an eye on the 'dragon' with the help of its 'eye in the sky', **GSAT-7 also called Rukmini**, the Navy's own dedicated military satellite. It has helped the Navy monitor the Indian Ocean Region (IOR) as it has a nearly 2,000 nautical mile 'footprint'.

The multi-band communication-cum surveillance satellite, which is operating from the geo-stationary orbit (at 36,000km altitude), provides real-time inputs to naval warships, submarines and maritime aircraft and networking capabilities to its naval assets on the high seas.

With the help of the shore-based operational centres, 'Rukmini' (also called INSAT-4F) has not only helped the Navy keep an eye on both Arabian Sea and Bay of Bengal but also helped the force increase its communication and surveillance capabilities from Persian Gulf to Malacca Strait, which together is equivalent to almost 70% of the IOR.

GSAT-7 or INSAT-4F is a multi-band military communications satellite developed by ISRO. The Indian Navy is the user of the multi-band communication spacecraft, which has been operational since September 2013. Rukmini, which provides wide range of service spectrum from low bit rate voice to high bit rate data communication, has given the Navy an integrated platform and helped it overcome the limitation of 'line of sight' (the straight path of signal when unobstructed by the horizon). With the help of this 'eye in the sky', the Army, too, gets vital inputs about over-the-land movements.

10. **Ans: a**

The finance ministry has set up a committee under former chief economic adviser Shankar Acharya to examine the desirability and feasibility of having a new fiscal year. Currently, India follows the April-March fiscal year and all macroeconomic and company data. However, most countries follow a January-December fiscal year. In 1867, British set India's financial year from April 1 to March 31.

11. **Ans: c**

Higher amount of both organic and inorganic waste increases the rate of decomposition and thus more oxygen is used by the microorganism for the process and reduce Dissolved oxygen.

BOD or biological oxygen demand is the amount of oxygen used by microorganisms for decomposition

COD or chemical oxygen demand is a better mode to measure water pollution since it takes into account both biodegradable and non-biodegradable wastes

12. **Ans: c**

Laffer curve show the relationship between tax rates and the amount of tax revenue collected by governments.

13. **Ans: b**

Bioremediation is the use of microorganisms to degrade the environmental contaminants into less toxic forms.

A **bio-pile** is a bioremediation technology in which excavated soils are mixed with soil amendments, formed into compost piles, and enclosed for treatment. The basic bio-pile system includes a treatment bed, an aeration system, an irrigation/nutrient system and a leachate collection system. Moisture, heat, nutrients, oxygen, and pH are controlled to enhance biodegradation. An irrigation/nutrient system is buried under the soil to pass air and nutrients through the soil. Soil piles can be up to 20 feet high. They may be covered with plastic to control runoff, evaporation, and volatilization, as well as to promote solar heating. If volatile organic compounds (VOCs) in the soil volatilize into the air stream, the air leaving the soil may be treated to remove or destroy the VOCs before they are discharged into the

atmosphere. Treatment time is typically 3 to 6 months, after which the excavated material is either returned to its original location or disposed. So it is an **ex-situ** method

Biosparging is an **in situ** remediation technology that uses indigenous microorganisms to biodegrade organic constituents in the saturated zone (The phreatic zone, or zone of saturation, is the area in an aquifer, below the water table, in which relatively all pores and fractures are saturated with water). In biosparging, air (or oxygen) and nutrients (if needed) are injected into the saturated zone to increase the biological activity of the indigenous microorganisms. Biosparging can be used to reduce concentrations of petroleum constituents that are dissolved in groundwater, adsorbed to soil below the water table, and within the capillary fringe.

Bioventing is an **in situ** remediation technology that uses microorganisms to biodegrade organic constituents in the groundwater system. Bioventing enhances the activity of indigenous bacteria and archaea and stimulates the natural in situ biodegradation of hydrocarbons by inducing air or oxygen flow into the unsaturated zone and, if necessary, by adding nutrients. During bioventing, oxygen may be supplied through direct air injection into residual contamination in soil. Bioventing primarily assists in the degradation of adsorbed fuel residuals, but also assists in the degradation of volatile organic compounds (VOCs) as vapors move slowly through biologically active soil

14. **Ans: d**

15. **Ans: d**

REN21 is the global renewable energy policy multi-stakeholder network that connects a wide range of key actors. REN21's goal is to facilitate knowledge exchange, policy development and joint action towards a rapid global transition to renewable energy.

REN21 brings together governments, NGOs, research and academic institutions, international organisations and industry to learn from one another and build on successes that advance renewable energy. To assist policy decision making, REN21 provides high quality information, catalyses discussion and debate and supports the development of thematic networks.

REN21 is an international non-profit association and is based at the United Nations Environment Programme (UNEP) in Paris, France. REN21's network structure is made up of the following agents:

- the Bureau
- the General Assembly
- the Secretariat
- the Steering Committee

16. **Ans: b**

Maharashtra, West Bengal, Bihar, Uttar Pradesh and Andhra Pradesh as per census data

17. **Ans: d**

Fly ash, also known as "pulverised fuel ash", is a coal combustion product that is composed of the particulates (fine particles of fuel) that are driven out of coal-fired boilers together with the flue gases. Ash that falls to the bottom of the boiler is called bottom ash. In modern coal-fired power plants, fly ash is generally captured by electrostatic precipitators or other particle filtration equipment before the flue gases reach the chimneys. Together with bottom ash removed from the bottom of the boiler, it is known as coal ash.

Depending upon the source and makeup of the coal being burned, the components of fly ash vary considerably, but all fly ash includes substantial amounts of silicon dioxide (SiO₂) (both amorphous and crystalline), aluminium oxide (Al₂O₃) and calcium oxide (CaO), the main mineral compounds in coal-bearing rock strata. The constituents of fly ash depend upon the specific coal bed makeup but may include one or more of the following elements or substances found in trace concentrations (up to hundreds ppm): arsenic, beryllium, boron, cadmium, chromium, hexavalent chromium, cobalt, lead, manganese, mercury, molybdenum, selenium, strontium, thallium, and vanadium, along with very small concentrations of dioxins and PAH compounds. It also has unburnt carbon

A gradual increase in fly-ash concentration in the normal field soil was reported to increase the porosity and water-holding capacity. This improvement in water-holding capacity is beneficial for the growth of plants especially under rain fed agriculture.

Advantages of Fly Ash bricks

- It reduces dead load on structures due to light weight
- Same number of bricks will cover more area than clay bricks
- High fire Insulation
- Due to high strength, practically no breakage during transport and use.

- Due to uniform size of bricks mortar required for joints and plaster reduces almost by 50%.
- Due to lower water penetration seepage of water through bricks is considerably reduced.
- Gypsum plaster can be directly applied on these bricks without a backing coat of lime plaster.
- These bricks do not require soaking in water for 24 hours. Sprinkling of water before use is enough.

Disadvantages of Fly Ash bricks

- Mechanical strength is low, but this can be rectified by adding marble waste or mortar between blocks.
- Limitation of size. Only modular size can be produced. Large size will have more breakages.
- It is only good for the places like subtropical area or area where climate is warm because it doesn't absorb heat. But during cold it is not helpful.

18. **Ans: c**

Mission Parivar Vikas: The Government has launched Mission Parivar Vikas for substantially increasing the access to contraceptives and family planning services in the high fertility districts of seven high focus states with TFR of 3 and above. These 146 districts are from the seven high focus, high TFR states (Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand and Assam) that itself constitutes 44% of the country's population.

19. **Ans: b**

20. **Ans: c**

PMEGP is a major credit-linked subsidy programme being implemented by the **Ministry of MSME since 2008-09**. The Scheme is **aimed at generating self-employment opportunities through establishment of micro-enterprises in the non-farm sector** by helping traditional artisans and unemployed youth in rural as well as urban areas. **The Khadi and Village Industries Commission (KVIC) is the nodal implementation agency for the PMEGP at the national level**. At the state/district level, state offices of KVIC, Khadi and Village Industries Boards (KVIBs) and District Industry Centres (DIC) are the implementing agencies.

21. **Ans: d**

Ecotone is a zone of junction between two or more diverse ecosystems. It may be narrow or wide. Sometimes the density of some of the species in this zone is greater than that of adjacent ecosystem this is called edge effect.

22. **Ans: c**

This is a negative consequence of large increase in a country's income. This disease is primarily associated with a natural resource discovery, but it can result from any large increase in foreign currency, including FDI, foreign aid or a substantial increase in natural resource prices. Economists often describe resource-rich countries as suffering from the **'Dutch Disease' or 'resource curse'**. The expression comes from the experience of the Netherlands half a century back (in 1960s when the country discovered huge natural gas in the North Sea), which brought in foreign revenue, but reduced the competitiveness of the domestic economy (i.e., exports) on account of a rising exchange rate (bloating of exchange rate). There are many other examples of this phenomenon including countries as different as United Kingdom, Australia and Nigeria.

23. **Ans: a**

The increase in species richness or biodiversity that occurs from the poles to the tropics, often referred to as the latitudinal **diversity gradient (LDG)**, is one of the most widely recognized patterns in ecology. Put another way, in the present-day localities at lower latitudes generally have more species than localities at higher latitudes. The LDG has been observed to varying degrees in Earth's past.

Elevational Diversity Gradient (EDG) is an ecological pattern where trends in biodiversity occur at different elevations. The EDG states that species richness tends to increase as elevation increases, up to a certain point, creating a "diversity bulge" at middle elevations. There have been multiple hypotheses proposed for explaining the EDG, none of which accurately describe the phenomenon in full.

24. **Ans: a**

The basic reason for price rises in the situations of deficit financing is that governments fail to equalise the total demand of the economy by the total supply

25. **Ans: b**

Detritus food chains start from dead organic remains of animals and plants. Food chain shows simple and isolated relationship. Food web is more complex.

26. **Ans: d**

The CRR provides more money in the hands of banks, which may be now lent out for investment and increase the supply of currency in the economy. As the supply of money increases to the banks, they may cut interest rates (cost of money remaining the same).

27. **Ans: c**

Biosphere is a very narrow layer of earth surface where Atmosphere, Lithosphere and Hydrosphere meet.

28. **Ans: c**

Both are correct. The liquidity trap is the situation in which prevailing interest rates are low and savings rates are high, making monetary policy ineffective. In a liquidity trap, consumers choose to avoid bonds and keep their funds in savings because of the prevailing belief that interest rates will soon rise. Because bonds have an inverse relationship to interest rates, many consumers do not want to hold an asset with a price that is expected to decline.

Liquidity crunch-A time when cash resources are in short supply and demand is high. During a liquidity crunch, businesses and consumers are charged high interest rates on loans which are more difficult to obtain. Also known as liquidity crisis and credit crunch.

29. **Ans: c**

- Pangong Tso lies in the path of the Chushul approach, one of the main approaches that China can use for an offensive into Indian-held territory.
- Indian assessments show that a major Chinese offensive, if it comes, will flow across both the north and south of the lake.
- During the 1962 war, this was where China launched its main offensive — the Indian Army fought heroically at Rezang La, the mountain pass on the southeastern approach to Chushul valley, where the Ahir Company of 13 Kumaon led by Maj. Shaitan Singh made its last stand.

30. **Ans: b**

Exceptionally low prices are fixed by the firms under such pricing policy which has the objective of harming and finally eliminating rivals from the market—when they have monopolistic presence in the market they start exploiting the consumers

31. **Ans: b**

Bio magnification is an increase in concentration of a pollutant from one link in a food chain to another. In bio accumulation there is an increase in concentration of pollutant from environment to the first organism in a food chain. Bioaccumulation occurs when an organism absorbs a substance at a rate faster than that at which the substance is lost by catabolism and excretion.

32. **Ans: d**

The Ministry of Environment and Forests has decided to establish a Centre for Biodiversity Policy and Law (CEBPOL) in the National Biodiversity Authority (NBA), which is a statutory autonomous body of the Ministry responsible for implementing the Biological Diversity Act, 2002. The Government of Norway has offered to provide technical and institutional collaboration for the CEBPOL.

Norway is the first developed country to have recently enacted a national legislation on ABS (Access and Benefit Sharing).

The objectives of CEBPOL are to develop professional expertise in the complex and still-evolving policy and legal issues relating to biodiversity, including on access and benefit sharing, inter alia through research, development and training; and to provide advice and expertise to the Government on these matters.

33. **Ans: b**

In Amensalism one species is harmed and other is unaffected

34. **Ans: a**

The 3rd statement is neutral to the issue of attracting foreign investment and its promotion. Once the domestic currency becomes fully convertible in the capital account such prohibitory laws are not possible —that is why India is believed to not allowing such convertibility at the full scale—as the economy does not want foreign exchange taking flight from the economy (since it is itself trying to attract it)

35. **Ans: b**

For bio magnification to occur the pollutant must be long lived, mobile, soluble in fats and biologically active. If soluble in water the pollutant will be excreted by the organism. Pollutant that is soluble in fat is retained for a very long time. If the pollutant is short lived it will be broken down before it can become dangerous.

36. **Ans: d**

Poorna swaraj session 1929;

January 26, 1930 fixed as the first Independence Day, to be celebrated everywhere.

37. **Ans: a**

Tropical Moist Deciduous forests are found throughout India except western and north western region. Tropical Dry Deciduous forests are found in northern part of India except the North-East

38. **Ans: a**

In Malabar, K. Kelappan led a march from Calicut to Payyannur.

39. **Ans: d**

The Terai is a lowland region in southern Nepal and northern India that lies south of the outer foothills of the Himalayas, the Siwalik Hills, and north of the Indo-Gangetic Plain. This lowland belt is characterised by tall grasslands, scrub savannah, sal forests and clay rich swamps.

In northern India, the Terai spreads from the Yamuna River eastward across Himachal Pradesh, Haryana, Uttarakhand, Uttar Pradesh and Bihar.

The Terai is part the Terai-Duar savanna and grasslands ecoregion. The corresponding lowland region in West Bengal, Bangladesh, Bhutan and Assam in the Brahmaputra River basin is called '**Doars**'.

The region comprises more than 50 wetlands. North of the Terai rises the Bhabhar, a narrow but continuous belt of forest about 8–12 km (5.0–7.5 mi) wide.

40. **Ans: a**

On May 21, 1930, **Sarojini Naidu**, **Imam Sahib** and **Manilal** (Gandhi's son) took up the unfinished task of leading a raid on Dharasana Salt Works. The unarmed and peaceful crowd was met with a brutal lathi charge which left 2 dead and 320 injured.

41. **Ans: c**

42. **Ans: a**

Impact of Agitation

- Imports of foreign cloth and other items fell.
- Government income from liquor, excise and land revenue fell.
- Elections to Legislative Assembly were largely boycotted

43. **Ans: d**

Delhi ridge in the northwest, (extension of Aravalis), the Rajmahal hills in the east, Gir range in the west and the Cardamom hills in the south constitute the outer extent of the Peninsular plateau. However, an extension of this is also seen in the northeast, in the form of Shillong and Karbi-Anglong plateau. The Peninsular India is made up of a series of patland plateaus such as the Hazaribagh plateau, the Palamu plateau, the Ranchi plateau, the Malwa plateau, the Coimbatore and the Karnataka plateau.

44. **Ans: b**

The idea of the Indian National Army (INA) was first conceived in **Malaya by Mohan Singh**, an Indian officer of the British Indian Army, when he decided not to join the retreating British Army and instead turned to the Japanese for help. The outbreak of the Quit India Movement gave a fillip to the INA as well. **In September 1942, the first division of the INA was formed with 16,300 men.** With the Japanese contemplating an Indian invasion, the idea of an armed wing of INA seemed more relevant to them. But soon, serious differences emerged between the Indian Army officers led by Mohan Singh and the Japanese over the role to be played by the INA. Actually, the Japanese wanted a token force of 2,000 only while Mohan Singh wanted to raise an army of 2,00,000.

45. **Ans: d**

Air-independent propulsion (AIP) is any technology which allows a non-nuclear submarine to operate without the need to access atmospheric oxygen (by surfacing or using a snorkel). It can augment or replace the diesel-electric propulsion system of non-nuclear vessels. It is based on the combustion of stored oxygen and ethanol to augment battery-powered propulsion. Notably, a submarine is about stealth. It is a weapons platform not visible to the naked eye. AIP significantly improves stealth because it enables a submarine to generate electricity for services and battery charging and propulsion while completely submerged. AIP systems also generate electricity, powering a submarine to operate and also generate oxygen, lighting and amenities for crew. They enable conventional diesel-electric submarines to remain submerged for two to three weeks at a time. Another advantage is that the Non-nuclear submarines running on battery power or AIP can be virtually silent.

46. **Ans: d**

The **Tebhaga movement** was a significant peasant agitation, **initiated in Bengal** by the **Kisan Sabha** (peasant front of the Communist Party of India) in 1946–47. At that time, share croppers had contracted to give half of their harvest to the landlords. **The demand of the Tebhaga (sharing by thirds) movement was to reduce the landlord share to one third.**

47. **Ans: b**

Earth quake waves are classified into body waves and surface waves. Primary wave (P-wave) and Secondary Wave (S-Wave) are body waves.

48. **Ans: b**

The European planters at **Champaran** practised illegal methods of indigo cultivation and forced the Indian peasants to cultivate Indigo on 3/20th part of their land holding. This was called Tinkathia system. Peasants of Champaran with the help of Gandhi and Rajendra Prasad organised Satyagraha and led to abolition of Tinkathia system.

49. **Ans: b**

All of Western and Central Asia remains under the influence of westerly winds along the altitude of 9-13 km from west to east. These winds blow across the Asian continent at latitudes north of the Himalayas roughly parallel to the Tibetan highlands. These are known as **Jet Streams**. Tibetan highlands act as a barrier in the path of these jet streams. As a result, jet streams get bifurcated. One of its branches blows to the north of the Tibetan highlands, while the southern branch blows in an eastward direction, south of the Himalayas. It has its mean position at 25°N in February at 200-300mb level. It is believed that this southern branch of the jet stream exercises an important influence on the winter weather in India.

50. **Ans: a**

Through the Cripps mission for the first time, British government **recognized the "Right of Dominion" for India.**

It promised that immediately after the war is stopped, steps would be taken up to set up an elected body charged with the task of making the constitution for India and provisions would be made so that the Indian states could participate in the framing of the constitution. The Cripps mission which was a move to appease the Congress, Muslim League and Indian states at the same time was **rejected by all of them**; Muslim league said there was inadequate representation of Muslims. Sikhs rejected because of non-accession of provinces. Hindu Mahasabha rejected because the "Pakistan Virus" was alive. The Dalits and depressed classed also rejected because there was nothing new for them.

51. **Ans: d**

The annexation of Awadh in 1856, was on the grounds of maladministration, and not on the basis of "Doctrine of Lapse". Hence Statement 1 is wrong. All other statements are correct.

52. **Ans: a**

Think of what would happen in the absence of some basic rules. Every individual would be insecure simply because they would not know what members of this group could do to each other, who could claim rights over what. Any group will need some basic rules that are publicly promulgated and known to all members of that group to achieve a minimal degree of coordination. But these rules must not only be known, they must also be enforceable. If citizens have no assurance that others will follow these rules, they will themselves have no reason to follow these rules. Saying that the rules are legally enforceable gives an assurance to everybody that others will follow these, for if they do not do so, they will be punished.

The **first function** of a constitution is to **provide a set of basic rules that allow for minimal coordination amongst members of a society.**

The **second function** of a constitution is to **specify who has the power to make decisions in a society.** It decides how the government will be constituted.

Most of the countries of Asia have written constitution. Saudi Arabia do not have a written constitution. (NCERT)

53. **Ans: a**

In 1822, Rammohan Roy started the first Persian journal named – 'Mirat-ul-Akhbar', published weekly.

Satyarth Prakash is an 1875 **book**, (and **not a News Paper**) written originally in Hindi by Maharishi Dayanand Saraswati, a renowned religious and social reformer and the founder of Arya Samaj.

Young India was a weekly paper in English published by **Mohandas Karamchand Gandhi** while **New India** and **Common Wheel** were **Besant's** newspapers.

54. **Ans: b**

The **third function** of a constitution is to set some limits on what a government can impose on its citizens. These limits are fundamental in the sense that government may never trespass them. Under Indian law, the freedom of speech and of the press do not confer an absolute right to express one's thoughts freely. Clause (2) of Article 19 of the Indian constitution enables the legislature to impose certain restrictions on free speech under following heads

1. Security of the State,
2. Friendly relations with foreign States,
3. Public order,
4. Decency and morality,
5. Contempt of court,
6. Defamation,
7. Incitement to an offence, and
8. Sovereignty and integrity of India.

Reasonable restrictions on these grounds can be imposed only by a duly enacted law and not by executive action

55. **Ans: d**

The credit for the birth of INC is given to A. O Hume, a retired civil servant.

In 1883, Indian National Conference was held under the leadership of Surendra Nath Bannerjea and Ananda Mohan Bose.

In 1884, at the annual convention of Theosophical Society at Adyar in Madras, A. O Hume proposed to form a committee, for the preparation of an All-India organization.

In 1884, he founded the "Indian National Union", before INC.

Finally INC was formed on 28th Dec 1885.

First session was held in Gokuldas Tejpal Sanskrit College, Mumbai. Actually it was decided to be held at Poona. But the outbreak of Cholera, forced to shift the venue.

In 1890, Kadambini Ganguly, the 1st women graduate of Calcutta University addressed the INC session.

56. **Ans: b**

Consolidated fund was constituted under Article 266 (1) of the Constitution of India. All revenues received by the government by way of direct taxes and indirect taxes, money borrowed and receipts from loans given by the government flow into the Consolidated Fund of India.

All government expenditure is made from this fund, except exceptional items which are met from the Contingency Fund or the Public Account. Importantly, no money can be withdrawn from this fund without the Parliament's approval

57. **Ans: a**

The 1st statement is correct: Corps of volunteers or "Samitis" were used for mass mobilization.

Example, Swadesh Bandhab Samiti of Ashwini Kumar Dutta in Barisal.

Statement 2 is also correct: Emphasis given to self-reliance or "Atma Shakti". This for to re-assert the National dignity, honor and confidence. It include Social reforms and stand against Caste oppression, early marriage, Dowry etc.

The 3rd Statement is wrong, because "Parallel Government" was a feature of Quit India Movement.

58. **Ans: d**

Annual budget is a money bill which in simple language shows expenditure and revenue generation of Consolidated fund Of India ,As per constitution this fund must be managed by the central Govt through the approval of the Lok Sabha (no approval required from Rajya Sabha) and hence this bill must have majority support in Lok Sabha to pass, if majority members in Lok Sabha vote against this money bill(budget),that means that the Govt in power has not required support to carry out its policies and hence budget will be defeated and either council of ministers resign voluntarily and tell president that they don't have required majority or if they don't do so logically and obviously opposition will ask speaker for No Confidence Motion and if no confidence motion passes with majority then Govt must resign.

59. **Ans: b**

In April 30, 1908, Prafulla Chaki and Khudiram Bose, attempted to kill a white judge. He was the chief presidency magistrate of Muzaffarpur, - "D.H. Kingsford". They threw a bomb on his Carriage, instead of Kingsford, two British ladies got killed. Prafulla Chaki shot himself dead, while Khudiram Bose was tried and hanged in 11th Aug, 1908. Followed by this British captured their Bomb making factory at "Manicktolla". The Entire **Anushilan group** were arrested and tried, including the Ghosh Brothers. This case is known as "Alipore conspiracy / Muraripukur conspiracy / Manicktolla Conspiracy".

60. **Ans: d**

Article 51A brings the Indian Constitution into conformity with these treaties. The Fundamental Duties noted in the constitution are as follows:

It shall be the duty of every citizen of India

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

61. **Ans: c**

The Royal Commission on Indian Currency or the Hilton Young Commission was formed in 1926. It **recommended the formation of RBI**. The commission gave it recommendations conceptualised from the guidelines laid down by Dr. B. R Ambedkar. They took inspiration from his book "The Problem of Rupee- Its origin and solution".

62. **Ans: a**

63. **Ans: b**

Jinnah's 14 Points were as below

- The form of the future constitution should be **federal, with the residuary powers vested in the provinces;**
- A uniform measure of **autonomy shall be guaranteed to all provinces;**
- All legislatures in the country and other elected bodies shall be constituted on the definite principle of adequate and effective representation of minorities in every province without reducing the majority in any province to a minority or even equality;
- **In the Central Legislature, Muslim representation shall not be less than one third;**
- Representation of communal groups shall continue to be by means of separate electorate as at present: provided it shall be open to any community, at any time to abandon its separate electorate in favour of a joint electorate.
- Any territorial distribution that might at any time be necessary shall not in any way affect the Muslim majority.
- **Full religious liberty**, i.e. liberty of belief, worship and observance, propaganda, association and education, shall be guaranteed to all communities.
- No bill or resolution or any part thereof shall be passed in any legislature or any other elected body if three fourths of the members of any community in that particular body oppose it as being injurious to the interests of that community or in the alternative, such other method is devised as may be found feasible and practicable to deal with such cases.
- Sindh should be separated from the Bombay Presidency.
- Reforms should be introduced in the North West Frontier Province and Balochistan on the same footing as in the other provinces.
- Provision should be made in the constitution giving Muslims an adequate share, along with the other Indians, in all the services of the state and in local self-governing bodies having due regard to the requirements of efficiency.
- The constitution should embody adequate safeguards for the protection of Muslim culture and for the protection and promotion of Muslim education, language, religion, personal laws and Muslim charitable institutions and for their due share in the grants-in-aid given by the state and by local self-governing bodies.
- No cabinet, either central or provincial, should be formed without there being a proportion of at least one-third Muslim ministers.
- No change shall be made in the constitution by the Central Legislature except with the concurrence of the States constituting of the Indian Federation.

64. **Ans: b**

Not available for both Constitutional Amendment bill and money bill

65. **Ans: c**

The Nehru Report of 28-30 August, 1928 was a memorandum outlining a proposed new dominion status constitution for India.

The committee was created when Lord Birkenhead, Secretary of State of India, made a speech in the House of Lords in which he challenged the Indians to draft a Constitution implying that they could not produce one that would be widely acceptable among the leaders of the various Indian communities.

It was prepared by a committee of the All Parties Conference chaired by Motilal Nehru with his son Jawaharlal Nehru acting as secretary. There were nine other members in this committee. The final report was signed by Motilal Nehru, Ali Imam, **Tej Bahadur Sapru**, Madhav Shrihari Aney, Mangal Singh, Shuaib Qureshi, **Subhas Chandra Bose**, and G. R. Pradhan

The Nehru Report was the first major attempt of Indians to draft a constitutional framework for the country. The report was finalised in August 1928. While majority of the members favoured a dominion status, a section of them wanted complete independence and hence the **recommendation for dominion status was not unanimous**.

66. **Ans: c**

The Indian Constitution was never subject to a referendum. All powers and authority of sovereign and independent India and its constitution shall flow from the people (NCERT)

67. **Ans: c**

This increasing pressure on agriculture due to de-industrialisation was one of the major causes of the extreme poverty of India under British rule. According to Census Reports, between 1901 and 1941 alone the percentage of population dependent on agriculture increased from 63.7 per cent to 70 per cent.

68. **Ans: c**

69. **Ans: c**

After the end of First World War, there was a resurgence of nationalist activity in India and Indian struggle against imperialism took a decisive turn towards a broad-based popular struggle. But the British Government was not prepared to part with or even share its power with the Indians and once again resorted to the policy of 'carrot and stick'. The carrot was represented by the Montagu-Chelmsford Reforms and government of India act 1919, while measures such as the Rowlatt Act represented the stick.

70. **Ans: b**

First Past the Post system and the Institution of the Speaker and his role, both are borrowed from the British constitution;

71. **Ans: b**

In line with the government policy contained in Montagu's statement, the Government announced further constitutional reforms known as Montford Reforms. But these reforms had many drawbacks that made it unfixable for Indians to accept, hence many Indian leaders condemned it like **Subhas Chandra Bose** said that the **Government of India Act, 1919 forged fresh fetters for the people** and **M.K. Gandhi** called the **Montford Reforms only a method of further draining India of her wealth and of prolonging her servitude**.

Whereas, the Congress met in a special session in August 1918 at Bombay under Hasan Imam's presidency and declared the reforms to be "disappointing" and "unsatisfactory" and demanded effective self-government instead.

72. **Ans: c**

Ordinarily, a person would be arrested after he or she has reportedly committed some offence. However there are exceptions to this. Sometimes a person can be arrested simply out of an apprehension that he or she is likely to engage in unlawful activity and imprisoned for some time without following the above mentioned procedure. This is known as **Preventive Detention**. In India, everyone is free to choose a religion and practice that religion. Freedom of religion also includes the freedom of conscience. This means that a person may choose any religion or may choose not to follow any religion.

73. **Ans: b**

The Lucknow Pact refers to an agreement reached between the Indian National Congress and the Muslim League at the joint session of both the parties, held in Lucknow, in the year 1916.

Muhammad Ali Jinnah, then a member of the Congress as well as the League, made both the parties reach an agreement to pressure the British government to adopt a more liberal approach to India and give Indians more authority to run their country, besides safeguarding basic Muslim demands.

Due to the reconciliation brought about by Jinnah between the Congress and the League, the Nightingale of India, Sarojini Naidu, gave him the title of "the Ambassador of Hindu-Muslim Unity".

74. **Ans: d**

Dr. Ambedkar considered the right to constitutional remedies as 'heart and soul of the constitution'. (NCERT) It is so because this right gives a citizen the right to approach a High Court or the Supreme Court to get any of the fundamental rights restored in case of their violation. The Supreme Court and the High Courts can issue orders and give directives to the government for the enforcement of rights. The courts can issue various special orders known as writs.

75. **Ans: d**

Informative

76. **Ans: a**

A Money Bill can be introduced only in the Lok Sabha on the recommendations of the President. The Rajya Sabha cannot initiate a Money Bill nor can it reject or amend it after passage by the Lok Sabha. The Rajya Sabha must return a Money Bill within 14 days of receipt, after which the Lok Sabha may accept any of its recommendations.

77. **Ans: b**

Along with other nationalists, Gandhi was also aroused by the **Rowlatt Act. In February 1919, he founded the Satyagraha Sabha** whose members took a pledge **to disobey the Act** and thus to court arrest and imprisonment. Here was a new method of struggle. The nationalist movement, whether under the Moderate or Extremist leadership, had hitherto confined its struggle to agitation. Big meetings and demonstrations, refusal to cooperate with the Government, boycott of foreign cloth and schools, or individual acts of terrorism were the only forms of political work known to the nationalists. Satyagraha immediately raised the movement to a new higher level. Nationalists could now act in place of giving only verbal expression to their dissatisfaction and anger. The National Congress was now to become an organisation for political action

78. **Ans: b**

The number of members to be elected from each State to Rajya Sabha has been fixed by the fourth schedule of the Constitution. 7th Schedule Gives allocation of powers and functions between Union & States. It contains 3 lists:

- Union List (For central Govt) 97 Subjects.
- States List (Powers of State Govt) 66 subjects
- Concurrent List (Both Union & States) 47 subjects.

79. **Ans: d**

Charter Act of 1853 had the following provisions

- Higher posts in administration thrown open to competitive examination and Macaulay committee was formed in 1854 to enforce this
- A 6 membered Indian (central) Legislative Council was formed, which handled the legislative activity, separated from Governor General in Council, like British Parliament
- Local representation in Indian (central) Legislative Council. 4 out of 6 were from provincial govts of Madras, Bengal, Bombay and Agra
- Law member was made the full member of Governor General in Council who from there on, carried out only executive functions after separation of legislative functions
- Company's rule was extended without specifying the time period of extension, which indicated the termination at any time
- Members in Board of Directors reduced from 24 to 18 of which 6 were nominated.

80. **Ans: d**

81. **Ans: c**

The features are associated with Neolithic age. The period witnessed the usage of polished stone tools and has wheat, barley, rice and millets as crops for cultivation.

82. **Ans: b**

Garba is a form of dance which originated in the state of Gujarat in India.

The name is derived from the Sanskrit term Garbha ("womb") and Deep ("a small earthenware lamp"). Many traditional garbas are performed around centrally lit lamp or a picture or statue of the Goddess Shakti. The circular and spiral figures of garba have similarities to other



spiritual dances, such as those of Sufi culture (garba being an earlier tradition). Traditionally, it is performed during the nine-day Hindu festival Navarātrī. Either the lamp (the Garba Deep) or an image of the Goddess, Durga (also called Amba) is placed in middle of concentric rings as an object of veneration.

83. **Ans: c**

The Sangam literature is the ancient Tamil literature of the period in the history of ancient southern India (known as the Thamizhagam or the Tamilagam) spanning from 300 BCE to 300 CE. This collection contains 2381 poems in Tamil composed by 473 poets, some 102 of whom remain anonymous. **Most of the available Sangam literature are from the Third Sangam.** The poems belonging to Sangam literature were composed by Tamil poets, both men and women, from various professions and classes of society. These poems were later collected into various anthologies, edited, and with colophons added by anthologists and annotators around 1000 AD.

The book Agattiyam is the oldest book of Tamil grammar composed by Agattiyar in First Sangam (held at Thenmadurai) while Tolkappiyam is composed by Tolkappiyar in the Second Sangam (held at Kapatapuram) as 3 books namely Ezhuttadikaram, Solladikaram and Porulaidkaram. The Third Sangam was chaired by Nakeerar (held at Madurai) which covers the entire corpus of Sangam literature.

The main works include

1. **Pathinenmelkanakku** has 18 major poetic works divided into **Ettutogai** and **Pattuppattu**.
2. **Pathinenkilkanakku** has 18 minor poetic works
3. **Silappathigaram** written by Ilango Adigal
4. **Manimegalai** written by Chithalai Chathanar

Manimegalai is a sequel to another of the Five Great Epics, Silappatikaram, and tells the story of the daughter of Kovalan and Madhavi, who became a Buddhist Bikkuni.

This epic describes how Manimekalai, the beautiful daughter of Kovalan and Madhavi, follower of local deities later included in Hinduism, converted to Buddhism. According to the poem, Manimekalai studies the six systems of philosophy of Hinduism and other prevalent religions of the time and compares them to the teachings of the Buddha. She is most impressed with Buddhism which treats everyone equal with loving kindness and fraternity. Later, upon hearing doctrinal expositions from the Buddhist teacher Bhikshu Aravaṇa Adigal, she becomes a dedicated Bhikshuni or Buddhist nun.

The Manimekhalai is the only extant Tamil Buddhist literary work of what once was an extensive literature. The reason for its survival is probably its status as the sequel to the Silappatikaram.

84. **Ans: d** The Sattriya dance form was introduced in the **15th century A.D** by the great Vaishnava saint and reformer of Assam, **Mahapurusha Sankaradeva** as a powerful medium for propagation of the Vaishnava faith. Sankaradeva introduced this dance form by incorporating different elements from various treatises, then prevalent dance forms and local folk dances combined with his own rare outlook. Sattriya dance is a clear indication of the influence of the former on the latter. Other visible influences on Sattriya dance are those from Assamese folk dances namely Bihu, Bodos etc. Many hand gestures and rhythmic syllables are strikingly similar in these dance forms



85. **Ans: b**

Advaita philosophy considered **god without attributes or qualities** called **Nirgunabrahman**.

Saguna means "with attributes." Nirguna means "without attributes." "Saguna Brahman" describes a God with (tangible) attributes. The term "Nirguna Brahman" describes a God with no (tangible) attributes. The former included traditions that focused on the worship of specific deities such as shiva, vishnu and his avatars (incarnations) and forms of the goddess or devil, all often conceptualised in anthropomorphic forms. **Nirguna bhakti** on the other hand was **worship of an abstract form of god**.

86. **Ans: a**

Odisi is known as the oldest dance form of India on the basis of archaeological evidences. The reason is the bass reliefs of 1st century BC in the **Udaygiri caves**, near Vidisha in Madhya Pradesh. The Natya Shastra speaks of the dance from this region and refers to it as **Odra-Magadhi**. Characterized by various Bhangas (Stance), which involves stamping of the foot and striking



various postures as seen in Indian sculptures. The common Bhangas are Bhanga, Abanga, Atibhanga and Tribhanga. The techniques of movement are built around the two basic postures of the Chowk and the Tribhanga.

The **Chowk** is a position imitating a square – a very masculine stance with the weight of the body equally balanced.

The **Tribhanga** is a very feminine stance where the body is deflected at the neck, torso and the knees. There are three traditions of the Odissi Dance viz. Mahari, Gotipua and Nartaki Schools.

87. **Ans: b**

The Satavahanas were early issuers of Indian state coinage struck with images of their rulers.

They formed a cultural bridge and played a vital role in trade and the transfer of ideas and culture to and from the Indo-Gangetic Plain to the southern tip of India. They supported Brahmanism as well as Buddhism, and patronised Prakrit literature.

Coins featuring ships with double mast have been found on the Coromandel Coast, indicating involvement in maritime trade and naval power.

88. **Ans: b**

Gombeyatta, Putul Nautch and Pavakoothu are all puppet forms. Putul Nautch is from West Bengal

<http://ccrtindia.gov.in/puppetforms.php>

89. **Ans: d**

90. **Ans: b**

Manganiar or Manghanhar

The Manganiar or Manghanhar and related Langha are Muslim communities in Sindh, Pakistan and in the desert of Rajasthan, India in the districts of Barmer and Jaisalmer, along the border of Sindh province of Pakistan. Majority of Manghanhar are found in the districts of Tharparkar, Sanghar, Mirpur Khas, Tando Allahyar, Hyderabad, Badin, Sujawal, Thatta, Jamshoro in Sindh Pakistan. **They are famous for their classical folk music.** They are the groups of hereditary professional musicians, whose music has been supported by wealthy landlords and aristocrats for generations.

91. **Ans: a**

To overcome the financial difficulties in his empire, Muhammed Bin Tuglaq raised the land revenue on the farmers of Doab, which affected the famine hit farmers. They revolted and the revolts were crushed, but he realised that the promotion of agriculture is the real solution to overcome the financial difficulties. So he gave Takkavi Loans to buy seeds and extend agriculture.

92. **Ans: a**

The South Asian Association for Regional Cooperation (SAARC) is the regional intergovernmental organization and geopolitical union of nations in South Asia. Its member states include Afghanistan, Bangladesh, Bhutan, India, Nepal, the Maldives, Pakistan and Sri Lanka. SAARC comprises 3% of the world's area, 21% of the world's population and 3.8% of the global economy, as of 2015.

SAARC was founded in Dhaka on 8 December 1985. Its secretariat is based in **Kathmandu, Nepal**. The organization promotes development of economic and regional integration. It launched the South Asian Free Trade Area in 2006. SAARC maintains permanent diplomatic relations at the United Nations as an observer and has developed links with multilateral entities, including the European Union

93. **Ans: d**

- He treated Hindus as second grade citizens and **imposed Jizia** on them,
- **He increased slaves by capturing defeated soldiers and young men**
- He also opened free hospitals and marriage bureaus for poor Muslims

94. **Ans: b**

The **New Development Bank (NDB)**, formerly referred to as the BRICS Development Bank, is a multilateral development bank established by the BRICS states (Brazil, Russia, India, China and South Africa). According to the Agreement on the NDB, "the Bank shall support public or private projects through loans, guarantees, equity participation and other financial instruments." Moreover, the NDB "shall cooperate with international organizations and other financial entities, and provide technical assistance for projects to be supported by the Bank. The initial authorized capital of the bank is \$100 bln divided into 1 mln shares having a par value of \$100,000 each. The initial subscribed capital of the NDB is \$50 bln divided into paid-in shares (\$10 bln) and callable shares (\$40 bln). The initial subscribed capital of the



bank was equally distributed among the founding members. The Agreement on the NDB specifies that the voting power of each member will be equal to the number of its subscribed shares in the capital stock of the bank.

The bank is headquartered in Shanghai, China. The first regional office of the NDB is in Johannesburg, South Africa

95. **Ans: b**

Branding of horses (Dagh) and descriptive list of soldiers (Hulya) were introduced by Alaudhin Khilji. Standing army is paid in cash from treasury. He also held strict periodic review of army.

96. **Ans: a**

The **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)** is an international organisation of seven nations of South Asia and South East Asia. Member states are **Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan, and Nepal** which are among the countries dependent on the Bay of Bengal.

The main objective of BIMSTEC is technological and economic cooperation among south Asian and southeast Asian countries along the coast of the Bay of Bengal. Commerce, investment, technology, tourism, human resource development, agriculture, fisheries, transport and communication, textiles, leather etc. have been included in it.

Provide cooperation to one another for the provision of training and research facilities in educational vocational and technical fields. Promote active collaboration and mutual assistance in economic, social, technical and scientific fields of common interest

97. **Ans: d**

Secret agents reported market functioning were called **Muhyians**.

Shahna-i-Mandi is the officer who took care of market operations

98. **Ans: a**

The **Shanghai Cooperation Organisation (SCO)** is a Eurasian political, economic, and security organisation, the creation of which was announced on 15 June 2001 in Shanghai, China by the leaders of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan. The **Shanghai Cooperation Organisation Charter** was signed in June 2002 and entered into force on 19 September 2003.

These countries, except for Uzbekistan, had been members of the Shanghai Five group, founded on 26 April 1996 in Shanghai. India and Pakistan joined SCO as full members on 9 June 2017 at a summit in Astana, Kazakhstan.

99. **Ans: d**

UPSC 2012 question

100. **Ans: c**

BRICS is the acronym for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa. Induction of South Africa happened in 2010.

The BRICS members are all leading developing or newly industrialized countries, but they are distinguished by their large, sometimes fast-growing economies and significant influence on regional affairs. Since 2009, the BRICS nations have met annually at formal summits.