

Q.1)

Ans) a

**Exp) Statement 1 is correct.** Section 11 of Representation of People's Act 1951 provides Election commission the power to remove or reduce disqualification mentioned under Section 8A of RPA 1951.

**Statement 2 is incorrect.** RPA Act does not provide the Election Commission the power to deregister political parties.

**Statement 3 is incorrect.** Both National and regional political parties can be registered through Election Commission of India and not State Election Commission. Section 29A of RPA 1951 provides for registration of political parties.

KB:

Representation of People's Act 1950 and 1951 legislated by Parliament to give effect to various Articles of the Constitution. RPA Act 1951 provides grounds for disqualification of members of Parliament. It provides the Election Commission the power to register political parties. It provides for resolution of election disputes.

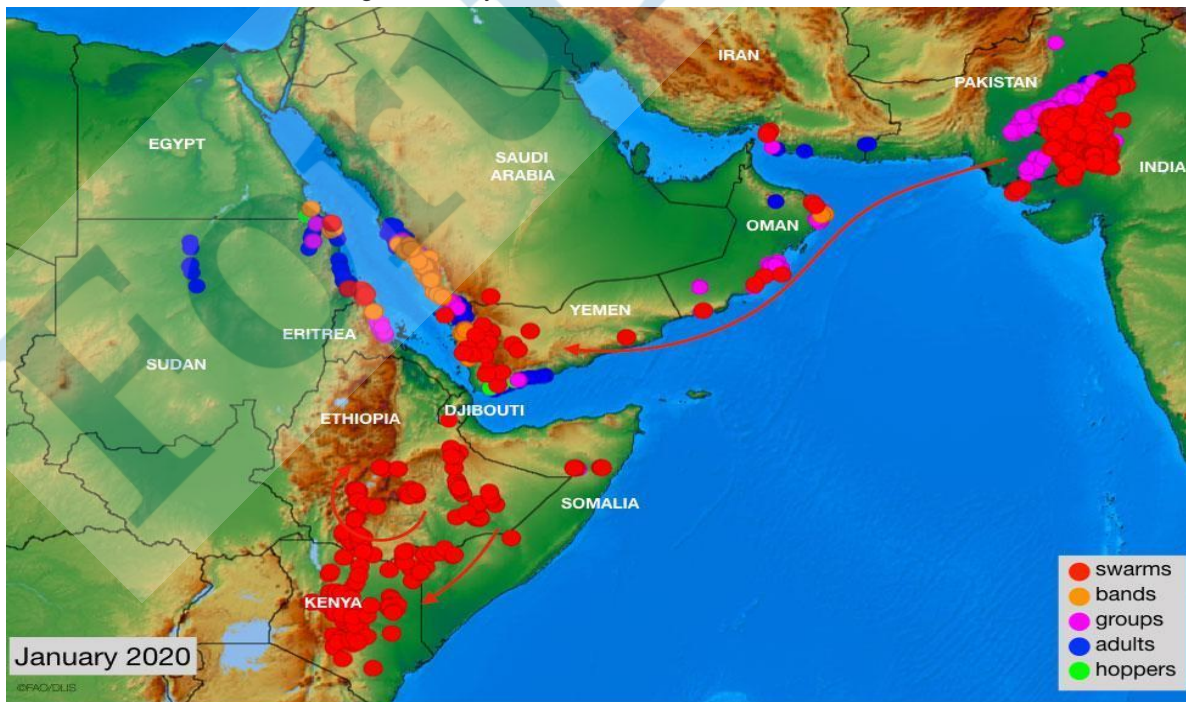
Q.2)

Ans) c

**Exp) Statement 1 is incorrect.** According to the Food and Agriculture Organization (FAO), three hotspots of threatening locust activity are: Horn of Africa, both sides of the Red Sea and Southwest Asia.

**Statement 2 is correct.** Both locusts and grasshoppers belong to the Acrididae family. Locusts develop gregarious characteristics in suitable environmental conditions forming an organized group.

**Statement 3 is incorrect.** Currently available satellites cannot directly detect individual locusts or locust swarms. Some highly sophisticated satellites used by the military and forthcoming civilian satellites could potentially detect locust swarms but these images are not yet available.



Q.3)

Ans) b

**Exp) Statement 1 is incorrect.** The Agriculture Census in India is conducted at five yearly intervals to collect data on structural aspects of operational holdings in the country. The Agriculture Census programme is carried out in three phases at five yearly intervals with cooperation of States/UTs. The first Agricultural Census in the country was conducted with reference year 1970-71. The latest was the 10th Agriculture Census 2015-16.

**Statement 2 is correct.** This report is based on data collected on the number and area of operational holdings for different size classes/social groups and gender during Phase-I of Agriculture Census 2015-16. The total number of operational holdings in the country has increased from 138.35 million in 2010-11 to 146.45 million in 2015-16 showing an increase of 5.86%. The total operated area in the country has decreased from 159.59 million ha. in 2010-11 to 157.82 million ha. in 2015-16 showing a decrease of 1.11%.

**Statement 3 is correct.** The percentage share of female operational holders has increased from 12.79% in 2010-11 to 13.96% in 2015-16 with the corresponding figures of 10.36% and 11.72% in the operated area. This shows that more and more females are participating in the management and operation of agricultural lands.

KB)

The small and marginal holdings taken together (0.00-2.00 ha.) constituted 86.08% of the total holdings in 2015-16 against 85.01% in 2010-11 while their share in the operated area stood at 46.94% in the current census as against 44.58% in 2010-11. The Semi-medium and Medium operational holdings (2.00-10.00 ha.) in 2015-16 were only 13.35% with 43.99% operated area. The corresponding figures for 2010-11 census were 14.29% and 44.82%. The large holdings (10.00 ha. & above) were merely 0.57% of total number of holdings in 2015-16 and had a share of 9.07% in the operated area as against 0.70% and 10.59% respectively for 2010-11 census.

Source) <http://agcensus.nic.in/document/introagcen.htm>

Subject) Economics

Topic) Agriculture Survey

Nature) Factual

Q.4)

Ans) c

**Exp) Statement 1 is correct.** SAFAR envisages a research-based management system where strategies of air pollution mitigation go hand in hand with the nation's economic development. The Air Quality Index is a tool for effective communication of air quality status to people by simplifying the complex data into a single number, nomenclature and colour.

**Statement 2 is correct.** SAFAR denotes the City Air Quality- Over all city pollution and Location specific Air Quality. AQI denotes the relative contribution of different pollutants in the environment by categorizing them into 6 categories.

KB)

The System of Air Quality and Weather Forecasting And Research (SAFAR) is an initiative of the Ministry of Earth Sciences (MoES). It was developed indigenously by the Indian Institute of Tropical Meteorology, Pune and operationalized by India Meteorological Department (IMD). The National Air Quality Index (NAQI) is an initiative of the Ministry of Environment, Forest and Climate Change. NAQI data is maintained by the Central Pollution Control Board.

Q.5)

Ans) d

**Exp) Statement 1 is incorrect.** Article 130 of Constitution provides the Supreme Court shall sit in Delhi or in such other place or places, as the Chief Justice of India may, with the approval of the President, from time to time, appoint. Hence, approval is needed from the President not from Parliament.

**Statement 2 is incorrect.** Original Jurisdiction implies any citizen or entity can approach supreme court directly without approaching high court or any other subordinate courts. Supreme court has original jurisdiction with respect to:

1. Federal disputes
2. Violation of fundamental rights of any citizen.

Article 131 of the Constitution provides the Supreme court the power to resolve federal disputes. Federal disputes comprises state - state disputes, centre-state disputes etc.

Article 32 of the Constitution provides citizens the right to seek constitutional remedies. Citizens can approach the apex court in violation of any of its fundamental rights.

Q.6)

Ans) a

**Exp) Option a is correct.** An amalgamation is a combination of two or more companies into a new entity. Amalgamation is distinct from a merger because neither company involved survives as a legal entity. Instead, a completely new entity is formed to house the combined assets and liabilities of both companies.

**Option b is incorrect.** After amalgamation the amalgamated entity gets a new name.

**Option c is incorrect.** Amalgamation takes place when two or more companies engaged in the same lines/areas of business combined with their activities.

**Option d is incorrect.**

KB)

The terms of amalgamation are finalized by the board of directors of each company. The plan is prepared and submitted for approval. For instance, the High Court and Securities and Exchange Board of India (SEBI) will approve the shareholders of the new company when a plan is submitted. The new company officially becomes an entity and issues shares to shareholders of the transferor company. The transferor company is liquidated, and all assets and liabilities are taken over by the transferee company.

Source) <https://www.investopedia.com/terms/a/amalgamation.asp>

Subject) Economic

Topic) Bank Merger and Amalgamation

Nature) Factual

Q.7)

Ans) d

**Exp) Statement 1 is incorrect.** NPT is an international treaty which aims to prevent the spread of nuclear weapons and technology. It also promotes peaceful use of nuclear energy. The treaty is binding in nature. The treaty defines Nuclear weapon states as those that have tested nuclear devices before 1 January 1967. ( US, Russia, UK, France and China are Nuclear weapon states.)

India, Pakistan and North Korea have declared to have tested nuclear weapons. While Israel's position as a nuclear state is not yet confirmed.

**Statement 2 is Incorrect.** Iran is still a party to NPT. North Korea became a party to the NPT in 1985 as a non-nuclear weapon state. It withdrew from the treaty in 2003 citing hostile US policy towards North Korea.

Q.8)

Ans) d

**Exp) Statement 1 is incorrect.** The Gross Tax Revenue (GTR) percentage of GDP in 2014-15 it was 10 percent, in 2015-16 it was 10.6 percent, 2016-17 it was 11.2%, 2017-18 it was 11.2%, 2018-19 PA it was 10.9 and 2019-20 it was 11.7%. GTR was increased in 2015-16 and constant in 2016-17 and 2017-18 and also decreased in 2018-19.

**Statement 2 is incorrect.** The fiscal deficit percentage of GDP in 2014-15 it was 5.11per cent 2015-16 it was 5.33per cent, 2016-17 it was 5.36, 2017-18 it was 5.91, 2018-19 PA it was 6.49 and 2019-20BE it was 7.04.

KB)

Gross tax revenue means total income before claiming any deductions. Tax Revenue forms part of the Receipt Budget, which in turn is a part of the Annual Financial Statement of the Union Budget. It gives a detailed report on revenue collected from different items like corporation tax, income tax, wealth tax, customs, union excise, service, taxes on Union Territories like land revenue, stamp registration etc.

**Fiscal Deficit = Total expenditure – (Revenue receipts + Non-debt creating capital receipts).** It is an indication of the total borrowings needed by the government. While calculating the total revenue, borrowings are not included.

Source) Table 1: Chapter 2: Volume 2 Economic Survey 2019 – 20

Subject) Economics

Topic) Fiscal Development

Nature) Factual

Q.9)

Ans) b

**Exp) Statement 1 is correct. Indonesia (followed by Malaysia) is the world's biggest producer of palm oil while India (followed by EU) is the largest importer of crude palm oil.**

Annual imports of edible oil during the past three years have averaged 14.82 million tonnes at \$9.43 billion. Though palm oil has a high proportion of unhealthy saturated fats-45% compared to 6% in mustard oil-there is no way India can affordably meet its growing needs without relying on it. Annual imports of crude palm oil during the past three years have averaged 6.76 million tonnes. Soybean and sunflower oils follow at some distance.

**Statement 2 is incorrect.** In cooking oil, India depends on imports for two-thirds (2/3) of its requirement. Self-sufficiency is almost impossible with oilseeds because there is not enough land available. To make a dent in the import bill, it must increase palm oil production because oil palms have the highest productivity at 4,000 kg of oil per hectare. In contrast, mustard, which has a high oil content of 35-42%, yields 440-500 kg of oil per hectare at current levels of productivity.

**Statement 3 is incorrect.** Oil palm is a native of the Guinea coast of Africa. It was introduced to India in the mid-1980s under the Technology Mission on Oilseeds. Currently, it covers 3.45 lakh hectares out of a potential area of 19.33 lakh hectares, nearly half of it in Andhra Pradesh.



KB)

Palm oil is edible oil which is extracted from the pulp of fruit of oil palms. The color of pulp is red. That's why crude palm oil is naturally similar to pulp color because of high inactive vitamin A content. It is different from kernel oil or coconut oil. Commonly it is combined or mixed with coconut oil to make highly saturated vegetable fat, which is also used for cooking purposes.

Source) <https://www.financialexpress.com/opinion/why-indias-dalhan-success-will-elude-tilhan/1672879/>

Subject) Economics

Topic) Trade

Nature) Factual

Q.10)

Ans) c

**Exp) Statement I is correct. Tax efforts, demographic performance and forest & ecology are the new criterion recommended by the 15th finance commission's first report for tax devolution.**

Devolution of taxes to states: The share of states in the centre's taxes is recommended to be decreased from 42% during the 2015-20 period to 41% for 2020-21. The 1% decrease is to provide for the newly formed union territories of Jammu and Kashmir, and Ladakh from the resources of the central government.

**Table 1: Criteria for devolution (2020-21)**

Criteria	14th FC 2015-20	15th FC 2020-21
Income Distance	50.0	45.0
Population (1971)	17.5	-
Population (2011)	10.0	15.0
Area	15.0	15.0
Forest Cover	7.5	-
Forest and Ecology	-	10.0
Demographic Performance	-	12.5
Tax Effort	-	2.5
<b>Total</b>	<b>100</b>	<b>100</b>

Sources: Report for the year 2020-21, 15th Finance Commission; PRS.

**Statement 2 is correct.** Disaster risk management: The Commission recommended setting up National and State Disaster Management Funds (NDMF and SDMF) for the promotion of local-level mitigation activities. The Commission has recommended retaining the existing cost-sharing patterns between the centre and states to fund the SDMF (new) and the SDRF (existing). The cost-sharing pattern between centre and states is (i) 75:25 for all states, and (ii) 90:10 for north-eastern and Himalayan states.

**Table 2: Grants for disaster risk management (In Rs crore)**

Funding Windows	National corpus	States' corpus
Mitigation (20%)	2,478	5,797
Response (80%)	9,912	23,186
(i) Response and Relief (40%)	4,956	11,593
(ii) Recovery and Reconstruction (30%)	3,717	8,695
(iii) Capacity Building (10%)	1,239	2,998
<b>Total</b>	<b>12,390</b>	<b>28,983</b>

Sources: Report for the year 2020-21, 15th Finance Commission; PRS.

KB)

The Finance Commission is a Constitutionally mandated body that is at the centre of fiscal federalism. Set up under Article 280 of the Constitution, its core responsibility is to evaluate the state of finances of the Union and State Governments, recommend the sharing of taxes between them, lay down the principles determining the distribution of these taxes among States. Its working is characterised by extensive and intensive consultations with all levels of governments, thus strengthening the principle of cooperative federalism. Its recommendations are also geared towards improving the quality of public spending and promoting fiscal stability. The first Finance Commission was set up in 1951 and there have been fifteen so far.

Source) <https://www.prsindia.org/report-summaries/report-15th-finance-commission-fy-2020-21>

Subject) Economics

Topic) finance

Nature) Factual

Q.11)

Ans) b

Exp) Option b is correct:

Romesh Chunder Dutt was regarded by the growing politically - conscious educated public as one of their most effective spokespersons and became President of the Indian National Congress in 1899.

He also wrote on the economic impacts of British rule in India including in his first book- 'Peasantry of Bengal', written in 1875; the ideas developed in this book were expanded fully in 'Famines in India,' published in 1900, containing his strongly-argued thesis about the over-assessment of land revenues.

He translated Mahabharata and Ramayana in English, Indian classics for the 'Temple Classics' series and Rig Veda into Bengali.

Dutt was appointed a lecturer in Indian History in the University of London shortly after his retirement from the Civil Service, but later returned to India in 1904 to serve the State of Baroda as Revenue Minister for three years.

Q.12)

Ans) c

Exp) **Statement 1 is correct.** Citizenship Amendment Act 2019 has provided for acquisition of citizenship by naturalisation to six religious minorities communities from three countries (Afghanistan, Pakistan and Bangladesh) who have migrated to India by or on December 31, 2014. The act has relaxed the number of years of residency required from 12 years to 6 years (i.e. 5 years stay in India plus 1 year stay immediately prior to the application for citizenship by naturalization) to these communities to acquire citizenship by naturalisation.

**Statement 2 is correct.** The act has expanded the ground on which OCI status can be cancelled. The act provided that any Overseas Citizens of India if violates any law made by the Central Government may result into cancellation of OCI status.

Q.13)

Ans) d

Exp) Literally, Erythraean Sea means "red sea" but this is not a reference to the waterbody we know as the Red Sea today. For ancient Greek and Roman geographers, the Erythraean Sea incorporated the Red Sea, Persian Gulf, and Indian Ocean as a single maritime area.

The sea has been identified in The Periplus of the Erythraean Sea, an ancient maritime document that helped scholars' piece together ancient India's trading history. It details all major ports of call, including those in ancient India starting from the coast of Gujarat to Tamil Nadu and beyond.

Source)

<https://indianexpress.com/article/research/ajantas-roman-connection-how-trade-with-the-empire-made-india-rich-6135323/>

Q.14)

Ans) d

Exp) **Option a is incorrect.** Centre for Economic and Social Rights is an International NGO (HQ at New York). It works for recognition and enforcement of socio-economic rights for promoting social justice.

**Option b is incorrect.** Oxfam International (HQ at Nairobi) releases a report on income inequality.

**Option c is incorrect.** The International Council for Social Welfare publishes Global Social Policy Journal and International Social Work.

**Option d is correct.** The World Economic Forum, based in Colony-Geneva, Switzerland, is an NGO, founded in 1971 publishes various reports including Global Competitiveness Report, the Global Risks Report, the Global Gender Gap Report and the Global Social Mobility report.

KB) The World Economic Forum has created a new index called “Global Social Mobility Index” for the assessment of the state of social mobility worldwide. The latest report (2020) has claimed that most economies are unable to provide conditions in which their citizens can thrive. Individual opportunities remain centered around their socio-economic status at birth, consolidating equality. The Global Social Mobility Index comprises 82 economies. According to WEF “Social mobility is the movement in personal circumstances either upward or downward of an individual in relation to those of their parents. Or “it is the ability of a child to experience a better life than parents.

Q.15)

Ans) c

**Exp) Option a, b and d is incorrect. Option c is correct.**

National Payments Corporation of India (NPCI), an umbrella organisation for operating retail payments and settlement systems in India, is an initiative of Reserve Bank of India (RBI) and Indian Banks’ Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India.

KB)

National Payments Corporation of India (NPCI) has developed the National Electronic Toll Collection (NETC) program to meet the electronic tolling requirements of the Indian market.

Source) <https://www.npci.org.in/about-us-background>

Subject) Economics

Topic) Banking

Nature) Factual

Q.16)

Ans) c

**Exp) Statement 1 is correct: According to the RBI, the LTRO scheme will be in addition to the existing LAF and MSF (Marginal Standing Facility) operations. The LAF and MSF are the two sets of liquidity operations by the RBI with the LAF having a number of tools like repo, reverse repo, term repo etc.**

The LTRO is a tool under which the central bank provides one-year to three-year money to banks at the prevailing repo rate, accepting government securities with matching or higher tenure as the collateral.

While the RBI’s current windows of liquidity adjustment facility (LAF) and marginal standing facility (MSF) offer banks money for their immediate needs ranging from 1-28 days, the LTRO supplies them with liquidity for their 1- to 3-year needs.



**Statement 2 is correct.** Since the interest rate is comparatively low, there will be a downward pressure on short term lending rates which will lead to better policy transmission. LTRO operations are intended to prevent short-term interest rates in the market from drifting away from the policy rate, which is the repo rate.

KB)

The RBI seems to have shifted its focus from trimming rates to the transmission of older rate cuts to the actual borrowers in the economy. The LTRO is a move in that direction. With an increase in the proportion of low-cost funds, banks may now be forced to bring down interest rates on loans. This may also mean lower deposit rates for savers.

Source) <https://www.thehindubusinessline.com/opinion/columns/slate/all-you-wanted-to-know-about-ltro/article30905209.ece>

Subject) Economics

Topic) Banking

Nature) Factual

Q.17)

Ans) a

**Exp) Statement 1 is correct:** A microbial fuel cell (MFC) is a device that converts chemical energy to electrical energy by the action of microorganisms. MFCs can be grouped into two general categories: mediated and unmediated.

Mediator-free microbial fuel cells use electrochemically active bacteria to transfer electrons to the electrode (electrons are carried directly from the bacterial respiratory enzyme to the electrode).

In microbial fuel cells, microbes such as bacteria catalyze electrochemical oxidations or reductions at an anode or cathode, respectively, to produce an electric current.

**Statement 2 is incorrect.** The use of microbial fuel cells is still not optimized, and the level of electric current generated by such systems is low. Hence, it cannot find its application in areas of transport and backup power to produce electricity during a failure of the electricity grid.

KB:

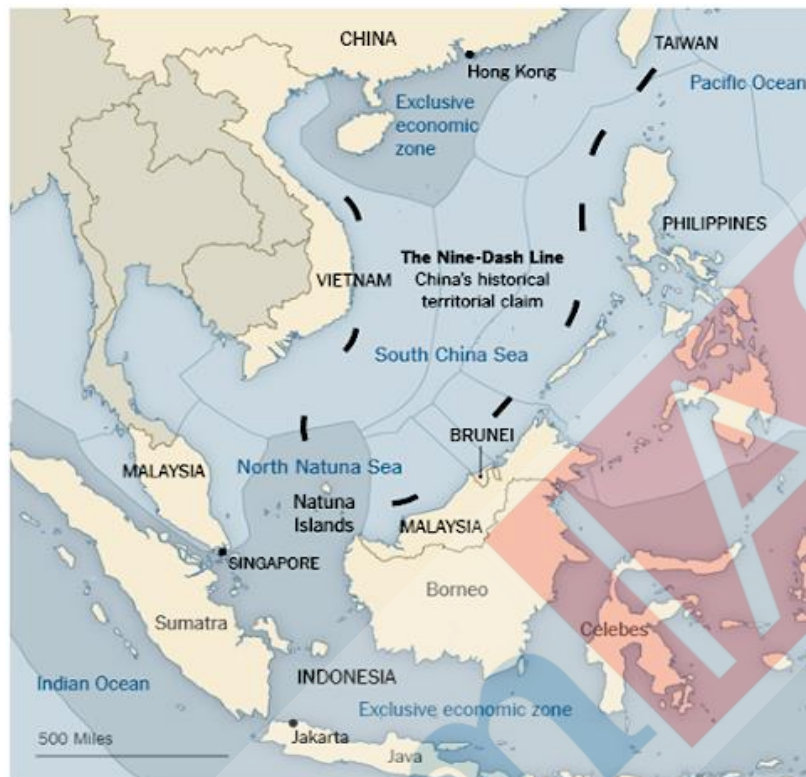
Microbial Fuel Cell has potential in areas:

1. It can utilise carbon dioxide from the atmosphere to produce electricity. It has the potential to reduce the level of carbon dioxide in the atmosphere.
2. Microbes work on waste material to produce electricity. It has huge potential in Organic waste management.
3. It may potentially provide a renewable energy source.

Q.18)

Ans) c

**Exp)** Recently there was a standoff between Indonesia and China in the South China sea over Natuna islands. Chinese fishing vessels entered in the region of Natuna islands which lie in the exclusive economic zone of Indonesia but are also claimed by China (and Taiwan). Few days later Indonesia President Joko Widodo visited Natuna Islands and claimed that there would be no compromise on territorial sovereignty.



Source: New York Times

Q.19)

Ans) c

**Exp)** Saddler University Commission (1917-19) was set up to study and report on problems of Calcutta University. The commission was appointed under the chairmanship of M.E. Saddler who was the vice Chancellor of the University of Leeds. The Saddler University Commission also included two Indian Members, namely Sir Ashutosh Mukherjee and Zia-ud-din Ahmed.

**Statement 1 is incorrect.** Its report consisted of 13 volumes, giving a critical and comprehensive survey of educational problems of secondary, collegiate and university education in India. It did not elaborate on primary education.

Its recommendations included:

- School courses should cover 12 years. Students should enter university after an intermediate stage (rather than matric) for a three-year degree course in university.
- Board of Secondary and Intermediate Education, consisting of the representatives of Government, University, High Schools and Intermediate Colleges be established and entrusted with the administration and control of Secondary Education.

**Statement 2 is correct.** According to the Saddler Commission, women education was to be encouraged in a big way. The establishment of a special Board of women Education in Calcutta University besides many other facilities that would help more and more women take up courses in school, colleges and Universities.

**Statement 3 is correct.** According to the Saddler Commission, a university should function as centralised, unitary residential-teaching and autonomous body, rather than as scattered, affiliated colleges.

Q.20)

Ans) c

**Exp) Option c is incorrect.** Separation of Power is not intrinsic to Constitutional Morality.

Constitutional Morality:

Constitutional Morality, the concept, was first proposed in India by Ambedkar in Constituent Assembly debate. It suggests that to protect the essence of the Constitution, just practicing the provisions of the Constitution is not sufficient. Constitutional provisions should be practiced with morality. Constitutional Morality is essential to protect constitutional democracy.

Constitutional Morality consists of basic elements like:

- **Self-restraint**
- Deference to processes
- Open culture of criticism
- Intolerance of corruption
- Constitutional supremacy
- Scepticism to claim of popular sovereignty
- **Rule of law**
- **Pluralistic society**

Various examples where judiciary and legislature have applied constitutional morality:

1. Naz Foundation case to decriminalise homosexuality (scrapping Section 377 of IPC)
2. Medical Termination of Pregnancy Act
3. Surrogacy cases etc.

Hate and seditious speeches goes against Constitutional morality. It is important that an individual practice their freedom of speech with self-restraint. Similarly, Parliamentary privileges must be exercised by members with self-restraint.

Q.21)

Ans) b

**Exp) Statement 1 is correct:** Epidemic Diseases Act of 1897 was introduced by the colonial government to tackle the epidemic of bubonic plague that had spread in the erstwhile Bombay Presidency in the 1890s.

**Statement 2 is correct:** Recently government of India decided that all States and Union Territories should be advised by the Union Ministry of Health and Family Welfare to invoke provisions of Section 2 of Epidemic Disease Act, 1897 so that all advisories being issued from time to time by the Ministry of Health and Family Welfare/State/UTs are enforceable.

**Statement 3 is incorrect:** Epidemic Diseases Act of 1897 empowers state governments/UTs to take special measures and formulate regulations for containing the outbreak. State governments do not need approval from the union government to invoke the act.

KB:

**Provisions of the 1897 Epidemic Diseases Act:**

- It empowers state governments/UTs to take special measures and formulate regulations for containing the outbreak.
- It also empowers the state to prescribe such temporary regulations to be observed by the public or by any person or class of persons as it shall deem necessary to prevent the outbreak of such disease or the spread thereof.
- The state may determine in what manner and by whom any expenses incurred (including compensation if any) shall be defrayed.
- The State Government may take measures and prescribe regulations for the inspection of persons travelling by railway or otherwise, and the segregation, in hospital, temporary accommodation or otherwise, of persons suspected by the inspecting officer of being infected with any such disease.
- It also provides penalties for disobeying any regulation or order made under the Act. These are according to section 188 of the Indian Penal Code (Disobedience to order duly promulgated by a public servant).
- It also gives legal protection to the implementing officers acting under the Act.

Q.22)

Ans) d

Exp)

Pairs 2 and 3 are correctly matched.

The mentioned cultural traditions are a part of UNESCO's Representative List of the Intangible Cultural Heritage of Humanity. A total of 13 Intangible cultural heritage (ICH) elements from India have been inscribed till date on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity.

The Ministry of Culture has appointed the Sangeet Natak Akademi, an autonomous organisation under the Ministry of Culture, as nodal office for matters relating to the intangible cultural heritage including for preparation of the nomination dossiers for the Representative List of UNESCO.

**Pair 1 is incorrectly matched.** Ramman is a religious festival and ritual theatre of the Garhwal Himalayas, India. It is celebrated by the Hindu Community in the Saloor-Dungra villages of the Painkhanda Valley in the Chamoli district of Uttarakhand. The villagers pay their offerings to the village deity, Bhumiyal Devta, in the courtyard of the village temple. This festival is unique to this village and is not performed elsewhere in the Himalayan region.

**Pair 2 is correctly matched.** Sankirtana, ritual singing, drumming and dancing of Manipur. The Kirtan form of congregational singing accompanies the dance which is known as Sankirtana in Manipur. The male dancers play the Pung and Kartal while dancing. The masculine aspect of dance — the Choloms are a part of the Sankirtana tradition. The Pung and Kartal choloms are performed at all social and religious festivals. This art form is performed to mark religious occasions and various stages in the life of Manipuri Vaishnavites. Practised at temples, the

**Pair 3 is correctly matched.** Seraikella Chhau is a tribal martial art dance performed in the state of Jharkhand. It is a subgenre of Chhau dance included in UNESCO's Representative List of the Intangible Cultural Heritage of

Humanity. The dance is mainly performed during the spring festival and lasts for 13 days. The whole community participates in it. The dance is performed by the male dancers during night time at an open space. It is a blend of both dance and martial practices employing mock combat techniques. The theme of the Chhau dance is based on Hindu mythology. A Mask is worn by the dancers during performance.

Q.23)

Ans) d

**Exp) Statement 1 is incorrect.** Transgenders Persons (Protection of Rights) Act, 2019 does not provide self determination rights to Transgender community. The act provides District Magistrate the authority to provide the certification of identity to Transgenders.

**Statement 2 is incorrect:** the act describe a transgender person as someone whose gender does not match with the gender assigned to them at birth.

The term Transgender is defined under the act. The act has defined Transgender person as intersex. The Act defines a transgender person as one whose gender does not match with the gender they were assigned at birth, including trans men and trans women, or one who is genderqueer, or belongs to communities like kinner, hijra, aravani, and jogta. However, the act is criticised on ground that the definition is incomplete in its sense.

Q.24)

Ans) d

**Exp) Operation Vanilla** was launched by Indian Navy to assist the population of Madagascar affected by cyclone Diane. Indian Navy diverted a large amphibious ship viz. INS Airavat carrying clothing, medicines, and other relief material to provide assistance and support in the relief operations.

KB:

**About Cyclone Diane:**

**Nature of cyclone:** Tropical cyclone.

**Origin:** North-west off the coast of Mauritius in the South-western Indian Ocean.

Recently, Madagascar was hit by it and there has been heavy flooding and landslides causing loss of lives and displacement, affecting more than 92,000 people. India has been the first country to respond to floods in Madagascar.

Q.25)

Ans) c

**Exp) Statement 1 is correct:** Jammu and Kashmir (Reorganisation) Act 2019 provides that the provisions contained in article 239A, which are applicable to “Union territory of Puducherry”, shall also apply to the “Union territory of Jammu and Kashmir”.

**Statement 2 is incorrect:** It provides that State legislatures can legislate on all state subjects except police and public order only. It can legislate on the matters of land.

**Statement 3 is correct:** Section 57 (2) of the Act provides for abolition of council of states.



Q.26)

Ans) d

**Exp) Options a, b and c are correct.** The Responsibility to Protect (R2P or RtoP) is a global political commitment which was endorsed by all member states of the United Nations at the 2005 World Summit in order to address its four key concerns to prevent **genocide, war crimes, ethnic cleansing and crimes against humanity.**

Background

The atrocities committed in the 1990s in the Balkans and Rwanda, which the international community failed to prevent, and the NATO military intervention in Kosovo, which was criticized by many as a violation of the prohibition of the use of force, the international community engaged in a serious debate on how to react to gross and systematic violations of human rights.

The responsibility to protect (R2P) embodies a political commitment to end the worst forms of violence and persecution. It seeks to narrow the gap between Member States' pre-existing obligations under international humanitarian and human rights law and the reality faced by populations at risk of genocide, war crimes, ethnic cleansing and crimes against humanity.

KB)

The responsibility to protect (commonly referred to as 'RtoP') rests upon three pillars of equal standing: the responsibility of each State to protect its populations (pillar I); the responsibility of the international community to assist States in protecting their populations (pillar II); and the responsibility of the international community to protect when a State is manifestly failing to protect its populations (pillar III). The adoption of the principal in 2005 constituted a solemn commitment, which included much expectation of a future free of these crimes.

Source) <http://un.org/en/genocideprevention/about-responsibility-to-protect.shtml>

Subject) International Relations

Topic) United Nations

Nature) Factual

Q.27)

Ans) b

**Exp) Statement 1 is correct.** As per Section 9B of the Mines and Minerals development and Regulation (amendment) Act, 2015, The State Government can, by notification, establish a trust, as a non-profit body, to be called the District Mineral Foundation in any district affected by mining related operations.

**Statement 2 is incorrect.** According to the estimates of Indian Bureau of Mines, Rajasthan is endowed with the largest resources of lead-zinc ore amounting to 88.6%, followed by Andhra Pradesh with 3.3%, Madhya Pradesh with 2.2%, Bihar with 1.7% and Maharashtra with 1.4% of share in total ore in the country. Odisha has minimal zinc ore reserves.

**Statement 3 is incorrect.** The Baghmara (Sonakhan) gold mine which became the first-ever auction of a gold mine in the country is present about 140 km north-east of Raipur in Baloda Bazar-Bhatapara district of Chhattisgarh. Vedanta Ltd won the auction for the mine. Hence, Gold mines are present in Chhattisgarh.

KB)

**Zinc production in India:**

India is the 5th largest producer of zinc and is the 6th largest in reserves position in the world. Zinc mine production in India is primarily concentrated in Rajasthan state. Zinc and Lead ores are usually found together. Zawar mines in Rajasthan are famous for lead-zinc ore.

According to the Geological Survey of India, the most significant mineral ores are zinc sulphide or sphalerite, zinc carbonate or smithsonite, zinc silicate or willemite and zinc oxide or zincite. Sphalerite is the most important ore and contains about 64.06% of zinc.

**District Mineral Foundation:**

The objective of the District Mineral Foundation is to work for the interest and benefit of persons, and areas affected by mining related operations. The composition and functions of the District Mineral Foundation shall be such as may be prescribed by the State Government.

Every holder of a mining lease or a prospecting license-cum-mining lease shall, in addition to the royalty, pay to the District Mineral Foundation of the district in which their mining operations are carried on. If the mining area is spread across several districts, the fund is shared on a pro-rata basis by these districts. DMF contribution would not be exceeding one-third of royalty and the Central Government retains the power to prescribe the rates of contribution, though DMF's operation is under state governments. The contributions made to DMFs are collected by the State Governments

Q.28)

Ans) a

**Exp) Statement 1 is correct.** AT-1, short for Additional Tier-1 bonds, are a type of unsecured, AT-1 bonds have several unusual features lurking in their fine print, which make them very different from plain-vanilla bonds.

**Features of AT - 1 Bonds:**

- These bonds are perpetual and carry no maturity date. Instead, they carry call options that allow banks to redeem them after five or 10 years. But banks are not obliged to use this call option and can opt to pay only interest on these bonds for eternity.
- Banks issuing AT-1 bonds can skip interest payouts for a particular year or even reduce the bonds' face value without getting into hot water with their investors, provided their capital ratios fall below certain threshold levels.

**Statement 2 is incorrect.** AT-1, short for Additional Tier-1 bonds, are a type of unsecured, perpetual bonds that banks issue to shore up their core capital base to meet the Basel-III norms. After a string of banks turned turtle in the global financial crisis, central banks got together and decided to formulate new rules (called the Basel-III norms) that would make them maintain stronger balance sheets.

KB)

AT-1 bonds are complex hybrid instruments, ideally meant for institutions and smart investors who can decipher their terms and assess if their higher rates compensate for their higher risks. But in India, these bonds seem to have been sold to a fair number of retail investors as fixed deposit or Non-convertible debentures (NCD) substitutes.

Source) <https://www.thehindubusinessline.com/opinion/columns/slate/all-you-wanted-to-know-about-at-1-bonds/article31024984.ece>

Subject) Economics

Topic) Banking

Nature) Factual

**Q.29)**

**Ans) b**

**Exp)**

Coordinates of the given cities:

Surat - 21.1702° N, 72.8311° E

Jhansi - 25.4484° N, 78.5685° E

Raipur - 21.2514° N, 81.6296° E

Kolkata - 22.5726° N, 88.3639° E

The maximum apparent movement of the Sun extends up to the tropics; in the case of India, the Tropic of Cancer. Any place lying above the Tropic of Cancer, i.e., lying on a latitude greater than 23.5N, will never experience an overhead Sun.

Except Jhansi, all the 3 places lie below the Tropic of Cancer, and hence, will experience overhead Sun.

**Q.30)**

**Ans) c**

**Exp) Option c is correct. Blue Dot Network (BDN)** is an American Foreign Policy Initiative. The BDN was formally announced on 4th November, 2019 at the Indo-Pacific Business Forum in Bangkok, Thailand. It will be led by the US along with Japan and Australia. It aims to counter China's Belt and Road Initiative. It seems to be planned as a direct counter to China's Belt and Road Initiative (BRI). However, unlike the BRI, the BDN would not offer public funds or loans for the project. BDN will serve as a globally recognized seal of approval for major infrastructure projects, letting people know that projects are sustainable and not exploitative. It will not be funding any projects but will serve as a global approval body for major infrastructure projects. India has not joined China's BRI so there are high chances that it may join BDN.

KB)

**Belt and Road Initiative:**

- BRI is an ambitious project that focuses on connectivity and cooperation among multiple countries spread across the continents of Asia, Africa, and Europe.

- Initially announced in the year 2013, the project involves building networks of roadways, railways, maritime ports, power grids, oil and gas pipelines, and associated infrastructure projects.

The project covers two parts:

- Silk Road Economic Belt: It is land-based and is expected to connect China with Central Asia, Eastern Europe, and Western Europe.
- 21st Century Maritime Silk Road: It is sea-based and is expected to connect China's southern coast to the Mediterranean, Africa, South-East Asia, and Central Asia.

Q.31)

Ans) a

**Exp) Option a is correct:** Article 14 provides for equality before law. The concept of 'equality before law' is an element of the concept of 'Rule of Law', propounded by A.V. Dicey. It means absence of arbitrary power and equal subjection of all citizens to the ordinary law of land.

**Option b and c is incorrect:** Article 19 and 21 acts as a limitation on power of the state and are not related to the Rule of Law which provides for equal subjugation of people to law.

Q.32)

Ans) c

**Exp) Statement 1 is correct:** Article 30 of the Constitution belongs to Minority rights and not Universal rights and hence it is contrary to ideals of universal rights. The Universal Rights are the rights available to all and hence the statement is incorrect.

**Statement 2 is correct:** The article provides Minorities, religious and linguistic, the right to establish and administer educational establishments. It provides that the government has no right to interfere in the functioning of minority educational establishments. These institutions are exempted from the clause of reserving 25 percent of seats for economically backward class children under Right to Education Act.

Though the Supreme Court in its judgement has mentioned that the government can interfere in cases of improving the excellence of educational institutions but its a verdict of the Supreme Court and not mentioned in the Constitution.

Q.33)

Ans) a

**Exp) Explanation - Option a is incorrect.** The Financial Action Task Force (FATF) is the global money laundering and terrorist financing intergovernmental body (established 1989). The countries which support terror funding and money laundering are first put in the Grey List and then in the Black List.

**Option b is correct.** Dark Grey list is the last warning to improve before putting a country in the black list.

**Option c is correct.** Pakistan is still in the grey list of FATF.

**Option d is correct.** Iran and North Korea are only two countries in black list of FATF.

Q.34)

Ans) c

**Exp) Statement 1 is correct.** Lausanne Declaration (1998) is related to Doping in sports. WADA was established in 1999 as an international independent agency, in pursuant to the Lausanne Declaration, composed and funded equally by the sport movement and governments of the world.

**Statement 2 is correct:** Recently the Executive committee of WADA has banned Russia from the Olympics and World Championship for four years as WADA has found evidence of mass doping in Russian Athletes.

Q.35)

Ans) a

**Exp) Statement 1 is correct.** German watch, based in Bonn and Berlin (Germany), is an independent development and environmental organisation which works for sustainable global development. It publishes the Global Climate Risk Index annually.

**Statement 2 is incorrect.** In the Global Climate Risk Index 2020, India's rank has worsened from the 14th spot to 5th in the global vulnerability ladder. According to the index, India has the highest number of fatalities due to Climate Change.

**Statement 3 is correct.** Apart from analysing the extent to which the countries have been affected by the impacts of weather-related loss events (storms, floods, heat waves etc.), the report also shows that extreme weather, linked with climate change, is not only affecting poorer countries, but also some of the world's richest countries.

Q.36)

Ans) c

**Exp) Statement 1 is incorrect:** CRISPR (Clustered, regularly interspaced, short palindromic repeats) is more advanced techniques than Recombinant DNA. This technique is simpler and faster than Recombinant DNA. CRISPR is more advanced as editing process targets on very specific gene codes.

**Statement 2 is incorrect:** Cas 9 protein enzyme acts as a scissor in CRISPR Technique. Restriction endonucleases enzyme act as a scissor enzyme in Recombinant DNA Technique.

**Statement 3 is correct:** Traditional hybridisation of genes technique faced the challenge of inclusion and multiplication of undesirable genes. Recombinant DNA is more advanced than Traditional hybridisation and solves the problem of inclusion and multiplication of undesirable genes.

KB)

Three types of Gene Editing Techniques:

1. Traditional hybridisation



2. Recombinant DNA technique
3. CRISPR technique

Application of Recombinant and CRISPR includes correcting genetic defects, treating and preventing the spread of diseases and improving crops. However, its promise also raises ethical concerns.

Recombinant DNA technology is the joining together of DNA molecules from two different species. The recombined DNA molecule is inserted into a host organism to produce new genetic combinations that are of value to science, medicine, agriculture, and industry.

Three basic steps in genetically modifying an organism –

1. Identification of DNA with desirable genes
2. Introduction of the identified DNA into the host
3. Maintenance of introduced DNA in the host and transfer of DNA to its progeny.

Similarly, CRISPR-Cas9 technology behaves like a cut-and-paste mechanism on DNA strands that contain genetic information.

The specific location of the genetic codes that need to be changed, or “edited”, is identified on the DNA strand, and then, using the Cas9 protein, which acts like a pair of scissors, that location is cut off from the strand.

Four stage process of CRISPR technology are

- The Cas9 protein forms a complex with guide RNA in a cell.
- This complex attaches to a matching genomic DNA sequence adjacent to a spacer.
- The Cas9-RNA complex cuts the double strands of the DNA.
- Programmed DNA may be inserted at the cut.

Q.37)

Ans) b

Exp) Pairs 1,2 and 3 are correctly matched.

**Pair 1 is correctly matched.** Kunduz is a city in Northern Afghanistan. Recently there has been violence in Kunduz between Taliban and Afghan forces.

**Pair 2 is correctly matched.** Kyaukpadaung is a town in the Rakhine state in Myanmar.

**Pair 3 is correctly matched.** Katchatheevu is an island in Indian ocean which is administered by Sri Lanka. The island is used by Tamil and Sri lankan fishermen for fishing. Akatu is a place in Cyprus.

**Pair 4 is incorrectly matched.** Akatu is a place in Cyprus.

Q.38)

Ans) d

Exp) The Features of the Government of India Act, 1935 included:

**Option a is correct.** The act provided for Provincial autonomy and separate legal identity for provinces. The provinces were given independent financial powers and resources and Provincial governments could borrow money on their own security.

**Option b is correct.** The provision for a separate electorate was introduced in India under the Indian Councils Act of 1909 and was further extended by Government of India Act 1919. The Government of India Act 1935 extended the communal electorates to women, landlords and Depressed Classes.

**Option c is correct.** The act provided for a Federal Legislature which was to have two chambers (bicameral)—the Council of States and the Federal Legislative Assembly. The Council of States (the Upper House) was to be a permanent body. The term federal legislature was used for the first time. Earlier, it was termed as the Imperial Legislative Council which was made Bicameral by Indian Councils Act of 1919.

**Option d is incorrect.** Under the Act, the Governor-general had residuary powers. He could (a) restore cuts in grants, (b) certify bills rejected by the legislature, (c) issue ordinances and (d) exercise his veto. The Veto power of governor general was retained, not abolished.

**Q.39)**

**Ans) d**

**Exp) Statement 1 is incorrect:** Vice- President of India is the ex-officio Chairman of Council of states. Chairman is not a member of the council and hence the statement is wrong. The Chairman shall vacate the office only when he/ she is not on the post of Vice- President anymore.

**Statement 2 is incorrect:** The salaries and allowances of the Chairman are decided by Parliament and not by the Council of States. Salaries and allowances of Vice- President are not mentioned in the Constitution. He/ she draws his/ her salary as ex-officio chairman of the Council of States.

**Q.40)**

**Ans) b**

**Exp) Option a is incorrect:** Freedom is absolute in nature and liberty is qualified in nature.

**Option b is correct:** the exercise of liberty is limited by the rights of others. Liberty entails the responsible use of freedom under the rule of law without depriving anyone else of their freedom. Freedom" primarily, if not exclusively, means the ability to do as one wills and what one has the power to do.

**Option c is incorrect:** Freedom is universal in nature and Liberty is guaranteed under the Constitution.

**Q.41)**

**Ans) a**

**Exp) Statement 1 is correct:** Article 361 of the Constitution provides immunities to both President and Governor. It provides that no criminal proceedings can be initiated against the President in any court.

**Statement 2 is incorrect:** Article 361 of the Constitution provides that civil proceedings can be initiated only by intimating to the President two months before the start of the proceedings. However, no arrest can be initiated on any ground during the term of office of President.

**Q.42)**

**Ans) a**

**Exp) Option a is correct.** The Razmnāma is a Persian translation of the Hindu epic poem Mahabharata, commissioned by the Mughal Emperor Akbar. Akbar had commissioned the project to the Brahmin Sanskrit

scholars of Benaras and Persian language experts, who completed the work by 1584. The book also contains rich illustrations and is mostly written in prose.

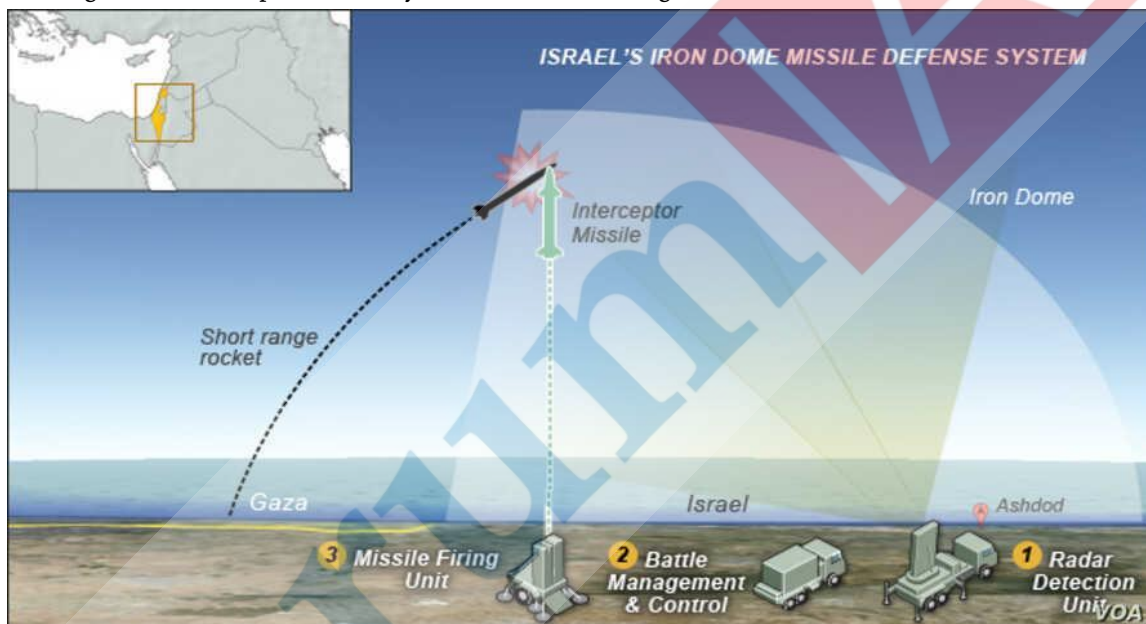
Source)

<https://timesofindia.indiatimes.com/city/jaipur/persian-mahabharata-by-akbar-languishing-in-city-palace/articleshow/67697502.cms>

Q.43)

Ans) c

Exp) The Iron Dome is a mobile all-weather air defence system developed by Israel to intercept and destroy short-range rockets and artillery shells fired from short distances. The Dome has three central components – detection and tracking radar, the weapon control system and missile firing unit.



Q.44)

Ans) b

Exp) **Statement 1 is incorrect.** Thiruvalluvar, was a celebrated Tamil poet and philosopher, best known as the author of Thirukkural. The book is written in Tamil language.

**Statement 2 is correct.** Basavanna was an Indian 12th-century Statesman, philosopher, poet, Lingayat saint. As a leader, he developed and inspired a new devotional movement named Virashaivas, or "ardent, heroic worshippers of Shiva ". This movement shared its roots in the ongoing Tamil Bhakti movement, particularly the Shaiva Nayanars traditions.

**Statement 3 is incorrect.** Little is known about the life of Thiruvalluvar, but he's believed to have lived between 4th century BCE and early 6th century CE.

Basavanna on the other hand is believed to have lived in the 12th century CE. Hence, Basavanna and Thiruvalluvar were not contemporaries.

**Statement 4 is correct.** Thirukkural is a collection of couplets on ethics, political and economical matters, and love. Considered one of the greatest works on ethics and morality, it is known for its universality and secular nature.

Q.45)

Ans) a

**Exp) Option a is correct:** Article 15(3) provides for special provisions for the vulnerable section: women and children. Article 15(4) provides for special provisions for socially and educationally backward classes. Hence, it talks about positive discrimination.

**Option b is correct:** Article 16(4) provides for special provisions for socially and educationally backward classes in government jobs. Hence, positive discrimination.

**Option c is incorrect:** The article provides protection to persons convicted of any offence. This is not linked to positive discrimination.

KB)

Affirmative action or positive discrimination is a policy which aims to bring equality of opportunity by ensuring a level playing field. The policy aims to correct the historical injustices and atrocities done against a particular community. The policy adheres to the goals and directions of Preamble of ensuring social justice.

Q.46)

Ans) d

**Exp) Option a is incorrect.** The form of money which is backed by the trust between the two parties i.e. payer and payee, is termed as fiduciary money.

**Option b is incorrect.** Bitcoin is the currency circulated under blockchain technology. Other types of Crypto currencies include, litecoin, monero and so on.

**Option c is incorrect.** A reserve tranche is a portion of the required quota of currency each member country must provide to the International Monetary Fund (IMF) that can be utilized for its own purposes—without a service fee or economic reform conditions.

**Option d is correct.** Fiat money is government-issued currency that is not backed by a physical commodity, such as gold or silver, but rather by the government that issued it. The value of fiat money is derived from the relationship between supply and demand and the stability of the issuing government, rather than the worth of a commodity backing it as is the case for commodity money.

KB)

Fiat money does not have any intrinsic value. What value it has depends on public confidence in the currency's issuer.

Legal tender is any currency declared legal by a government. Many governments issue a fiat currency and then make it legal tender by setting it as the standard for repaying debt.

Source) <https://www.investopedia.com/terms/f/fiatmoney.asp>

Subject) Economics

Topic) Banking

Nature)

**Q.47)**

**Ans) c**

**Exp) Options a, b and d are incorrect. Option c is correct.**

**Marginal costs:** The marginal cost of production is the change in total production cost that comes from making or producing one additional unit.

**Prime costs:** Prime costs are a firm's expenses directly related to the materials and labor used in production. It refers to a manufactured product's costs, which are calculated to ensure the best profit margin for a company. The prime cost calculates the direct costs of raw materials and labor that are involved in the production of a good. Direct costs do not include indirect expenses, such as advertising and administrative costs.

**Fixed costs:** A fixed cost is a cost that does not change with an increase or decrease in the amount of goods or services produced or sold. Fixed costs are expenses that have to be paid by a company, independent of any specific business activities. In general, companies can have two types of costs, fixed costs or variable costs, which together result in their total costs. Shutdown points tend to be applied to reduce fixed costs.

**Mixed costs:** A mixed cost is a cost that contains both a fixed cost component and a variable cost component.

KB)

The marginal cost of production is an economic and managerial accounting concept most often used among manufacturers as a means of isolating an optimum production level. Manufacturers often examine the cost of adding one more unit to their production schedules. At a certain level of production, the benefit of producing one additional unit and generating revenue from that item will bring the overall cost of producing the product line down.

Source)

Subject) Economics

Topic)

Nature)

**Q.48)**

**Ans) a**

**Exp) Options b, c and d are incorrect. Option a is correct.**



As per Economic Survey, thalis have become more affordable for the common man now. Affordability of Thalīs vis-à-vis a day's pay of a worker has improved over time, indicating improved welfare of the common person.

KB)

Affordability of vegetarian Thalīs improved 29 per cent from 2006-07 to 2019-20 while that for non-vegetarian Thalīs by 18 per cent. It is found that the absolute prices of a vegetarian Thali have decreased significantly since 2015-16 though the price has increased in 2019. This is owing to the sharp downward trend in the prices of vegetables and dal in contrast to the previous trend of increasing prices. As a result, an average household of five individuals that eats two vegetarian Thalīs a day, gained around Rs 10,887, on average per year, while a non-vegetarian household gained Rs 11,787, on average per year.

Source) Economic Survey 2019 – 2020

Subject) Economics

Topic) fiscal Development

Nature) Conceptual

Q.49)

Ans) b

**Exp) Statement 1 is correct:** Rupee movement will impact foreign portfolio investor (FPI) inflows into the Indian market. Stronger rupee attracts more FPI inflows. If the exchange rate between the two currencies do not regularly take the inflation divergence into account, the Indian rupee can start to become uncompetitively strong from an export perspective. However, a strong currency works well from the perspective of foreign portfolio investors (FPIs) and foreign direct investors (FDI). Not articulating an exchange rate level is, therefore, an attempt at balancing these naturally-conflicting interests.

**Statement 2 is incorrect.** The Currency acts as store value when a country engages it interacts using the capital account i.e as investment or borrowings, where the currency represents underlying assets or liabilities.

**Statement 3 is incorrect.** Currency acts as a medium of exchange when a country engages with the world on the current account i.e buying and selling of goods.

KB)

A country, its relationship with the world flows through two accounts: capital account and current account. For sake of simplicity, capital account refers to all the monies transferred on account of buying or selling of assets like equity, debt, property, etc, and current account includes all the trade in goods and services including investment incomes and remittances. It can readily be seen that when a country engages with the world on the current account, its currency is being used as a medium of exchange; when it interacts using the capital account, the current is a store of value.

Source) <https://www.financialexpress.com/opinion/heres-why-india-may-end-up-choosing-capital-flows-over-current-account-flows/1818454/>

Subject) Economics

Topic) Trade

Nature)

Q.50)

Ans) d

**Exp)** The Reserve Bank of India will carry out US-style 'Operation Twist' to bring down interest rates.

**Option a is correct.** 'Operation Twist' involves simultaneous purchase and sale of government bonds/securities, conducted by RBI as a part of its open market operations (OMOs), after a careful review of the liquidity situation.

**Option b is correct.** Under the operation, RBI has decided to buy long term government bonds, and simultaneously sell short term government bonds. This, while keeping the liquidity in the market constant, will increase the demand for the long-term bonds, which will result in lower long-term yield on government securities. This will drive down interest rates in the market, making long term loans cheaper.

**Option c is correct.** Operation Twist is a part of open market operations of RBI, which is an instrument of monetary policy transmission.

**Option d is incorrect.** Operation Twist was first introduced to the world by the US in a bid to lower long-term interest rates and to provide a boost to the economy by making credit cheaper for businesses, industries and other borrowers. In both scenarios where the US initiated Operation Twist, it was to combat a period of recession and prolonged slow growth. Like the US, India has been encountering a period of a prolonged period of slow growth since the first half of 2019.

KB)

The RBI manages and controls the liquidity, rupee strength and monetary management through purchase and sale of government securities (G-Secs) in a monetary tool called Open market Operations. OMOs are the market operations conducted by the RBI by way of sale and purchase of G-Secs to and from the market with an objective to adjust the rupee liquidity conditions in the market on a durable basis. When the RBI feels that there is excess liquidity in the market, it resorts to sale of securities thereby sucking out the rupee liquidity. Similarly, when the liquidity conditions are tight, the RBI may buy securities from the market, thereby releasing liquidity into the market.

Source) <https://www.investopedia.com/terms/o/operation-twist.asp>

Subject) Economics

Topic) Banking

Nature) Factual

Q.51)

Ans) c

**Exp) Statement 1 is incorrect.** The Paiks of Odisha were the traditional landed militia ('foot soldiers' literally) and enjoyed rent free land tenures for their military service and policing functions on a hereditary basis. The English Company's conquest of Odisha in 1803, and the dethronement of the Raja of Khurda had greatly reduced

the power and prestige of the Paiks. The rebellion was ignited due to the loss of employment under military service under the Raja.

**Statement 2 is incorrect.** The rebellion was led by Bakshi Jagabandhu Bidyadhar in 1817, who had been the military chief of the forces of the Raja of Khurda. The rebellion was brutally repressed by 1818.

Q.52)

Ans) b

**Exp)** Famines during British rule in India were inevitable due to the exploitative British policies which adversely impacted agriculture. This included:

- Excessive rent.
- Zamindari system: The zamindars, with increased powers, resorted to summary evictions, demanded illegal dues and 'begar' to maximise their share in the produce and, as such, had no incentive to invest for improvement of agriculture.
- The overburdened peasants had to approach the moneylenders to be able to pay their dues to the zamindars, who forced the farmer to sell the produce at low prices to clear his dues. The powerful moneylender was also able to manipulate the judiciary and law in his favour.
- The peasant turned out to be the ultimate sufferer under the triple burden of the Government, zamindar and moneylender.
- This was as much true for the zamindari areas as for areas under Ryotwari and Mahalwari systems. The peasant became landless.

**Option a is incorrect.** The population largely remained stagnant, and even suffered a decline in 1921. There was no population explosion.

**Option c is incorrect.** Under the British rule, local industries were systematically destroyed and there was no industrial employment available for the distressed peasants and tenants.

**Option d is incorrect.** Famines were the result of faulty British policies, wherein, even a moderate drought was transformed into famines, hunger and hunger deaths, as no food was timely supplied to areas experiencing crop failures.

Q.53)

Ans) c

**Exp) Option a is incorrect:** Article 72 and Article 161 of the Constitution provides Pardoning power to the President and Governor respectively. Pardon means to absolve the convicts from all punishments and set the convict free. The President can pardon convicts from death sentence even on State laws. Governors are not provided power to pardon death sentences even in state laws domain.

**Option b is incorrect:** Pardoning power is a grace to convicts. Grace cannot be exercised as a matter of right. The President does not act as a court of appeal while exercising Mercy petition. Mercy petitions have the objective of keeping the door open for correcting any judicial errors.

**Option c is correct:** Five types of Pardoning power has been provided to the President and Governor. This consists of: Pardon, Commutation, Reprieve, Remit and Respite. Pardon is completely absolving from punishment. Commutation is to change the nature of punishment and make it less severe.

**Option d is incorrect:** Both the President and Governor can remit and respite the death sentence, if a person is convicted under the State laws. But only The President can pardon a death sentence.

Q.54)

Ans) a

**Exp) Pair 1 is correctly matched.** Blue Pottery is Turko- Persian in origin but today is widely recognized as a traditional craft of Jaipur, Rajasthan. It has also been accorded a Geographical Indication tag.

**Pair 2 is incorrectly matched.** Patola refers to richly woven handloom Sarees, usually made from silk in Patan, Gujarat. They are also made in Ahmedabad and Surat.

**Pair 3 is incorrectly matched.** Kashida embroidery of Kashmir is famous for the fine workmanship that is generally done on the famous Cashmere Shawls. It is also done on phirans (woollen kurtas) and namdahs (woollen rugs) as well as stoles. It draws inspiration from nature. Birds, blossoms and flowers, creepers, chinar leaves, ghobi, mangoes, lotus, and trees are the most common themes.

Q.55)

Ans) c

**Exp)** Indian Regional Navigation Satellite System

**Statement 1 is correct:** IRNSS is designed to provide accurate position information and will be able to track and provide information during natural disasters when usually connectivity is poor.

**Statement 2 is correct:** IRNSS will provide navigation technology and it will help in Vehicle Tracking and fleet management.

**Statement 3 is correct:** IRNSS will help in mapping of mineral resources also.

KB:

IRNSS will provide two types of services:

1. Standard Positioning Service (SPS), which is provided to all the users.
2. Restricted Service (RS), which is an encrypted service provided only to the authorized users.

Q.56)

Ans) c

**Exp)** The Reserve Bank of India (RBI) released the National Strategy for Financial Inclusion 2019-2024 on January 10, 2020. It sets forth the vision and objectives of financial inclusion policies in India. The strategy was prepared by the RBI with inputs from the central government and financial sector regulators.

**Both statements 1 and 2 are correct:** RBI recommended that financial inclusion should be measured through parameters across three key indicators. These include parameters to: (i) measure access (to financial institutions), such as number of bank branches or ATMs for a specified population, (ii) measure usage, such as percentage of adults with a saving account, insurance or pension policy, and (iii) measure quality of services, such as grievance

redressal (through number of complaints received and addressed). Additionally, it recommended conducting surveys to assess the current impediments to financial inclusion (such as issues faced while using digital services, knowledge of customer rights and attitude of service providers).

KB)

RBI identified six strategic objectives of a national strategy for financial inclusion:

- universal access to financial services
- providing basic bouquet of financial services
- access to livelihood and skill development
- financial literacy and education
- customer protection and grievance redressal
- effective coordination.

To achieve this vision, it identified certain milestones such as: (a) providing banking access to every village (or hamlet of 500 households in hilly areas) within a five km radius by March 2020, (b) strengthening digital financial services to create infrastructure to move towards a cashless society by March 2022, and (c) ensuring that every adult has access to a financial service provider through a mobile device by March 2024.

Source) <https://www.prsindia.org/policy/report-summaries/national-strategy-financial-inclusion>

Subject) Economics

Topic) Current

Nature) Factual

Q.57)

Ans) b

**Exp)** The planets Mercury, Venus, Earth, and Mars, are called terrestrial because they have a compact, rocky surface like Earth. The terrestrial planets are the four innermost planets in the solar system. Jupiter, Saturn, Uranus, and Neptune are known as the Jovian (Jupiter-like) planets, because they are all gigantic compared with Earth, and they have a gaseous nature.

**Statement 1 is incorrect.** The Terrestrial planets are closer to the Sun as compared to the Jovian planets.

**Statement 2 is correct.** The Terrestrial planets are much smaller than the Jovian planets as they have low gravity and were not able to attract large amounts of gas to their atmospheres.

**Statement 3 is correct.** The terrestrial planets are denser than the Jovian planets because they are made from heavier elements.

Q.58)

Ans) a

**Exp)** Information Technology agreement at WTO

**Option a is correct:** The Information Technology Agreement was adopted at the Singapore conference of WTO in 1996. It aims at eliminating all tariffs and taxes on information technology products, both goods and services.



**Option b and d are incorrect:** The agreement is not just about bringing down tariffs rather than eliminating it.

**Option c is incorrect:** The agreement aims at eliminating tariffs and taxes for both information technology goods and services.

KB)

The Information Technology Agreement (ITA) was concluded by 29 participants at the Singapore Ministerial Conference in December 1996. Since then, the number of participants has grown to 82, representing about 97 percent of world trade in IT products. The participants are committed to completely eliminating tariffs on IT products covered by the Agreement. At the Nairobi Ministerial Conference in December 2015, over 50 members concluded the expansion of the Agreement, which now covers an additional 201 products valued at over \$1.3 trillion per year.

Q.59)

Ans) d

**Exp) Statement 1 is correct.** Conservation Agriculture is based on three main principles adapted to reflect local conditions and needs:

1. Minimum soil disturbance: It refers to low disturbance **no-tillage and direct seeding**.
2. Permanent soil organic cover: Three categories are distinguished: 30-60%, >60-90% and >90% ground cover, measured immediately after the direct seeding operation. Area with less than 30% cover is not considered as CA.
3. Species diversification: Rotation/association should involve at least 3 different crops. However, repetitive wheat, maize, or rice cropping is not an exclusion factor for the purpose of this data collection, but rotation/association is recorded where practiced.

**Statement 2 is correct.** As per Food and Agriculture Organization, three pillars of Climate Smart Agriculture are:

1. Sustainably increase agricultural productivity and incomes.
2. Adapt and build resilience of people and food systems to climate change.
3. Reduce and/or remove greenhouse gas emissions, where possible.

**Statement 3 is correct.** By explicitly focusing on climate change, CSA opens up new funding opportunities for agricultural development, by allowing the sector to tap into climate finance for adaptation and mitigation. This includes funding from, among others, the Adaptation Fund, the Least Developed Countries Fund or the Special Climate Fund, as well as the Clean Development Mechanism and the Voluntary Carbon Market. Most promising of all is the earmarked allocation which has been made specifically for CSA by the Global Environment Facility Trust Fund (GEF) and the future Green Climate Fund. These funding opportunities are often not available to other sustainable practices, including Conservation Agriculture.

Q.60)

Ans) b

**Exp)** The Great American Interchange was an important late Cenozoic event in which land and freshwater fauna migrated from North America to South America and vice versa. The rising up of the volcanic Isthmus of Panama formed a land bridge between the formerly separated continents of North America and South America and thus facilitated the Great American Interchange.



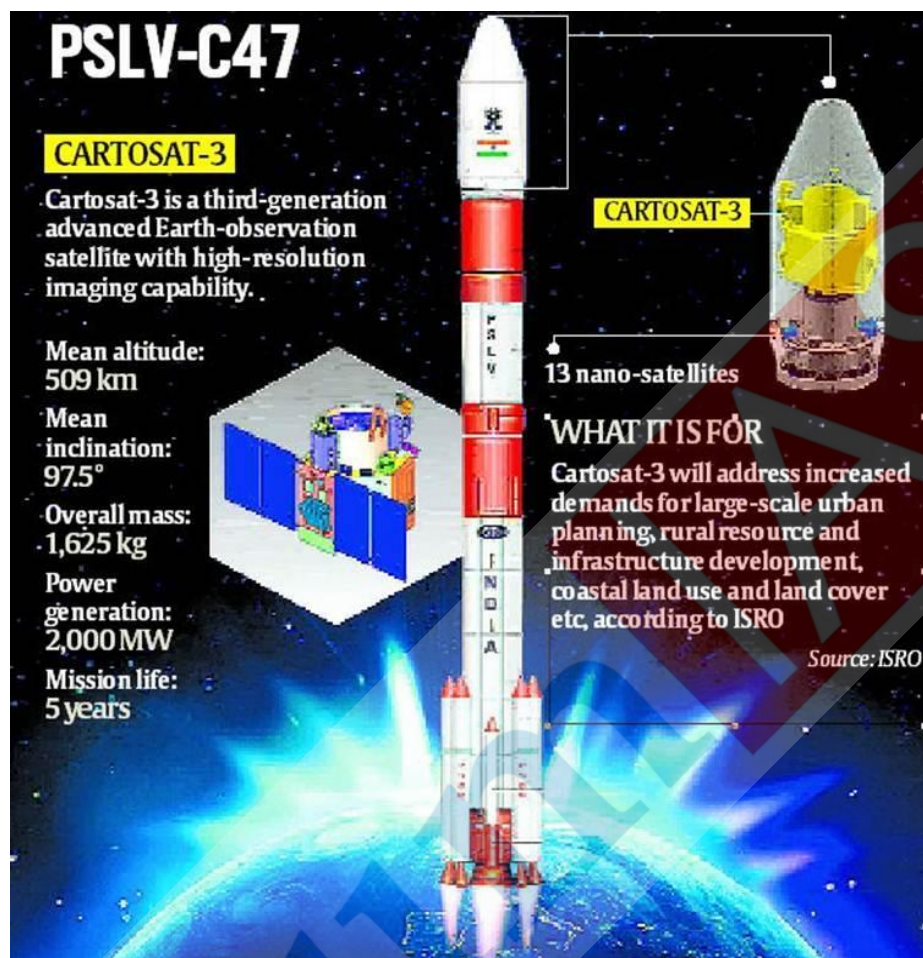
Q.61)

Ans) c

**Exp)** Statement 1 is incorrect. It was placed in the sun synchronous orbit by PSLV-C47.

**Statement 2 is correct.** It is an Earth observation satellite. It would address increased user's demands for large scale urban planning, rural resource and infrastructure development, coastal land use and land cover apart from defense and military purposes.

**Statement 3 is correct.** It is a third-generation agile satellite with high-resolution imaging capabilities and a mission life of five years.



Q.62)

Ans) d

Exp) All the given statements are correct. Raman spectroscopy is used in advanced nanotechnology including cancer detection, analysing various substances in forensic science, and to identify and characterize the original and decayed compounds present in objects of art and archaeology. Other application areas are biotechnology, mineralogy, environmental monitoring, food and beverages, medical and clinical chemistry, diagnostics, pharmaceutical, material science, surface analysis, etc.

KB)

Raman spectroscopy is the measurement of the intensity and wavelength of inelastically scattered light from molecules. The Raman scattered light occurs at wavelengths that are shifted from the incident light by the energies of molecular vibrations.

Q.63)

Ans) d

Exp) Statement I is correct. Artificial Leaf can harness sunlight to split water into hydrogen and oxygen without needing any external connections. It converts the energy of sunlight directly into storable chemical form.

**Statement 2 is correct.** Artificial leaf is a thin sheet of semiconducting silicon. It mimics photosynthesis to make fuel from water.

**Statement 3 is correct.** Artificial leaf produce hydrogen energy in a clean way. It thus helps to reduce the carbon footprint and also tackling global warming and climate change

Q.64)

Ans) b

**Exp) Pairs 1 is incorrectly matched.** Interstitium is a new organ discovered by the scientists. It is a fluid filled space which resides beneath the top layer of skin, and in tissue layers lining the gut, blood vessels, muscles and lungs.

**Pair 2 is correctly matched.** Pinaka is an indigenous multi-barrel rocket launch (MBRL) system developed by the Defence Research and Development Organisation (DRDO) for the Indian Army.

**Pair 3 is incorrectly matched.** GravityRAT is a malware designed to infiltrate computers and steal the data of users, and relay the stolen data to Command and Control centres in other countries. The 'RAT' in its name stands for Remote Access Trojan, which is a program capable of being controlled remotely and thus difficult to trace.

Q.65)

Ans) b

**Exp) Option a is correct.** Increased nutrient run-off results into eutrophication causing ocean deoxygenation.

**Option b is incorrect.** Melting of glaciers is not a cause of oxygen deoxygenation, it is responsible for sea level rise.

**Option c is correct.** Ocean Warming results in an increase in temperature of water. This impacts the marine species, resulting in death. Death of marine species requires oxygen for its complete humification and carbonification.

**Option d is correct.** Nitrogen deposition from the burning of fossil fuels results into excessive nutrients and hence eutrophication.

KB)

Recently, a report titled, 'Ocean deoxygenation: Everyone's problem' was released by the International Union for Conservation of Nature (IUCN). The report examines the causes, impacts and potential solutions to oxygen deoxygenation. It states that deoxygenation is beginning to impact the balance of marine life, particularly species sensitive to low-oxygen, including most fish and concluded that there is an urgent need to "dramatically raise our ambitions to tackle and immediately curb our emissions".



Q.66)

Ans) c

Exp) **Option c is correct. Edge computing** enables data to be analysed, processed, and transferred at the edge of a network. The idea is to analyse data locally, closer to where it is stored, in real-time without latency, rather than send it far away to a centralised data centre. It delivers low latency nearer to the requests.

KB)

In **cloud computing**, remote servers hosted on the Internet store and process data, rather than local servers or personal computers.

**Cluster computing** is a form of computing in which a bunch of computers are connected through a LAN (local area network) so that they behave like a single machine.

**Quantum computing** is the use of quantum-mechanical phenomena such as superposition and entanglement to perform computation. A quantum computer is used to perform such computation, which can be implemented theoretically or physically.

Q.67)

Ans) a

Exp) **Statement 1 is correct.** Aditya - L1 will be the first Indian mission to study the Sun. It would observe the Sun's Corona, Chromosphere and photosphere.

**Statement 2 is incorrect.** Aditya - L1 will image and study the sun from the First Lagrange point also known as L1 Lagrange point. It will be inserted in a halo orbit around the L1, which is 1.5 million km from the Earth.

KB)

The outer layers of the Sun, extending to thousands of km above the photosphere is termed as the corona. It has a temperature of more than a million-degree Kelvin which is much higher than the photosphere temperature of around 6000K. How the corona gets heated to such high temperatures is still an unanswered question in solar physics.

Q.68)

Ans) a

Exp) Since Barley, Opium and Mango were already present in India, the most appropriate answer is **option a**

Q.69)

Ans) a

Exp) The year 2020 marks 100 years of Non-Cooperation Movement. Although all the 4 options given about NCM are correct, the most significant aspect of NCM was that **provincial congress committees along linguistic lines were formed for the first time.** It involved the regions and classes that did not participate in the past in any movement initiated by Congress. The movement has a much broader social and geographical base than any of the previous movements led by Congress. There was peasant participation from Rajasthan, Gujarat, Sindh, Awadh,



Assam and Maharashtra. There were some tribal movements in the delta region of Andhra and Bengal. Traders from Bombay and Bengal too actively participated.

Q.70)

Ans) a

Exp) **Option a is correct.** Congress Khilafat Swaraj Party was founded by CR Das and Moti Lal Nehru with demand of greater self-government increased political participation for Indians.

**Option b is incorrect.** JP Narayan, Minoo Masani, Ram Manohar Lohia along with Acharya Narendra Dev founded Congress Socialist Party in 1934. It was founded within the Congress but advocated armed struggle.

**Option c is incorrect.** Lala Hardayal, Sohan Singh Bhakna were the founders of Ghadar Party. It was a revolutionary organization.

**Option d is incorrect.** Agha Khan along with Ajmal Khan were among the founders of Muslim League.

Q.71)

Ans) c

Exp) **Option C is correct.** Syadvada is a Jain doctrine. Syadvada means “ a method which examines different probabilities”. It is a theory of knowledge relativity. It says that all judgments are conditional and they are good only in certain conditions only. Syadvada emphasises that we can know only some aspects of reality. Hence the knowledge is relative and conditional.

Q.72)

Ans) b

Exp) **Statement 1 is incorrect:** It was used for the first time in the Tomb of Itmad ud Daula (17th century). Pietra Dura is also called Parchin Kari. It is a technique for using highly polished cut and coloured stones to create images.

**Statement 2 is Correct:** Mariam-uz- Zamani was the wife of Mughal Emperor Akbar. She was the daughter of Raja Bharmal known by the name of Harka bai or Jodha bai. The Palace is built around a courtyard. It contains murals of hindu gods such as Lord Ram and Lord Hanuman.

Q.73)

Ans) a

Exp) **Option A is correct.** **Abdur Razzaq** came to India and stayed at the court of Zamorin at Calicut. He has given account of the city of Vijayanagar . He wrote his account in “Matla-us-Sadain wa Majma-ul-Bahrain” or “The Rise of Two Auspicious Constellations and the Confluence of Two Oceans”. The city of Vijayanagar was located along hills and had circles of walls. The city had seven citadels and an equal number of walls guarding each other. The city of Vijaynagar which was protected by strong fortifications on one side and by river and hills on another.

KB)

**Nicolo Conti:** An Italian traveller, Nicolo Conti (1420-1421 AD) visited Vijayanagar empire during the reign of Devaraya-I (the Tuluva dynasty ruler). He gave a comprehensive account of the Hindu kingdom of Vijayanagar.

**Ibn Batuta:** The greatest medieval Muslim traveler and the author of one of the most famous travel books Rihlah. His great work describes his extensive travels covering some 75,000 miles (120,000 km) in trips to almost all of the Muslim countries and as far as China and Sumatra.

**Firishta or Ferishta,** was a historian of Persian origin, he later served the Mughals emperors as their court historian. The name firishta means angel or one who is sent in Persian.

Q.74)

Ans) b

**Exp)** Therigatha is a collection of poems recited by nuns. It is a Buddhist text. It is the earliest known collection of women's literatures composed in India.

Q.75)

Ans) d

**Exp) Statement 1 is correct.** The Doctrine of Lapse was the policy adopted by Lord Dalhousie to extend British paramountcy over Indian States. According to the doctrine if in a princely state which is indirectly or directly under British control the ruler dies without heir, it would be annexed by the British.

**Statement 2 is correct.** Dalhousie had the belief that British Administration was superior to native Indian administration. Though completely wrong in assertion but this was also used as a pretext to annex the states whose ruler died without any legal heir.

**Statement 3 is correct.** Satara was the first state to be annexed under this policy. It was annexed in 1848.

**Statement 4 is incorrect.** Awadh was annexed on the pretext of misgovernance (1856)

Q.76)

Ans) d

**Exp)** Behramji Malabari was a poet and a social reformer and is known for advocating the protection of women's rights and activities against child marriages. He founded Seva Sadan as a social reform organization in 1885. It provided education, welfare and medical services to all socially discarded and exploited women.

Harvilas Sarada was an Indian academic and politician. He is best known for having introduced Child Marriage Restraint Act (1929). The act fixed marriageable age for girls at 14 years and for boys at 18 years. It was later amended to 18 and 21 years for girls and boys respectively.

Ananda Mohan Bose was one of the founders of The Sadharan Brahmo Samaj. One of its aims was the socio-economic upliftment of women.

Q.77)

Ans) d

Exp) There are 37 Ramsar Sites in India. Of the given options, Pulicat lake is not a Ramsar site.

KB)

**Vembanad Lake:** Largest lake of Kerala, spanning across Alappuzha, Kottayam, and Ernakulam districts. Famous tourist locations like Alappuzha and Kumarakom, known for houseboats, fall here. River mouths of Pamba-Achankovil rivers in Vembanad forms one of the unique wetland topography of Kerala, the Kuttanad. It is below sea level and is famous for exotic fish varieties and Paddy fields that are below sea level.

**Wular lake:** The largest freshwater lake in India is located Jammu and Kashmir with extensive marshes of emergent and floating vegetation, particularly water chestnut, that provide an important source of revenue for the State Government and fodder for domestic livestock. The lake supports an important fishing industry and is a valuable source of water for irrigation and domestic use. The area is important for wintering, staging and breeding birds. Human activities include rice cultivation and tree farming.

**Tso moriri lake:** It is a lake in the Changthang Plateau in Ladakh. A freshwater to brackish lake lying at 4,595m above sea level, with wet meadows and borax-laden wetlands along the shores. The site is said to represent the only breeding ground outside of China for one of the most endangered cranes, the Black-necked crane (*Grus nigricollis*), and the only breeding ground for Bar-headed geese in India.

**Pulicat Lake:** Pulicat Lagoon is the second largest brackish water lagoon in India, after Chilika Lake. The lake encompasses the Pulicat Lake Bird Sanctuary. The Pulicat Lake Bird Sanctuary is located in Nellore district of Andhra Pradesh and Protected area in Thiruvallur District of Tamil Nadu. The barrier island of Sriharikota separates the lake from the Bay of Bengal and is home to the Satish Dhawan Space Centre.

KB

Ramsar Convention:

The Ramsar Convention on Wetlands of International Importance is an international treaty for the conservation and sustainable use of wetlands. It is also known as the Convention on Wetlands. It is named after the city of Ramsar in Iran, where the Convention was signed in 1971.

Q.78)

Ans) c

Exp) **Statement 1 is correct.** The Union Govt has proposed a new national scholarship scheme, PM-Yasvati (PM Young Achievers Scholarship Award Scheme for Vibrant India), for meritorious students from the OBC, SC, Denotified, Nomadic and semi-Nomadic Tribe and economically backward categories.

**Statement 2 is incorrect.** Does not include primary, It's for the secondary and higher levels of education.

**Statement 3 is correct.** As is the idea of engaging senior citizens to mentor and tutor the students. This is a positive move that could help dent the number of drop-outs during the transition from elementary to secondary school and at the school to college/university level.

KB)

PM Yashasvi scheme aim is not just to increase public spending in education but to utilize the spending to maximum benefit—to focus public spending in segments and activities that are best served by government intervention, while in other cases leveraging public money for greater private flows.

Source) <https://economictimes.indiatimes.com/opinion/et-view/et-view-why-the-proposal-for-pm-yashasvi-is-a-good-idea/articleshow/73330314.cms>

Subject) Economics

Topic) Scheme

Nature) Factual

Q.79)

Ans) d

Exp) Option D is correct:

**The Simon Commission was a group of 7 MPs from Britain who were sent to India in 1928 to study constitutional reforms and make recommendations to the government, temporarily united different parties and ideological groups in the country.**

The commission did not include any Indian as its member. This was a uniting factor for the different parties. The Congress decided to oppose Simon Commission and Muslim League and Hindu Mahasabha decided to support Congress in this opposition. The Justice Party (South Indian Liberal Federation) did not oppose Simon Commission.

Q.80)

Ans) a

Exp) Correct Option is A

In 1927 Muslim leaders met at Muslim League session (Delhi). They put forward four demands for Muslims to be incorporated in the draft constitution. These proposals came to be known as Delhi Proposal. In 1929 Nationalist leaders put forward their demands that meetings at the Round Table Conference should formulate a scheme for implementation for dominion status, the Congress should have a majority in the conference and there should be Amnesty and a general policy of conciliation. These demands were called “Delhi Manifesto”.

Nehru-Liaquat pact also called Delhi Pact (1950) was signed between India and Pakistan. It allowed refugees to return to dispose of their property, forced conversions were unrecognized and minority rights were confirmed.

Poona Pact (1932) was an agreement between BR Ambedkar and MK Gandhi. Through Poona Pact more seats were given to depressed classes in return for acceptance of continuation of the joint electorate. Through Poona Pact Gandhi was able to persuade Dalit leaders to get away with separate electorate.

Q.81)

Ans) b

**Exp) Statement 1 is incorrect.** During a positive Indian Ocean Dipole (IOD) phase, the west Indian Ocean warms up anomalously and creates higher pressure and a dry phase towards the Australian side leading to droughts and bushfires.

**Statement 2 is correct.** A positive Southern Annular Mode (SAM) event, results in weaker than normal westerly winds and higher pressures over Australia. It has been a significant contributor to the dry conditions observed in Australia resulting in bushfires.

**Statement 3 is correct.** Increased concentration of greenhouse gases in the atmosphere lead to global warming. It increases the frequency and intensity of extreme weather events like heat waves that trigger bushfires.

KB)

Bushfires can cause multiple direct impacts on the survival of fauna populations, on life and property, on water resources, and indirectly on government budgets and insurance costs.

Q.82)

Ans) a

**Exp) Statement 1 is correct.** Alluvial soils are the most widely available soil in India (about 43%) which covers an area of 143 sq.km. They are found in northern plains, river valleys, deltas and estuaries and coastal plains. It is highly fertile, and rich in humus, lime and organic matters.

**Statement 2 is incorrect.** Laterite soils are formed in areas having alternate wet and dry conditions, where, as a result of excessive rainfall, silica is leached down, leaving Iron and Aluminium sesquioxides in the surface. The soil is rich in Aluminium and Iron, and are often mined for bauxite. They are also used for brick formation.

**Statement 3 is incorrect.** Adding Gypsum to soils can help tackle the problem of soil salinity. It also increases water holding capacity and makes the soil well drained. This increases fertility and makes it more resistant to soil erosion.

Q.83)

Ans) b

**Exp)** The eleven Himalayan states recently came together at a conclave to demand a separate Union Ministry to deal with problems endemic to them and a **Green Bonus** in recognition of their contribution to environment conservation. These states have a higher forest cover and are sources of many rivers forming the lifeline of downstream regions. The Green Bonus is demanded to ensure sustainable development of Himalayan States.

Q.84)

Ans) a

**Exp) All the given options are correct.** Application of AI in agriculture is emerging in three major categories, (i) agricultural robotics, (ii) soil and crop monitoring, and (iii) predictive analytics. These include Weed control, seed



sowing, crop harvesting, plant disease diagnosis etc. AI systems are also helping to improve harvest quality and accuracy (precision agriculture).

KB)

Recently India and Germany have signed an agreement to collaborate on the use of artificial intelligence (AI) in agriculture. It would help in increasing yields; reducing carbon footprint by minimizing energy usage; saving money and improving overall quality of the agricultural products.

Q.85)

Ans) b

Exp) Native crops are the plant crops or species which are indigenous to a particular region.

**Statement 1 is incorrect.** Presence of these crops in the wild in an area does not essentially act as an indicator of health of the local ecosystem. It is the indicator species whose presence, absence or abundance reflects environmental conditions. Indicator species can signal a change in the biological condition of a particular ecosystem, and thus may be used as a proxy to diagnose the health of an ecosystem.

**Statement 2 is correct.** Native crops are better adapted to local conditions, require less inputs for their production, introduce nutrients suitable to the specific area, and hence, are more resistant to adverse climate and pest attacks in the region. Requirement of lesser inputs also reduces the carbon footprint.

**Statement 3 is correct.** The native crops in a region are largely being replaced by High-yielding varieties under the Green Revolution. As a result, many such varieties have gone extinct.

Q.86)

Ans) d

Exp) Data localization builds upon the concept of data sovereignty that regulates certain data types by the laws applicable to the data subject or processor. Data localization or data residency law requires data about a nation's citizens or residents be collected, processed, and/or stored inside the country, often before being transferred internationally, and usually transferred only after meeting local privacy or data protection laws, such as giving the user notice of how the information will be used and obtaining their consent. Data Localisation is a concept where the aim is to keep the data of citizens of the country within the geographical border of a country. It implies the database should be inside the border of a specific country. The main intent behind data localisation is to protect the personal and financial information of the country's citizens and residents from foreign surveillance and give local governments and regulators the jurisdiction to call for the data when required.

Q.87)

Ans) b

Exp) **Statement 1 is correct.** Mangroves are salt-tolerant trees, also called halophytes, and are adapted to life in harsh coastal conditions (halophytic adaptations). They contain a complex salt filtration system and complex root system to cope with salt water immersion and wave action. They are adapted to the low oxygen conditions of waterlogged mud.

**Statement 2 is incorrect.** According to India State of Forest Report, 2019, West Bengal has the highest area under the mangroves, followed by Gujarat.

**Statement 3 is incorrect.** Mangrove cover has been separately reported in the ISFR 2019 and the total mangrove cover in the country is 4,975 sq km. An increase of 54 sq Km in mangrove cover has been observed as compared to the previous assessment of 2017. Top three states showing mangrove cover increase are Gujarat (37 sq km) followed by Maharashtra (16 sq km) and Odisha (8 sq km).

**Q.88)**

**Ans) b**

**Exp)** The Ankara Initiative was launched at the UNCCD COP12 in 2015 to strengthen implementation of the United Nations Convention to Combat Desertification (UNCCD). It will support the global sustainable development agenda and leverage the lessons learned from Turkey's past experience and approaches to land management.

**KB)**

United Nations Convention to Combat Desertification (UNCCD) was a result of the United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit. UNCCD is a Convention to combat desertification and mitigate the effects of drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements.

**Q.89)**

**Ans) d**

**Exp) Option D is correct:** Atmiya Sabha was founded by Ram Mohan Roy. Arya Samaj was founded by Dayanad Saraswati in 1875. He gave the slogan "back to the vedas". Tattvabodhini sabha was established (1839) by Devendra Nath Tagore.

**Q.90)**

**Ans) c**

**Exp) Pair 1 is incorrectly matched.** Jasmine Revolution was a campaign of civil resistance in Tunisia. It included a series of street demonstrations and led to the ousting of longtime president Zine El Abidine Ben Ali in January 2011.

**Pair 2 is incorrectly matched.** Water Revolution refers to an Anti-Extradition Bill protest in Hong Kong. The protesters were defending their freedoms and rights, including the right to democracy under the 'One Country, Two Systems' (OCTS) framework.

**Pair 3 is correctly matched.** Yellow revolution or yellow jackets (gilets jaunes) movement was a protest movement for economic justice that began in France. The protests were against the rising fuel taxes in France.

**Pair 4 is correctly matched.** Orange Revolution was a series of protests and political events that took place in Ukraine. The protestors demanded the reversal of authorities' attempt to rig the 2004 presidential elections.

Q.91)

Ans) A

**Exp) Option A is correct:** Operation Flood launched in 1970. It was a project of the National Dairy Development Board. It was successful as it adopted new methods in animal husbandry and feeding ingredients for the cattle. Bangladesh was Liberated in 1971. After the Bangladesh war Shimla agreement was signed between India and Pakistan in 1972. Operation meghdoot was the code name of Indian Armed forces operation to capture Siachen in 1984.

Q.92)

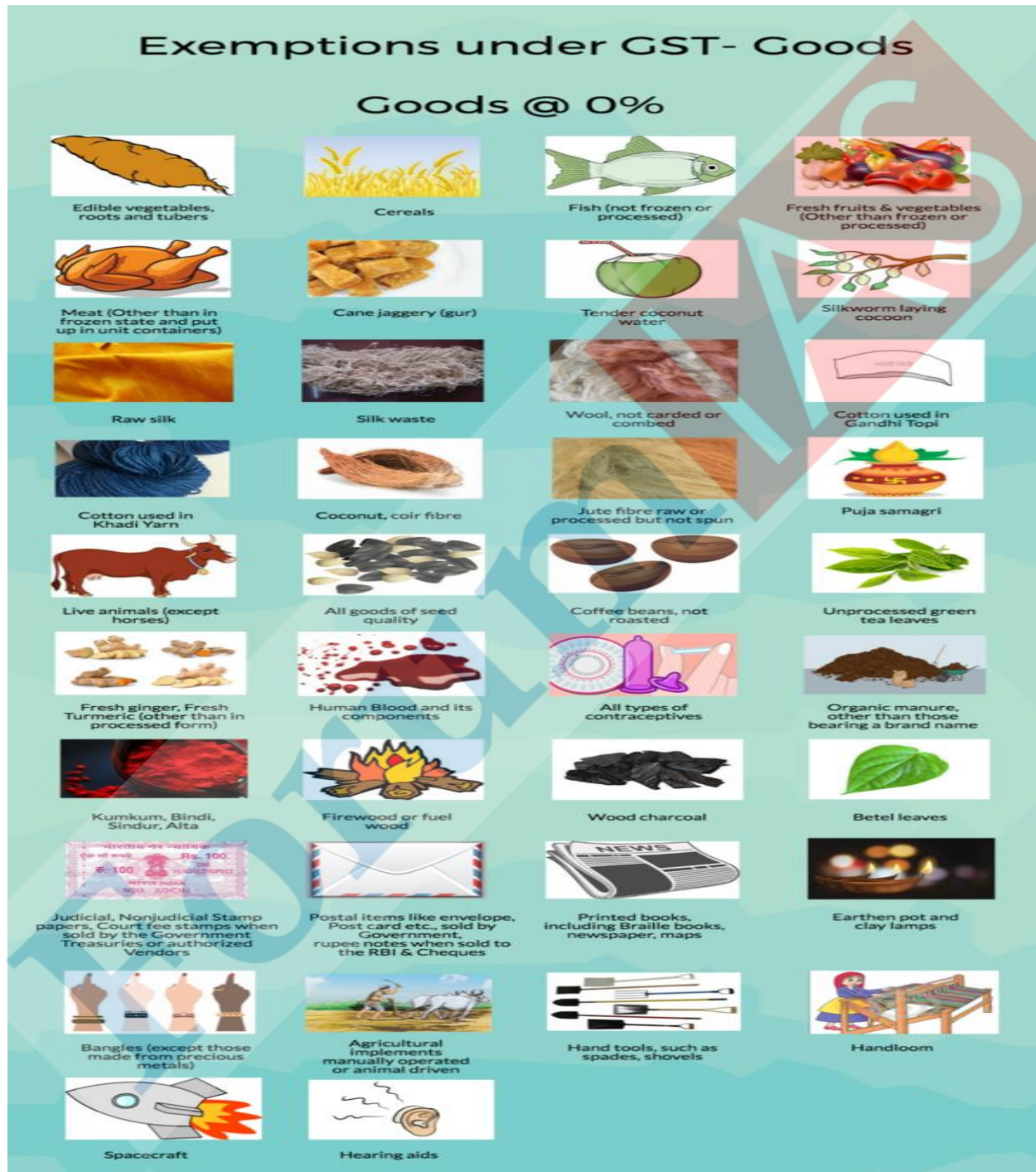
Ans) a

**Exp) Option a is correct:** The Supreme court in its various judgements have directed the government to provide free legal aid to every convict who is poor. It is based on the philosophy that everyone should get the opportunity to defend himself/ herself and poverty should not become ground of miscarriage of justice. Hence, the Supreme court held that free legal aid is intrinsic to Right to life with dignity under Article 21 of the Constitution. Article 39(a) directs states that the legal system should ensure social justice. Government legislated National Legal Services Authority (NALSA) 1987 to provide free legal aid. Article 15 does not provide for free legal aid. It provides for special provisions for socially and educationally backward classes in educational institutions and special provisions for women and children. Article 38 provides that the State shall strive to promote the welfare of the people by ensuring social, economic and political justice. It does not talk directly about free legal aid.

Q.93)

Ans) d

Exp) Above all options are correct. After 2018 Sanitary Napkins are tax-free in India.



KB)

GST Exempt supplies comprise the following three types of supplies:

- Supplies taxable at a 'NIL' rate of tax\* (0% tax);



2. Supplies that are wholly or partially exempted from CGST or IGST, by way of a notification amending Section 11 of CGST Act or Section 6 of IGST Act;
3. Non-taxable supplies as defined under Section 2(78) – supplies that are not taxable under the Act (For Example Alcoholic liquor for human consumption).

Source) <https://cleartax.in/s/exemptions-gst-goods>

Subject) Economics

Topic) GST

Nature) Factual

**Q.94)**

**Ans) c**

**Exp) Statement 1 is incorrect.** In 2019, the National Tiger Conservation Authority had told the apex court that African Cheetahs, planned to be translocated to India from Namibia will be kept at the Nauradehi Wildlife Sanctuary in Madhya Pradesh. India's last spotted cheetah died in 1947 and the animal was declared extinct in the country in 1952. Amrabad Tiger Reserve is in Telangana

**Statement 2 is correct.** Asiatic Lions are listed as 'Endangered' under the IUCN Red List. Currently, its population is restricted to the state of Gujarat in India. To diversify its habitat and to preserve the population in case of unforeseen disaster in Gir, the Asiatic lions from Gir forests of Gujarat are planned to be transferred to Kuno Palpur Wildlife Sanctuary in Madhya Pradesh.

**Statement 3 is incorrect.** Radhanagar beach is one of the 13 beaches identified by the Government for Blue flag certification. The beach is in Andaman & Nicobar Islands.

**KB)**

The Government has embarked upon a programme for 'Blue Flag' Certification for select beaches in the country. This Certification is accorded by an international agency "Foundation for Environment Education, Denmark" based on 33 stringent criteria in four major heads i.e. (i) Environmental Education and Information, (ii) Bathing Water Quality, (iii) Environment Management and Conservation and (iv) Safety and Services in the beaches. The 'Blue Flag' beach is an Eco-tourism model endeavoring to provide to the tourists/beach goers clean and hygienic bathing water, facilities/amenities, safe and healthy environment and sustainable development of the area. 13 pilot beaches that have been identified for the certification, in consultation with concerned coastal States/UTs, are Ghoghala Beach (Diu), Shivrajpur beach (Gujarat), Bhogave (Maharashtra), Padubidri and Kasarkod (Karnagaka), Kappad beach (Kerala), Kovalam beach (Tamil Nadu), Eden beach (Puducherry), Rushikonda beach (Andhra Pradesh), Miramar beach (Goa), Golden beach (Odisha), Radhanagar beach (Andaman & Nicobar Islands) and Bangaram beach (Lakshadweep).

<https://www.thehindubusinessline.com/news/science/will-the-cheetah-grace-indian-forests-again/article30801226.ece>

<https://indianexpress.com/article/explained/explained-why-india-wants-to-bring-the-african-cheetah-to-india-6240005/>

<https://pib.nic.in/PressReleasePage.aspx?PRID=1594507>



Q.95)

Ans) b

**Exp) Statement 1 is correct.** Satellites used in space based internet are placed in the low Earth orbit (LEO), 200-2,000 km from the Earth's surface

**Statement 2 is correct.** The LEO can bring the lag down to 20-30 milliseconds resulting in faster data transmission.

**Statement 3 is incorrect.** Starlink is a satellite constellation being constructed by American company SpaceX to provide space-based internet. The constellation will consist of thousands of mass-produced small satellites, working in combination with ground transceivers.

Q.96)

Ans) b

**Exp) Statement 1 is incorrect.** In India alternative investment funds (AIFs) are regulated by the Securities Exchange Board of India (SEBI) and are provided for in Regulation 2 (1) (b) Sebi (Alternative Investment Funds) Regulation, 2012.

**Statement 2 is correct.** Category I AIFs - AIFs which invest in start-up or early stage ventures or social ventures or SMEs or infrastructure or other sectors or areas which the government or regulators consider as socially or economically desirable and shall include venture capital funds, SME Funds, social venture funds, infrastructure funds and such other Alternative Investment Funds as may be specified.

Category II AIFs - AIFs which do not fall in Category I and III and which do not undertake leverage or borrowing other than to meet day-to-day operational requirements and as permitted in the SEBI (Alternative Investment Funds) Regulations, 2012. Various types of funds such as real estate funds, private equity funds (PE funds), funds for distressed assets, etc. are registered as Category II AIFs.

Category III AIFs - AIFs which employ diverse or complex trading strategies and may employ leverage including through investment in listed or unlisted derivatives. Various types of funds such as hedge funds, PIPE Funds, etc. are registered as Category III AIFs.

KB)

Alternative Investment Fund or AIF means any fund established or incorporated in India which is a privately pooled investment vehicle which collects funds from sophisticated investors, whether Indian or foreign, for investing it in accordance with a defined investment policy for the benefit of its investors.

Source) [https://www.sebi.gov.in/sebi\\_data/faqfiles/jan-2017/1485861425527.pdf](https://www.sebi.gov.in/sebi_data/faqfiles/jan-2017/1485861425527.pdf)

Subject) Economics

Topic) Banking

Nature) Factual

Q.97)

Ans) a

**Exp) Options 1, 2 and 3 are correct & option 4 is incorrect.** Commission for Agricultural Costs and Prices (CACP) recommends MSP for Raw cotton, sunflower seeds and Ragi. Sugarcane comes under fair remunerative price (FRP) which is also being recommended by CACP. Government announces minimum support prices (MSPs) for 22 mandated crops and a fair and remunerative price (FRP) for sugarcane. The mandated crops are 14 crops of the kharif season, 6 rabi crops and two other commercial crops. In addition, the MSPs of toria and de-husked coconut are fixed on the basis of the MSPs of rapeseed/mustard and copra, respectively. The list of crops are as follows.

Cereals (7) - paddy, wheat, barley, jowar, bajra, maize and ragi

Pulses (5) - gram, arhar/tur, moong, urad and lentil

Oilseeds (8) - groundnut, rapeseed/mustard, toria, soyabean, sunflower seed, sesamum, safflower seed and niger seed

Raw cotton

Raw jute

Copra

De-husked coconut

Sugarcane (Fair and remunerative price)

Virginia flu cured (VFC) tobacco

KB)

Sugarcane is the measure under fair remunerative price (FRP) not by MSP.

Difference between FRP and MSP: - The FRP is the minimum price that sugarcane farmers are legally guaranteed to get from sugar mills. Cabinet decide FRP is based on recommendation of Commission of Agricultural Costs & Prices (CACP) Determinants Of MSP:

- demand and supply;
- cost of production;
- price trends in the market, both domestic and international;
- inter-crop price parity;
- terms of trade between agriculture and non-agriculture;
- a minimum of 50 percent as the margin over cost of production; and
- likely implications of MSP on consumers of that product

Source) <https://cacp.dacnet.nic.in/content.aspx?pid=32>

Subject) Economics

Topic) Agriculture Policy

Nature) Factual

Q.98)

Ans) d

**Exp) Statement 1 is incorrect.** The Red Panda is listed as endangered on the IUCN Red list.

**Statement 2 is incorrect.** Though nearly 95% of the diet of Red Panda comprises of bamboo, they may eat small mammals, birds, eggs, flowers, and berries. Hence, it is not purely herbivorous in nature.

**Statement 3 is incorrect.** In India, it is found in Sikkim, western Arunachal Pradesh, Darjeeling district of West Bengal and parts of Meghalaya. It is also the state animal of Sikkim. It is not found in Assam.

Q.99)

Ans) c

**Exp) Statement 1 is incorrect.** Diseases are declared Pandemic based on the geographical spread, the severity of illnesses they cause, and their effects on society whereas diseases are declared Epidemic when many people are infected at the same time.

**Statement 2 is incorrect.** If the spread escalates further, an Epidemic can become a Pandemic, which affects a wider geographical area.

**Statement 3 is correct.** Diseases are declared as Pandemic or Epidemic by the World Health Organisation (WHO). It indicates that continued spread is likely, and that countries should prepare for the possibility of widespread community transmission.

**Statement 4 is incorrect.** Diseases like Avian influenza, Zika fever, Ebola haemorrhagic fever etc. have been declared Pandemic by the WHO in the past. Novel coronavirus disease 2019 (COVID-19) has been recently declared a Pandemic.

KB)

MERS- CoV (the coronavirus that causes Middle East Respiratory Syndrome, or MERS) and SARS-CoV (the coronavirus that causes severe acute respiratory syndrome, or SARS) are the other types of human coronaviruses.

Q.100)

Ans) c

**Exp) Statement 1 is correct.** PGS is a process of certifying organic products, which ensures that their production takes place in accordance with laid-down quality standards. The certification is in the form of a documented logo or a statement.

**Statement 2 is incorrect.** The head of India's food safety regulator has said that she expects the Union Agriculture Ministry's Participatory Guarantee Scheme (PGS) to incentivise more farmers to grow organic food.

**Statement 3 is correct.** According to 'Participatory Guarantee System for India [PGS-India]', an 'Operational Manual for Domestic Organic Certification' published in 2015 by the National Centre of Organic Farming, Ghaziabad, under the Ministry of Agriculture's Department of Agriculture and Cooperation, PGS is a "quality assurance initiative that is locally relevant, emphasize[s] the participation of stakeholders, including producers and consumers, and (which) operate[s] outside the framework of third-party certification".

According to a 2008 definition formulated by the International Federation of Organic Agriculture Movements (IFOAM), the Bonn-based global umbrella organisation for the organic agriculture movement, PGSs are “locally focused quality assurance systems” that “certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange”.

KB)

Four pillars of PGS

The government’s 2015 PGS manual underlines that the system in India is based on “participatory approach, a shared vision, transparency and trust”.

**PARTICIPATION:** Stakeholders such as producers, consumers, retailers, traders, NGOs, Gram Panchayats, and government organisations and agencies are collectively responsible for designing, operating, and decision-making. Direct communication among the stakeholders helps create an integrity- and trust-based approach with transparency in decision-making, easy access to databases and, where possible, visits to farms by consumers.

**SHARED VISION:** Collective responsibility for implementation and decision making is driven by a common shared vision. Each stakeholder organisation or PGS group can adopt its own vision conforming to the overall vision and standards of the PGS-India programme.

**TRANSPARENCY:** At the grassroots level, transparency is maintained through the active participation of producers in the organic guarantee process, which can include information-sharing at meetings and workshops, peer reviews, and involvement in decision making.

**TRUST:** A fundamental premise of PGS is the idea that producers can be trusted, and that the organic guarantee system can be an expression and verification of this trust. The mechanisms for trustworthiness include a producer pledge made through a witnessed signing of a declaration, and written collective undertakings by the group to abide by the norms, principles and standards of PGS.

Source) <https://indianexpress.com/article/explained/explained-what-is-pgs-the-heart-of-the-organic-food-production-industry-6021466/>

Subject) Economics

Topic) Scheme

Nature) Factual