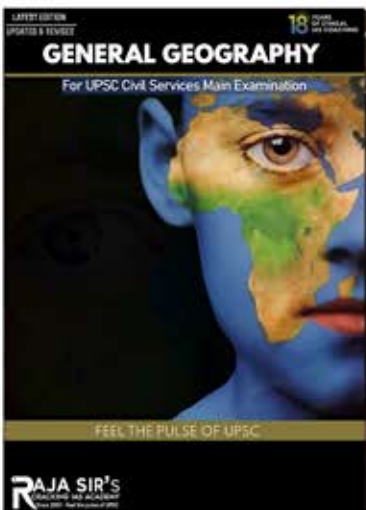
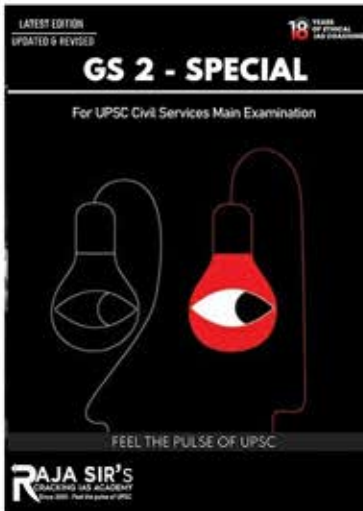


MONTHLY GENERAL STUDIES QUIZ



Consider the following statements:

1. In the tropical zone, the western sections of the oceans are warmer than the
2. In the temperate Zone, westerlies

Which of the statements given above is/ are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 and

Consider the following countries:

1. Denmark
2. Japan
3. Russian Federation
4. United Kingdom
5. United States of America

Which of the above are the members of the 'Arctic Council '?

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 4 and 5
- (d) 1, 3 and 5

Sinquefield Cup is associated with

- (a) Chess
- (b) Javelin throw
- (c) Tennis
- (d) Baseball

1. With reference to the Constitution of India, prohibitions or limitations or provisions contained in ordinary laws cannot act as prohibitions or limitations on the constitutional powers under Article 142. It could mean which one of the following?

(a) The decisions taken by the Election Commission of India while discharging its duties cannot be challenged in any court of law.

(b) The Supreme Court of India is not constrained in the exercise of its powers by laws made by the Parliament.

(c) In the event of grave financial crisis in the country, the President of India can declare Financial Emergency without the counsel from the Cabinet.

(d) State Legislatures cannot make laws on certain matters without the concurrence of Union Legislature.

2. In which of the following cases supreme court had exercised its powers under Article 142

1. The Cleansing of Taj

Mahal

2. The ban on the sale of alcohol along national and state highways
3. Bhopal Gas Tragedy Case
4. M. Siddiq v. Mahant Suresh Das

Select the correct answer using the code given below:

- (a) 1 and 2.
(b) 2 only.
(c) 1, 2 and 3.
(d) 1, 2, 3 and 4.

3. Consider the following statements regarding The Insurance Regulatory and Development Authority of India (IRDAI)

1. It is an autonomous and statutory body
2. IRDAI is a 10-member body a Chairman + nine full-time members

Select the correct answer using the code given below:

- (a) 1 only.
(b) 2 only.
(c) Both 1 and 2.
(d) Neither 1 nor 2.

4. Hydrogen sulfide occurs naturally in

1. Human body.

2. Crude oil.
 3. Natural gas.
 4. Hot springs.
 5. Volcanic gases.
- (a) 2, 3, 4, 5
(b) 1, 2 and 3
(c) 4 and 5
(d) 1, 2, 3, 4 and 5
- 5.** The Security Council of the UN consists of 5 permanent members, and the remaining 10 members are elected by the General Assembly for a term of
- (a) 1 year
(b) 2 years
(c) 3 years
(d) 5 years
- 6.** Consider the following statements:
1. Aadhaar card can be used as a proof of citizenship or domicile.
 2. Once issued, Aadhaar number cannot be deactivated or omitted by the Issuing Authority.
- Which of the statements given above is/are correct?
- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
- 7.** In the South Atlantic and South-Eastern Pacific regions in tropical latitudes, cyclone does not originate. What is the reason?
- (a) Sea surface temperatures are low
(b) Inter-Tropical Convergence Zone seldom occurs
(c) Coriolis force is too weak
(d) Absence of land in those regions
- 8.** The 'Common Carbon Metric', supported by UNEP, has been developed for:
- (a) assessing the carbon footprint of building operations around the world
(b) enabling commercial trading entities around the world to enter carbon emission trading
(c) enabling governments to assess the overall carbon footprint caused by their countries
(d) assessing the overall carbon foot-print caused by the use of fossil fuels by the world in a unit time

9. The Palghat Gap is located between
- (a) Nilgiris and Anamalai hills
 - (b) Mumbai and Nashik
 - (c) Mumbai and Pune
 - (d) None of the above

10. In which one of the following groups are all the four countries members of G20?
- (a) Argentina, Mexico, South Africa and Turkey
 - (b) Australia, Canada, Malaysia and New Zealand
 - (c) Brazil, Iran, Saudi Arabia and Vietnam
 - (d) Indonesia, Japan, Singapore and South Korea

11. Consider the following:
- 1. Carbon monoxide
 - 2. Methane
 - 3. Ozone
 - 4. Sulphur dioxide

Which of the above are released into atmosphere due to the burning of crop/biomass residue?

- (a) 1 and 2 only
- (b) 2, 3 and 4 only
- (c) 1 and 4 only
- (d) 1, 2, 3 and 4

12. Consider the following provisions under the Directive Principles of State Policy as enshrined in the Constitution of India :

- 1. Securing for citizens of India a uniform civil code
- 2. Organizing village Panchayats
- 3. Promoting cottage industries in rural areas
- 4. Securing for all the workers reasonable leisure and cultural opportunities

Which of the above are the Gandhian Principles that are reflected in the Directive Principles of State Policy?

- (a) 1, 2 and 4 only
- (b) 2 and 3 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

13. The Government enacted the Panchayat Extension to Scheduled Areas (PESA) Act in 1996. Which one of the following is not identified as its objective?
- (a) To provide self-governance
 - (b) To recognize traditional rights

- (c) To create autonomous regions in tribal areas
- (d) To free tribal people from exploitation

14. Consider the following international agreements:

1. The International Treaty on Plant Genetic Resources for Food and Agriculture
2. The United Nations Convention to Combat Desertification
3. The World Heritage Convention

Which of the above has / have a bearing on the biodiversity?

- (a) 1 and 2 only
- (b) only,
- (c) 1 and 3 only
- (d) 1, 2. and 3

15. With reference to a conservation organization called 'Wetlands International', which of the following statements is/are correct?

1. It is an intergovernmental organization formed by the countries which are signatories to Ramsar Convention.
2. It works at the field

level to develop and mobilize knowledge, and use the practical experience to advocate for better policies.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

16. 'Yanomami' which is recently seen in news, is a place located in

- (a) Brazil
- (b) Japan
- (c) Russia
- (d) Sudan

17. Consider the following statements regarding Indian Ocean Dipole (IOD)

1. IOD phenomenon is characterised by a difference in sea surface temperature between tropical Western Indian Ocean and tropical Eastern Pacific Ocean.
2. An IOD phenomenon can influence an El Nino's impact on the monsoon.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

18. Consider the following statements

1. All the states in India the States have already authorised the use of Hindi in proceedings in the High Court.
2. State government has the power to declare any regional language as an alternative for the proceedings of the court. However, judgments, orders, and decree may be passed by the magistrate in English.

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

- 19.**
1. Emamectin
 2. Benzoate
 3. Fenpyroximate
 4. Hexaconazole

5. Propiconazole

6. Quinalphos.

The above mentioned, which is recently seen in news refers to

- (a) Active Pharmaceutical Ingredient (API)
- (b) Pesticides
- (c) Fungicides
- (d) Weedicides

20. Consider the following statements:

1. Union Territories are not represented in the RajyaSabha.
2. It is within the purview of the Chief Election Commissioner to adjudicate the election disputes.
3. According to the Constitution of India, the Parliament consists of the LokSabha and the RajyaSabha only.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3
- (c) 1 and 3
- (d) None

21. Consider the following statements

1. Information collected by Population census is not accessible to court of law
2. State governments has no power to conduct caste-based census.

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

22. Consider the following statements regarding 'Kuki'

1. The Kukis are part of the Zo group of tribes
2. They are classified as Scheduled Tribes in Manipur
3. They are predominantly Christians

Select the correct answer using the code given below:

- (a) 1 and 3.
- (b) 2 and 3.
- (c) 2 only.
- (d) 1, 2 and 3.

23. Consider the following statements

1. Channapatna toys are a particular form of wooden

toys and dolls that are manufactured in Andhra Pradesh

2. Tipu Sultan, is the one attributed to introducing these wooden toys to Andhra Pradesh.

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

24. Which of the following are the methods of Parliamentary control over public finance in India?

1. Placing Annual Financial Statement before the Parliament
2. Withdrawal of moneys from Consolidated Fund of India only after passing the Appropriation Bill
3. Provisions of supplementary grants and vote-on-account
4. A periodic or at least a mid-year review of programme of the Government against macroeconomic forecasts and expenditure by a Parliamentary Budget Office

5. Introducing Finance Bill in the Parliament

Select the correct answer using the codes given below :

- (a) 1, 2, 3 and 5 only
- (b) 1, 2 and 4 only
- (c) 3, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

25. What will follow if a Money Bill is substantially amended by the RajyaSabha?

- (a) The LokSabha may still proceed with the Bill, accepting or not accepting the recommendations of the RajyaSabha
- (b) The LokSabha cannot consider the Bill further
- (c) The LokSabha may send the Bill to the RajyaSabha for reconsideration
- (d) The President may call a joint sitting for passing the Bill

26. Consider the following statements

- 1. 42nd Amendment Act, revoked the declaration of National Emergency immune to judicial review.
- 2. In Maneka Gandhi case, the Supreme Court held that National Emergency can be challenged in the

court on the ground of malafide or that the declaration was based on wholly extraneous and irrelevant facts.

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

27. Black Sea Grain Deal which is recently seen in news is between

- (a) Russia - Ukraine
- (b) Russia - Turkey
- (c) Ukraine - Turkey
- (d) Greece - Turkey

28. In which of the following COP Declared the Importance of migratory species for new global biodiversity strategy

- (a) COP 13
- (b) COP25
- (c) COP26
- (d) COP 15

29. Bandhavgarh National Park is located in

- (a) Maharashtra
- (b) Madhya Pradesh
- (c) Uttarakhand

(d) Rajasthan

30. Consider the following statements regarding Kaladan Project

1. It aims to create a multi-modal mode of transport for the shipment of cargo
2. It was jointly identified by India and Bangladesh

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

31. 'Gadgil Committee Report' and 'Kasturirangan Committee Report', sometimes seen in the news, are related to

- (a) constitutional reforms
- (b) Ganga Action Plan
- (c) linking of rivers
- (d) protection of Western Ghats

32. Which one of the following effects of creation of black money in India has been the main cause of worry to the Government of India?

- (a) Diversion of resources to the purchase of real estate and investment in luxury housing.

(b) Investment in unproductive activities and purchase of precious stones, jewellery, gold, etc.

(c) Large donations to political parties and growth of regionalism.

(d) Loss of revenue to the State Exchequer due to tax evasion.

33. Regarding the office of the Lok Sabha Speaker, consider the following statements:

1. He/She holds the office during the pleasure of the President.
2. He/She need not be a member of the House at the time of his/her election but has to become a member of the House within six months from the date of his/her election.
3. If he/she intends to resign, the letter of his/her resignation has to be addressed to the Deputy Speaker.

Which of the statements given above is /are correct?

- (a) 1 and 2 only
- (b) 3 only
- (c) 1, 2 and 3
- (d) None

34. Consider the following statements:

1. Animal Welfare Board of India is established under the Environment (Protection) Act, 1986.
2. National Tiger Conservation Authority is a statutory body.
3. National Ganga River Basin Authority is chaired by the Prime Minister.

Which of the statements given above is/ are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 2 only
- (d) 1, 2 and 3

35. The scientific view is that the increase in global temperature should not exceed 2 °C above pre-industrial level. If the global temperature increases beyond 3°C above the pre-industrial level, what can be its possible impact/impacts on the world?

1. Terrestrial biosphere tends toward a net carbon source
2. Widespread coral mortality will occur.
3. All the global wetlands will permanently disappear.
4. Cultivation of cereals will

not be possible anywhere in the world.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 1 and 2 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

36. Which of the following are included in the original jurisdiction of the Supreme Court?

1. A dispute between the Government of India and one or more States
2. A dispute regarding elections to either House of the Parliament or that of Legislature of a State
3. A dispute between the Government of India and a Union Territory
4. A dispute between two or more States

Select the correct answer using the codes given below :

- (a) 1 and 2
- (b) 2 and 3
- (c) 1 and 4
- (d) 3 and 4

37. If National Water Mission is properly and completely implemented, how will it

impact the country?

1. Part of the water needs of urban areas will be met through recycling of wastewater.
2. The water requirements of coastal cities with inadequate alternative sources of water will be met by adopting appropriate technologies that allow for the use of ocean water.
3. All the rivers of Himalayan origin will be linked to the rivers of peninsular India,
4. The expenses incurred by farmers for digging bore-wells and for installing motors and pump-sets to draw groundwater will be completely reimbursed by the Government.

Select the correct answer using the codes given below :

- (a) 1 only
- (b) 1 and 2 only
- (c) 3 and 4 only
- (d) 1, 2, 3 and 4

- 38.** Under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, who shall be the authority to initiate the process for determining the

nature and extent of individual or community forest rights or both?

- (a) State Forest Department
- (b) District Collector/Deputy Commissioner
- (c) Tahsildar /Block Development Officer / Mandai Revenue Officer
- (d) Gram Sabha

- 39.** Consider the following statements regarding 'Earth Hour'

1. It is an initiative of UNEP and UNESCO.
2. It is a movement in which the participants switch off the lights for one hour on a certain day every year.
3. It is a movement to raise the awareness about the climate change and the need to save the planet.

Which of the statements given above is / are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only.
- (d) 1, 2 and 3

- 40.** With reference to Bombay Natural History Society (BNHS), consider the following statements

1. It is an autonomous organization under the Ministry of Environment and Forests.
2. It strives to conserve nature through action-based research, education and public awareness.
3. It organizes and conducts nature trails and camps for the general public.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
 - (b) 2 only
 - (c) 2 and 3 only
 - (d) 1, 2 and 3
- 41.** Consider the following statements
1. The Constitution of India does not define the criteria for recognition of STs.
 2. The Government of India Act of 1935 called for the first time for representatives of "backward tribes" in provincial assemblies.
- Select the correct answer using the code given below:
- (a) 1 only.
 - (b) 2 only.
 - (c) Both 1 and 2.
 - (d) Neither 1 nor 2.

- 42.** Consider the following statements:

1. Aadhaar card can be used as a proof of citizenship or domicile.
2. Once issued, Aadhaar number cannot be deactivated or omitted by the Issuing Authority.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

- 43.** India is a member of which among the following?

1. Asia-Pacific Economic Cooperation
2. Association of South-East Asian Nations
3. East Asia Summit

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 3 only
- (c) 1, 2 and 3
- (d) India is a member of none of them

- 44.** Which of the following statements is/are correct about the deposits of 'methane hydrate'?

1. Global warming might trigger the release of methane gas from these deposits.
2. Large deposits of 'methane hydrate' are found in Arctic Tundra and under the sea floor.
3. Methane in atmosphere oxidizes to carbon dioxide after a decade or two.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

- 45.** Which of the following is/are the principal feature(s) of the Government of India Act, 1919?

1. Introduction of dyarchy in the executive government of the provinces
2. Introduction of separate communal electorates for Muslims
3. Devolution of legislative authority by the centre to the provinces

Select the correct answer using the codes given below :

- (a) 1 only
- (b) 2 and 3 only

- (c) 1 and 3 only
- (d) 1, 2 and 3

- 46.** Which of the following provisions of the Constitution of India have a bearing on Education?

1. Directive Principles of State Policy
2. Rural and Urban Local Bodies
3. Fifth Schedule
4. Sixth Schedule
5. Seventh Schedule

Select the correct answer using the codes given below :

- (a) 1 and 2 only
- (b) 3, 4 and 5 only
- (c) 1, 2 and 5 only
- (d) 1, 2, 3, 4 and 5

- 47.** Satkosia sanctuary is located in

- (a) Assam
- (b) West Bengal
- (c) Odisha
- (d) Arunachal Pradesh

- 48.** In India, under cyber insurance for individuals, which of the following benefits are generally covered, in addition to payment for the loss of funds and other

benefits?

1. Cost of restoration of the computer system in case of malware disrupting access to one's computer
2. Cost of a new computer if some miscreant wilfully damages it, if proved so
3. Cost of hiring a specialised consultant to minimise the loss in case of cyber extortion
4. Cost of defence in the Court of Law if any third party files a suit

Select the correct answer using the code given below:

- (a) 1, 2 and 4 only
- (b) 1, 3 and 4 only
- (c) 2 and 3 only
- (d) 1, 2, 3 and 4

- 49.** In India, it is legally mandatory for which of the following to report on cyber security incidents?

1. Service providers
2. Data centres
3. Body corporate

Select the correct answer using the code given below:

- (a) 1 only
- (b) 1 and 2 only
- (c) 3 only
- (d) 1, 2 and 3

- 50.** Under which Schedule of the Constitution of India can the transfer of tribal land to private parties for mining be declared null and void?

- (a) Third Schedule
- (b) Fifth Schedule
- (c) Ninth Schedule
- (d) Twelfth Schedule

- 51.** Article 239AA was inserted by

- (a) 69th amendment act
- (b) 74th amendment act
- (c) 66th amendment act
- (d) 44th amendment act

- 52.** In the context of recent advances in human reproductive technology, "Pronuclear Transfer" is used for

- (a) fertilization of egg in vitro by the donor sperm
- (b) genetic modification of sperm producing cells
- (c) development of stem cells into functional embryos
- (d) prevention of mitochondrial diseases in offspring

- 53.** In which one among the following categories of protected areas in India are local people not allowed to

collect and use the biomass?

- (a) Biosphere Reserves
- (b) National Parks
- (c) Wetlands declared under Ramsar Convention
- (d) Wildlife Sanctuaries

54. Under which Schedule of the Constitution of India can the transfer of tribal land to private parties for mining be declared null and void?

- (a) Third Schedule
- (b) Fifth Schedule
- (c) Ninth Schedule
- (d) Twelfth Schedule

55. If a particular area is brought under the Fifth Schedule of the Constitution of India, which one of the following statements best reflects the consequence of it?

- (a) This would prevent the transfer of land of tribal people to non-tribal people.
- (b) This would create a local self-governing body in that area.
- (c) This would convert that area into a Union Territory.
- (d) The State having such areas would be declared a Special Category State.

56. Consider the following statements:

1. The Election Commission of India is a five-member body.
2. Union Ministry of Home Affairs decides the election schedule for the conduct of both general elections and bye-elections.
3. The Election Commission resolves the disputes relating to splits/mergers of recognised political parties.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 3 only

57. Other than the Fundamental Rights, which of the following parts of the Constitution of India reflect/reflects the principles and provisions of the Universal Declaration of Human Rights (1948)?

1. Preamble
2. Directive Principles of State Policy
3. Fundamental Duties

Select the correct answer using the code given below:

- (a) 1 and 2 only

- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

- 58.** Amnesty International is
- (a) an agency of the United Nations to help refugees of civil wars
 - (b) a global Human Rights Movement
 - (c) a non-governmental voluntary organization to help very poor people
 - (d) an inter-governmental agency to cater to medical emergencies in war-ravaged regions
- 59.** 'Dugong' which is recently seen in news is
- (a) Sea mammal.
 - (b) Bird.
 - (c) Reptile.
 - (d) Amphibian.
- 60.** Consider the following statements regarding backwaters
1. They are often defined by a constant water level and so are a permanent feature.
 2. Biodiversity tends to be high in backwaters.
- Select the correct answer

using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

- 61.** Sahyadri Tiger Reserve is located in
- (a) Madhya Pradesh
 - (b) Telangana
 - (c) Karnataka
 - (d) Maharashtra
- 62.** The acidification of oceans is increasing. Why is this phenomenon a cause of concern?
1. The growth and survival of calcareous phytoplankton will be adversely affected.
 2. The growth and survival of coral reefs will be adversely affected.
 3. The survival of some animals that have phytoplanktonic larvae will be adversely affected.
 4. The cloud seeding and formation of clouds will be adversely affected.
- Which of the statements given above is/are correct?
- (a) 1, 2 and 3 only
 - (b) 2 only
 - (c) 1 and 3 only

(d) 1, 2, 3 and 4

63. Under the Kisan Credit Card scheme, short-term credit support is given to farmers for which of the following purposes?

1. Working capital for maintenance of farm assets
2. Purchase of combine harvesters, tractors and mini trucks
3. Consumption requirements of farm households
4. Post-harvest expenses
5. Construction of family house and setting up of village cold storage facility

Select the correct answer using the code given below:

- (a) 1, 2 and 5 only
- (b) 1, 3 and 4 only
- (c) 2, 3, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

64. Which of the following is /are among the noticeable features of the recommendations of the Thirteenth Finance Commission?

1. A design for the Goods and Services Tax, and a compensation package linked to adherence to the proposed design

2. A design for the creation of lakhs of jobs in the next ten years in consonance with India's demographic dividend

3. Devolution of a specified share of central taxes to local bodies as grants

Select the correct answer using the codes given below :

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

65. With reference to National Rural Health Mission, which of the following are the jobs of 'ASHA', a trained community health worker?

1. Accompanying women to the health facility for antenatal care checkup
2. Using pregnancy test kits for early detection of pregnancy
3. Providing information on nutrition and immunization
4. Conducting the delivery of baby

Select the correct answer using the codes given below:

- (a) 1, 2 and 3 Only
- (b) 2 and 4 Only
- (c) 1 and 3 Only

(d) 1, 2, 3 and 4

66. In the context of hereditary diseases, consider the following statements:

1. Passing on mitochondrial diseases from parent to child can be prevented by mitochondria replacement therapy either before or after in vitro fertilization of the egg.
2. A child inherits mitochondrial diseases entirely from mother and not from father.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

67. With reference to 'stem cells', frequently in the news, which of the following statements is/are correct?

1. Stem cells can be derived from mammals only
2. Stem cells can be used for screening new drugs
3. Stem cells can be used for medical therapies

Select the correct answer using the codes given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

68. Consider the following statements regarding Heat waves

1. If the normal maximum temperature of a station is less than or equal to 40°C , then an increase of 5°C to 6°C from the normal temperature is considered to be heat wave condition.

2. Heat waves are declared as natural disaster in India

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

69. Operation Shakti refers to

(a) Indian Armed Forces to evacuate Indian citizens and foreign nationals from Afghanistan

(b) Indian Army conducted an operation to flush out militants from the Golden Temple

(c) evacuation mission to bring back all the Indian nationals

who are currently stranded in Ukraine.

(d) India's capability to build fission and thermonuclear weapons

70. Which one of the following is the correct sequence of ecosystems in the order of decreasing productivity?

(a) Oceans, lakes, grasslands, mangroves

(b) Mangroves, oceans, grasslands, lakes

(c) Mangroves, grasslands, lakes, oceans

(d) Oceans, mangroves, lakes, grasslands

71. Consider the following statements

1. Illicit liquor (Hooch) uses Ethyl alcohol, which can cause death among humans.

2. Currently Alcohol is prohibited in the states of Bihar and Gujarat.

Select the correct answer using the code given below:

(a) 1 only.

(b) 2 only.

(c) Both 1 and 2.

(d) Neither 1 nor 2.

72. Consider the following statements

1. Permafrost is essentially any ground that stays frozen — 0 degree Celsius or lower for a decade.

2. Permafrost regions are not always covered in snow.

Select the correct answer using the code given below:

(a) 1 only.

(b) 2 only.

(c) Both 1 and 2.

(d) Neither 1 nor 2.

73. Lok Sabha to recognise Sikkim as a state in the Union of India in

(a) 32nd Amendment Act

(b) 36th Amendment Act

(c) 42nd Amendment Act

(d) 44th Amendment Act

74. Burachapori Wildlife Sanctuary is located in

(a) Assam

(b) West Bengal

(c) Odisha

(d) Madhya Pradesh

75. Samudra Shakti is a bilateral naval exercise between

(a) India - U.S.A

(b) India - Indonesia

- (c) India - France
(d) India - U.K
- 76.** In India, which of the following review the Independent regulators in sectors like telecommunications, insurance, electricity, etc.?
1. Ad Hoc Committees set up by the Parliament
2. Parliamentary Department Related Standing Committees
3. Finance Commission
4. Financial Sector Legislative Reforms Commission
5. NITI Aayog
Select the correct answer using the code given below:
(a) 1 and 2
(b) 1, 3 and 4
(c) 3, 4 and 5
(d) 2 and 5
- 77.** Wolbachia is a
(a) Bacteria
(b) Vaccination for malaria
(c) area captured by russia in ukraine
(d) is a private Russian paramilitary unit
- 78.** Endosulfan which is often seen in news is a
(a) Insecticide
(b) Herbicide
(c) Fungicide
(d) Pesticide
- 79.** Which of the following tribe practise a matrilineal system of inheritance.
1. Khasis.
2. Jaintias.
3. Garos.
(a) 1 and 2
(b) 2 and 3
(c) 1 Only
(d) 1, 2 and 3.
- 80.** Consider the following statements regarding sea butterflies
1. Sea butterflies are holoplanktonic
2. They are abundant in colder waters.
Select the correct answer using the code given below:
(a) 1 only.
(b) 2 only.
(c) Both 1 and 2.
(d) Neither 1 nor 2.

81. The acidification of oceans is increasing. Why is this phenomenon a cause of concern?

1. The growth and survival of calcareous phytoplankton will be adversely affected.
2. The growth and survival of coral reefs will be adversely affected.
3. The survival of some animals that have phytoplanktonic larvae will be adversely affected.
4. The cloud seeding and formation of clouds will be adversely affected.

Which of the statements given above is/are correct?

- (a) 1, 2 and 3 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2, 3 and 4

82. Which one of the following best describes the term "greenwashing:"?

- (a) Conveying a false impression that a company's products are eco-friendly and environmentally sound
- (b) Non-Inclusion of ecological/ environmental costs in the Annual Financial Statements of a country

(c) Ignoring the disastrous ecological consequences while undertaking infrastructure development

(d) Making mandatory provisions for environmental costs in a government project/programme

83. With reference to the Indian Renewable Energy Development Agency Limited (IREDA), which of the following statements is/are correct?

1. It is a Public Limited Government Company.
2. It is a Non-Banking Financial Company.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

84. Consider the following statements regarding London Interbank Offered Rate (LIBOR)

1. It is a benchmark interest rate at which major global banks lend to one another in the international interbank market for long-term loans.

2. The rate is calculated and will continue to be published yearly the Intercontinental Exchange (ICE).

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

85. Consider the following statements regarding Himalayan Chandra Telescope

1. It is a radio telescope named after Nobel laureate Subramaniam Chandrasekhar.
2. It contains a modified Ritchey-Chretien system
3. It is made of ULE ceramic which is designed to withstand High temperatures

Select the correct answer using the code given below:

- (a) 1 and 2.
- (b) 2 only.
- (c) 1 and 3.
- (d) 1, 2 and 3.

86. Palamu Tiger Reserve is located in

- (a) Jharkhand

- (b) Bihar
- (c) Assam
- (d) Rajasthan

87. Consider the following statements regarding International Organization for Migration

1. It has Permanent Observer status to the UN General Assembly
2. India is a member of International Organization for Migration

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

88. Which one of the following ancient towns is well known for its elaborate system of water harvesting and management by building a series of dams and channelizing water into connected reservoirs?

- (a) Dholavira
- (b) Kalibangan
- (c) Rakhigarhi
- (d) Ropar

89. With reference to 'Water Credit', consider the following statements:

1. It puts microfinance tools to work in the water and sanitation sector.
2. It is a global initiative launched under the aegis of the World Health Organization and the World Bank.
3. It aims to enable the poor people to meet their water needs without depending on subsidies.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

90. Consider the following statements regarding Committee of Privileges

1. It consists of 15 members in Lok Sabha nominated by the Speaker
2. The Parliament, till now, has not made any special law to exhaustively codify all the privileges.

Select the correct answer using the code given below:

- (a) 1 only.

- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

91. Consider the following :

1. Right to education.
2. Right to equal access to public service.
3. Right to food.

Which of the above is/are Human Right/Human Rights under "Universal Declaration of Human Rights"?

- (a.) 1 only
- (b.) 1 and 2 only
- (c.) 3 only
- (d.) 1, 2 and 3

92. What is/are the consequence/consequences of a country becoming the member of the 'Nuclear Suppliers Group'?

1. It will have access to the latest and most efficient nuclear technologies.
2. It automatically becomes a member of "The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)".

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2

(d) Neither 1 nor 2

93. Consider the following countries:

1. China.
2. France
3. India
4. Israel
5. Pakistan

Which among the above are Nuclear Weapons States as recognized by the Treaty on the Non-Proliferation of Nuclear Weapons, commonly known as Nuclear Non-Proliferation Treaty (NPT)?

- (a) 1 and 2 only
- (b) 1, 3, 4 and 5 only
- (c) 2, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

94. With reference to National Legal Services Authority, consider the following statements :

1. Its objective is to provide free and competent legal services to the weaker sections of the society on the basis of equal opportunity.
2. It issues guidelines for the State Legal Services Authorities to implement the legal programmes and schemes throughout the

country.

Which of the statements given above is / are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

95. Consider the following statements regarding Greater flamingo

1. Greater flamingo is the state bird of Rajasthan.
2. They are categorized as least concern in IUCN Red List of Threatened Species

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

96. Consider the following statements regarding Brahmaputra River

1. It flows through a depression formed by the Indus-Tsangpo Structure Zone
2. After merging with the Lohit and Dibang streams, it is known as the Brahmaputra
3. The river's left bank is fed

by the Subansiri, Kameng, Manas, and Sankosh Rivers, while the right bank receives the Dhansiri, Lohit, and Dibang Rivers. Select the correct answer using the code given below:

- (a) 2 only.
- (b) 3 only.
- (c) 1 and 2.
- (d) 1, 2 and 3.

97. India is home to lakhs of persons with disabilities. What are the benefits available to them under me law?

- 1. Free schooling till the age of 18 years in government-run schools.
- 2. Preferential allotment of land for getting up business.
- 3. Ramps in public buildings.

Which of the statements given above is/are correct?

- (a.) 1 only
- (b.) 2 and 3 only
- (c.) 1 and 3 only
- (d.) 1, 2 and 3

98. How does the National Rural Livelihood Mission seek to improve livelihood options of rural poor?

- 1. By setting up a large

number of new manufacturing industries and agribusiness centres in rural areas

- 2. By strengthening 'self-help groups' and providing skill development
- 3. By supplying seeds, fertilizers, diesel pump-sets and micro-irrigation equipment free of cost to farmers

Select the correct answer using the codes given below :

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

99. Consider the following countries:

- 1. Denmark
- 2. Japan
- 3. Russian Federation
- 4. United Kingdom
- 5. United States of America

Which of the above are the members of the 'Arctic Council' ?

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 4 and 5
- (d) 1, 3 and 5

100. Brominated flame retardants are used in many household products like mattresses and upholstery. Why is there some concern about their use?

1. They are highly resistant to degradation in the environment.
2. They are able to accumulate in humans and animals.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

101. Which of the the following pairs are true

1. Serotonin - Regulate mood, sleep patterns, sexuality, anxiety, appetite and pain.
2. Histamine - Increases blood pressure and heart rate. It's most widely known for its effects on alertness, arousal, decision-making, attention and focus.
3. Dopamine - Feeling pleasure, achieving heightened arousal and learning. Dopamine also helps with focus, concentration, memory,

sleep, mood and motivation.

4. Epinephrine - Regulates body functions including wakefulness, feeding behavior and motivation.

- (a) Only one pair is Correct
- (b) Two pairs are Correct
- (c) Three pairs are Correct
- (d) All the pairs are Correct

102. Which of the following are considered to be the source of privileges in the parliament?

1. Constitutional provisions.
2. Various laws made by Parliament.
3. Rules of both Houses.
4. Parliamentary conventions.
5. Judicial interoretations

Select the correct answer using the code given below:

- (a) 2, 3, 4 and 5.
- (b) 3 and 4.
- (c) 1, 2, 3 and 4.
- (d) 1, 2, 3, 4 and 5.

103. While bringing out the relationship between State and society, which one of the following statements is not true?

- (a) Society and State differ in their technique of operation.
- (b) The area of the State is always co-existent with that

of society.

(c) In point of time society is prior to the State.

(d) Society and State differ in their functions.

104. Consider the following statements

1. World Health Organization sets a global target of reducing salt intake by 30% by 2025.

2. Sodium labelling is not mandatory in India.

Select the correct answer using the code given below:

(a) 1 only.

(b) 2 only.

(c) Both 1 and 2.

(d) Neither 1 nor 2.

105. Consider the following statements

1. Baralacha La Pass is situated in the Zaskar range.

2. It finds mention in Rudyard Kipling's celebrated novel 'Kim'

Select the correct answer using the code given below:

(a) 1 only.

(b) 2 only.

(c) Both 1 and 2.

(d) Neither 1 nor 2.

106. Consider the following statements about Forum for India-Pacific Islands cooperation (FIPIC):

1. It is a multinational grouping developed in 2014 for cooperation between India and 14 Pacific Islands nations.

2. The first edition of the FIPIC took place in Jaipur in 2015.

3. 6th FIPIC Summit to be held in Port Moresby in 2020.

(a) 1 and 2 only.

(b) 1 only.

(c) 1 and 3 only.

(d) 2 and 3 only.

107. Which of the following countries are members of Forum for India-Pacific Islands cooperation (FIPIC)

1. Cook Islands

2. Solomon Islands

3. Palau

4. Papua New Guinea

5. Vanuatu

6. Cook Islands

(a) 1, 2, 4, and 6

(b) 2, 3, 4, and 6

(c) 1, 2, 3, 4, 5, 6

(d) 1, 2 and 4

108. With reference to the Indian judiciary, consider the following statements:

1. Any retired judge of the Supreme Court of India can be called back to sit and act as a Supreme Court judge by the Chief Justice of India with the prior permission of the President of India.
2. A High Court in India has the power to review its own judgement as the Supreme Court does.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

109. Which of the following is/are the indicators/ indicators used by IFPRI to compute the Global Hunger Index Report?

1. Undernourishment
2. Child stunting
3. Child mortality

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) 1 and 3 only

110. Consider the following statements regarding Sunflower

1. It is an annual flowering plant
2. Sunflower is native to North and Central America
3. They have ability to extract heavy metals from the soil

Select the correct answer using the code given below:

- (a) 1 and 2.
- (b) 2 and 3.
- (c) 1, 2 and 3.
- (d) Neither 1 nor 2.

111. With reference to agriculture in India, how can the technique of 'genome sequencing', often seen in the news, be used in the immediate future?

1. Genome sequencing can be used to identify genetic markers for disease resistance and drought tolerance in various crop plants.
2. This technique helps in reducing the time required to develop new varieties of crop plants.
3. It can be used to decipher the host-pathogen relationships in crops.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

112. With reference to land reforms in independent India, which one of the following statements is correct?

- (a) The ceiling laws were aimed at family holdings and not individual holdings.
- (b) The major aim of land reforms was providing agricultural land to all the landless.
- (c) It resulted in cultivation of cash crops as a predominant form of cultivation.
- (d) Land reforms permitted no exemptions to the ceiling limits.

113. With reference to Indian economy, consider the following:

1. Bank rate
2. Open market operations
3. Public debt
4. Public revenue

Which of the above is/are component/ components of Monetary Policy?

- (a) 1 only
- (b) 2, 3 and 4
- (c) 1 and 2
- (d) 1, 3 and 4

114. Consider the following statements regarding Sepsis disease

1. Sepsis is most often caused by fungal infections
2. Septic shock is a serious medical condition that can occur when an infection in your body causes extremely low blood pressure

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

115. Kambalakonda Wildlife Sanctuary is located in

- (a) Tamil nadu
- (b) Kerala
- (c) Andhra pradesh
- (d) Telangana

116. Jaisamand Wildlife Sanctuary is located in

- (a) Gujarat
- (b) Rajasthan
- (c) Uttarakhand

(d) Uttar Pradesh

117. AIRAWAT which is recently seen in news refers to

- (a) mass nesting event by Olive Ridley Turtles
- (b) a medium-range mobile surface-to-air missile system developed by DRDO
- (c) India's Supercomputer
- (d) Joint Air exercise between India and the United Kingdom

118. Consider the following statements regarding Hansen's disease

- 1. It is caused by bacteria
- 2. It is more common in tropical and subtropical areas.

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

119. Consider the following:

- 1. Aarogya Setu
- 2. CoWIN
- 3. DigiLocker
- 4. DIKSHA

Which of the above are built on top of open-source digital

platforms?

- (a) 1 and 2 only
- (b) 2, 3 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

120. If the RBI decides to adopt an expansionist monetary policy, which of the following would it not do

- 1. Cut and optimize the Statutory Liquidity Ratio
- 2. Increase the Marginal Standing Facility Rate
- 3. Cut the Bank Rate and Repo Rate

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

121. Consider the following statements regarding ExoMars Trace Gas Orbiter

- 1. It is a joint mission between the European Space Agency (ESA) and NASA.
- 2. It aims to gain a better understanding of methane and other atmospheric gases

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

122. Consider the following statements regarding Angel Tax

1. It is a tax levied on the capital raised via the issue of shares by unlisted companies if the share price of issued shares is seen in excess of the fair market value of the company.
2. Angel tax provisions were applicable only for investments received from resident investors.

Select the correct answer using the code given below:

- (a) 1 only.
- (b) 2 only.
- (c) Both 1 and 2.
- (d) Neither 1 nor 2.

123. Arrange the following islands in the South China Sea from North to South.

1. Spratly Islands
2. Natuna Islands
3. Paracel Islands.
4. Scarborough Shoal

- (a) 3-4-2-1
- (b) 4-3-1-2

- (c) 3-4-1-2
- (d) 4-1-2-3

124. Every year, a month long ecologically important campaign/festival is held during which certain communities/tribes plant saplings of fruit-bearing trees. Which of the following are such communities/ tribes?

- (a) Bhutia and Lepcha
- (b) Gond and Korku
- (c) Irula and Toda
- (d) Sahariya and Agariya

125. Under which Schedule of the Constitution of India can the transfer of tribal land to private parties for mining be declared null and void?

- (a) Third Schedule
- (b) Fifth Schedule
- (c) Ninth Schedule
- (d) Twelfth Schedule

126. Consider the following Statements;

1. Sarnaism is a religious belief based on worship at Sara, the sacred groves in the Northeastern region of India.
2. The highest number of

followers of the Sarna religion is in Assam.

3. The National Commission for Scheduled Tribes (NCST) has suggested that the Sara religion be accorded an independent category in the religion code of the Census of India.

Which of the following statement is/are incorrect?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

127. Consider the following pairs

- 1. Aral Sea Middle East,
- 2. The Dead Sea Central Asia,
- 3. Salton Sea California

Which of the following pairs are correct

- (a) Only one pair is correct
- (b) Only two pairs are correct
- (c) Only three pairs are correct
- (d) None of the pairs are correct

128. With reference to India's decision to levy an equalization tax of 6% on online advertisement services offered by non-resident entities, which of the following statements is/are correct?

- 1. It is introduced as a part of

the Income Tax Act.

- 2. Non-resident entities that offer advertisement services in India can claim a tax credit in their home country under the "Double Taxation Avoidance Agreements".

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

129. Sinquefield Cup is associated with

- (a) Chess
- (b) Javelin throw
- (c) Tennis
- (d) Baseball

130. Son Gharial Sanctuary is located in

- (a) Odisha
- (b) Assam
- (c) Madhya Pradesh
- (d) West Bengal

- 131.**
- 1. Lysosomal Storage Disorders (LSD)
 - 2. Pompe disease, cystic fibrosis
 - 3. Muscular dystrophy
 - 4. Spina bifida

5. Hemophilia

Which of the above are not a Rare disease?

- (a) 1, 2, 3 and 5
- (b) 1, 2, and 3
- (c) 5 only
- (d) None of the above

132. Consider the following statements regarding 'Earth Hour'

- 1. It is an initiative of UNEP and UNESCO.
- 2. It is a movement in which the participants switch off the lights for one hour on a certain day every year.
- 3. It is a movement to raise the awareness about the climate change and the need to save the planet.

Which of the statements given above is / are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only.
- (d) 1, 2 and 3

133. With reference to Bombay Natural History Society (BNHS), consider the following statements

- 1. It is an autonomous organization under the Ministry of Environment

and Forests.

- 2. It strives to conserve nature through action-based research, education and public awareness.
- 3. It organizes and conducts nature trails and camps for the general public.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

134. Consider the following statements:

- 1. Animal Welfare Board of India is established under the Environment (Protection) Act, 1986.
- 2. National Tiger Conservation Authority is a statutory body.
- 3. National Ganga River Basin Authority is chaired by the Prime Minister.

Which of the statements given above is/ are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 2 only
- (d) 1, 2 and 3

135. The scientific view is that the increase in global temperature should not exceed 2 °C above pre-industrial level. If the global temperature increases beyond 3°C above the pre-industrial level, what can be its possible impact/impacts on the world?

1. Terrestrial biosphere tends toward a net carbon source
2. Widespread coral mortality will occur.
3. All the global wetlands will permanently disappear.
4. Cultivation of cereals will not be possible anywhere in the world.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 1 and 2 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

136. Consider the following international agreements:

1. The International Treaty on Plant Genetic Resources for Food and Agriculture
2. The United Nations Convention to Combat Desertification
3. The World Heritage Convention

Which of the above has / have a bearing on the biodiversity?

- (a) 1 and 2 only
- (b) 3 only,
- (c) 1 and 3 only
- (d) 1, 2. and 3

137. With reference to a conservation organization called 'Wetlands International', which of the following statements is/are correct?

1. It is an intergovernmental organization formed by the countries which are signatories to Ramsar Convention.
2. It works at the field level to develop and mobilize knowledge, and use the practical experience to advocate for better policies.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

138. If a wetland of international importance is brought under the 'Montreux Record', what does it imply?

- (a) Changes in ecological character have occurred, are

occurring or are likely to occur in the wetland as a result of human interference.

(b) The country in which the wetland is located should enact a law to prohibit any human activity within five kilometers from the edge of the wetland

(c) The survival of the wetland depends on the cultural practices and traditions of certain communities living in its vicinity and therefore the cultural diversity therein should not be destroyed

(d) It is given the status of 'World Heritage Site'

139. With reference to 'Global Environment Facility', which of the following statements is/are correct?

(a) It serves as financial mechanism for 'Convention on Biological Diversity' and 'United Nations Framework Convention on Climate Change'.

(b) It undertakes scientific research on environmental issues at global level

(c) It is an agency under OECD to facilitate the transfer of technology and funds to

underdeveloped countries with specific aim to protect their environment.

(d) Both (a) and (b)

140. Consider the following countries:

1. Denmark

2. Japan

3. Russian Federation

4. United Kingdom

5. United States of America

Which of the above are the members of the 'Arctic Council'?

(a) 1, 2 and 3

(b) 2, 3 and 4

(c) 1, 4 and 5

(d) 1, 3 and 5

141. Brominated flame retardants are used in many household products like mattresses and upholstery. Why is there some concern about their use?

1. They are highly resistant to degradation in the environment.

2. They are able to accumulate in humans and animals.

Select the correct answer using the code given below.

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

142. Which of the following are some important pollutants released by steel industry in India?

1. Oxides of sulphur
2. Oxides of nitrogen
3. Carbon monoxide
4. Carbon dioxide

Select the correct answer using the code given below.

- (a) 1, 3 and 4 only
- (b) 2 and 3 only
- (c) 1 and 4 only
- (d) 1,2, 3 and 4

143. There is some concern regarding the nanoparticles of some chemical elements that are used by the industry in the manufacture of various products. Why?

1. They can accumulate in the environment, and contaminate water and soil.
2. They can enter the food chains.
3. They can trigger the production of free radicals.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only

(d) 1, 2 and 3

144. With reference to technologies for solar power production, consider the following statements:

1. 'Photovoltaics' is a technology that generates electricity by direct conversion of light into electricity, while 'Solar Thermal' is a technology that utilizes the Sun's rays to generate heat which is further used in electricity generation process.
2. Photovoltaics generates Alternating Current (AC), while Solar Thermal generates Direct Current (DC).
3. India has manufacturing base for Solar Thermal technology, but not for Photovoltaics.

Which of the statements given above is / are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) None

145. In India, cluster bean (Guar) is traditionally used as a vegetable or animal feed, but

recently the cultivation of this has assumed significance. Which one of the following statements is correct in this context?

- (a) The oil extracted from seeds is used in the manufacture of biodegradable plastics
- (b) The gum made from its seeds is used in the extraction of shale gas
- (c) The leaf extract of this plant has the properties of anti-histamines
- (d) It is a source of high quality biodiesel

146. The term 'Goldilocks Zone' refers to

- (a) the limits of habitable zone above the surface of the Earth
- (b) regions inside the Earth where shale gas is available
- (c) search for the Earth-like planets in outer space
- (d) search for meteorites containing precious metals

147. With reference to the Indian Regional Navigation Satellite System (IRNSS), consider the following statements:

- 1. IRNSS has three satellites in geostationary and four satellites in geosynchronous

orbits.

- 2. IRNSS covers entire India and about 5500 sq. Km beyond its borders.
- 3. India will have its own satellite navigation system with full global coverage by the middle of 2019.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) None

148. Consider the following statements regarding Chicory

- 1. It is an herb native to Brazil
- 2. Chicory root contains inulin
- 3. Chicory contains large amount of caffeine

Select the correct answer using the code given below:

- (a) 2 and 3.
- (b) 2 only.
- (c) 1 and 2.
- (d) 1 nor 3.

149. Though coffee and tea both are cultivated on hill slopes, there is some difference between them regarding their cultivation. In this context, consider the following statements:

1. Coffee plant requires a hot and humid climate of tropical areas whereas tea can be cultivated in both tropical and subtropical areas.
2. Coffee is propagated by seeds but tea is propagated by stem cuttings only.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

150. Consider the following statements:

1. In the tropical zone, the western sections of the oceans are warmer than the eastern sections owing to the influence of trade winds.
2. In the temperate Zone, westerlies make the eastern sections of oceans warmer than the western sections

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 and 2

Answers

1.	b	
2.	d	<p>1. The ban on the sale of alcohol along national and state highways: While the notification by the central government prohibited liquor stores along National Highways only, the Supreme Court put in place a ban on a distance of 500 metres by invoking Article 142.</p> <p>2. The Cleansing of Taj Mahal and justice to many undertrials is a result of the invocation of Article 142</p> <p>3. The Union Carbide case was one of the chief instances where the Supreme Court had exercised Article 142. In Union Carbide Corporation v. Union of India[21], a gas leak took place in Bhopal at the Union Carbide India due to poor maintenance of gas chambers, leading to death of nearly thousands of people.</p> <p>4. In M. Siddiq v. Mahant Suresh Das[23], popularly known as the Ayodhya dispute, the Supreme Court had exercised the powers mentioned under Article 142 of the Constitution in order to achieve complete justice and had passed various orders which had not been originally prayed by the parties.</p> <p><i>Article 142</i></p> <ul style="list-style-type: none"> • Article 142 provides discretionary power to the Supreme Court as it states that the SC in the exercise of its jurisdiction may pass such decree or make such order as is necessary for doing complete justice in any cause or matter pending before it. • In the early years of the evolution of Article 142, the general public and the lawyers both lauded the SC for its efforts to bring complete justice to various deprived sections of society or to protect the environment.

3.	c	<p><i>IRDAI:</i></p> <ul style="list-style-type: none"> ● It is an autonomous and statutory body established under the IRDA Act 1999. ● It is the apex body that supervises and regulates the insurance sector in India. ● Objective: To protect the interests of policyholders, to regulate, promote and ensure orderly growth of the insurance industry in India. ● Nodal Ministry: Ministry of Finance ● Head Office: Hyderabad. ● Composition: IRDAI is a 10-member body a Chairman, five full-time members, and four part-time members appointed by the Government of India. ● Functions: <ul style="list-style-type: none"> ○ To have a fair regulation of the insurance industry while ensuring financial soundness of the applicable laws and regulations. ○ Frame regulations periodically so that there is no ambiguity in the insurance industry. ○ Registering and regulating insurance companies; ○ Protecting policyholders' interests; ○ Licensing and establishing norms for insurance intermediaries; ○ Promoting professional organizations in insurance; ○ Regulating and overseeing premium rates and terms of non-life insurance covers; ○ Specifying financial reporting norms of insurance companies; ○ Regulating investment of policyholders' funds by

		<p>insurance companies;</p> <ul style="list-style-type: none"> ○ Ensuring the maintenance of solvency margin by insurance companies; ○ Ensuring insurance coverage in rural areas and of vulnerable sections of society.
4.	d	<p>Production</p> <ul style="list-style-type: none"> ● Hydrogen sulfide is often produced from the microbial breakdown of organic matter in the absence of oxygen gas, such as in swamps and sewers. This process is commonly known as anaerobic digestion. ● It occurs naturally in crude oil, natural gas, and hot springs. ● H₂S also occurs in ****volcanic gases, natural gas and in some sources of well water. ● Hydrogen sulfide is produced by the human body in small quantities through bacterial breakdown of proteins containing sulfur in the intestinal tract
5.	b	
6.	d	<ul style="list-style-type: none"> ● The Aadhaar platform helps service providers authenticate identity of residents electronically, in a safe and quick manner, making service delivery more cost effective and efficient. According to the GoI and UIDAI, Aadhaar is not proof of citizenship. ● However, UIDAI has also published a set of contingencies when the Aadhaar issued by it is liable for rejection. An Aadhaar with mixed or anomalous biometric information or multiple names in a single name (like Urf or Alias) can be deactivated. Aadhaar can also get deactivated upon non-usage of the same for three

		consecutive years.
7.	b	
8.	a	<p>Carbon footprint of an entity is the total amount of greenhouse gases that are generated by that entity.</p> <p>The Common Carbon Metric is a protocol developed by United Nations Environment Program's Sustainable Buildings & Climate Initiative (UNEP-SBCI) for measuring energy use & reporting GHG emissions from Building Operations.</p> <p>Its purpose is to support greenhouse gas (GHG) emissions reductions through accurate measurement of energy efficiency improvements in building operations.</p>
9.	a	<p>Often called as a significant discontinuity in the Western Ghats, the Palghat Gap is a geographical marvel spanning approximately 40 km in width, separating the Nilgiris and Anamalai hills, both towering above 2,000 meters above sea level.</p> <p>Significance of Palghat Gap</p> <ul style="list-style-type: none"> ● Origin and Formation: The Palghat Gap originated due to the drift of continental shelves after the separation of Australia and Africa from the Gondwana landmass. <ul style="list-style-type: none"> ○ The splitting of India and Madagascar led to the formation of the Gap approximately 100 million years ago. ● Vegetation: In contrast to the tropical rainforests of the Western Ghats, the vegetation in the Palghat Gap is classified as dry

evergreen forest.

- **Significance:**

- **Historical:**

- **Gateway to Kerala:** The Palghat Gap has historically served as a vital entry point into Kerala, **facilitating both road and rail transportation between Coimbatore and Palakkad.**

- **Also, the Bharathappuzha river flows** through the Palghat Gap, enhancing its importance as a transportation route.

- **Geographical:**

- **Shear Zone:** The Palghat Gap is a geological shear zone, **running from east to west**, which represents a weak region in the earth's crust.

- This geological characteristic can explain **occasional tremors** experienced in the Coimbatore region.

- **Climate:** While the **Western Ghats north of the Palghat Gap receive more annual rainfall**, the **southern region experiences more evenly distributed rainfall** throughout the year.

- **Ecological:**

- **Biogeographic Distinctions:** The distinct flora and fauna on either side of the Palghat Gap are believed to be a **consequence of ancient river systems or past incursions of the sea.**

- **Genetic Variations:** Genetic studies have revealed differences in the **mitochondrial DNA of elephant populations** residing on the Nilgiris side compared to those in the Anamalai and Periyar sanctuaries.

- **Bird Species Variation:** Research conducted by

		<p>IISc Bangalore highlighted genetic divergence in the White-bellied Shortwing, an endemic and threatened bird species.</p> <ul style="list-style-type: none"> ■ The Nilgiri blue robin and White-bellied blue robin populations exhibit slight variations in appearance based on their location around Ooty and the Anamalai hills. ■ Species Richness and Phylogenetic Diversity: A recent study conducted by groups from CCMB at Hyderabad and other institutions revealed that the southern region of the Western Ghats, located south of the Palghat Gap, boasts abundant species richness and phylogenetic diversity. <ul style="list-style-type: none"> ■ This region is home to more than 450 tree species, including ancient species like Magnolia champaca (Champa; Tamil: Sambagan), which have thrived for over 130 million years. ● Other Gaps: <ul style="list-style-type: none"> ○ Thalghat (Mumbai and Nashik) ○ Bhorghat(Mumbai and Pune)
10.	a	
11.	d	
12.	b	
13.	c	PESA Act

- The PESA Act was enacted in 1996 “to provide for the extension of the provisions of Part IX of the Constitution relating to the Panchayats to the Scheduled Areas”.
 - **Part IX, comprising Articles 243-243ZT** of the Constitution, contains provisions **relating to municipalities and cooperative societies.**
- **Provisions:**
 - Under the Act, **Scheduled Areas are those referred to in Article 244(1)**, which says that the provisions of the **Fifth Schedule shall apply to the Scheduled Areas and Scheduled Tribes in states other than Assam, Meghalaya, Tripura, and Mizoram.**
 - The Fifth Schedule **provides for a range of special provisions for these areas.**
 - Ten states — Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, and Telangana — have notified Fifth Schedule areas that cover (partially or fully) several districts in each of these states.
- **Objectives:**
 - To **ensure self-governance through Gram Sabhas (village assemblies)** for people living in the **Scheduled Areas.**
 - It recognises the **right of tribal communities, who are residents of the Scheduled Areas**, to govern themselves through their own systems of self-government, and also acknowledges their traditional rights over natural resources.
 - Empowers Gram Sabhas to play a key role in approving development plans and controlling all social sectors.

		<p>Significance of Implementing the Act</p> <ul style="list-style-type: none"> ● Democratic Decentralisation: PESA empowers gram sabhas to play a key role in approving development plans and controlling all social sectors. This includes management of: <ul style="list-style-type: none"> ○ Resources over jal, jangal, zameen (water, forest and land) ○ **[Minor forest produce](<a 118="" 178="" 769="" 808"="" href="https://www.drishtiias.com/daily-updates/daily-news-analysis/msp-hiked-for-minor-forest-produce#:~:text=MFP-rich%20districts,-,Minor%20Forest%20Produce%20(MFP),live%20in%20or%20near%20forests.):**) ○ Human resources: Processes and personnel who implement policies ○ Managing local markets ○ Preventing land alienation ○ Regulating intoxicants among other things ● Preserving Identity: The powers of gram sabhas include maintenance of cultural identity and tradition, control over schemes affecting the tribals, and control over natural resources within the area of a village. ● Conflict Resolution: The PESA Act thus enables gram sabhas to maintain a safety net over their rights and surroundings against external or internal conflicts. ● Public Watchdog: The gram sabha would have the powers to monitor and prohibit the manufacturing, transport, sale and consumption of intoxicants within their village limits. </td> </tr> <tr> <td data-bbox=">14.	d	
15.	b	<ul style="list-style-type: none"> ● Wetland International is the global not-for-profit organization dedicated to the conservation and restoration of wetlands. It is 		

		<p>supported by different NGO's, governments etc. Hence, statement 1 is incorrect.</p> <ul style="list-style-type: none"> Wetland International is mainly based in the developing world with its headquarter at Eden, Netherlands.
16.	a	<p>President Luiz Inácio Lula da Silva-led Brazilian government has promised to speed up the expulsion of illegal miners in the country's largest indigenous territory, Yanomami, after five people were reportedly killed in two separate violent attacks in the region</p> <p>https://indianexpress.com/article/explained/explained-global/why-is-brazil-pushing-out-illegal-miners-from-its-yanomami-territory-8589973/</p>
17.	b	<p>Indian Ocean Dipole (IOD)</p> <ul style="list-style-type: none"> The positive IOD refers to the warmer western basin of the Indian Ocean as compared to the Eastern basin. <ul style="list-style-type: none"> This year (2019), over the past month, strong easterly trade winds across the tropical Indian Ocean have aided the upwelling of cooler water in the eastern Indian Ocean (closer to Australia). At the same time, warm waters off the Horn of Africa (West Indian Ocean) have caused an even greater temperature across the basin.
18.	b	<ul style="list-style-type: none"> The language used in Courts in India has seen a transition over centuries with the shift from Urdu to Persian and Farsi

scripts during the Mughal period which continued in subordinate courts even during the British Rule. The **British introduced a codified system of law in India with English** as the official language. Post-independence, **Article 343** **of the Constitution of India provides that the official language of the Union shall be Hindi in the Devanagari script.** However, it **mandated that the English language will continue to be used for all official purposes of the Union for 15 years** from the commencement of the Constitution of [India](#). It further provides that the **President** may, during the said period, by order to authorise the use of the Hindi language for any official purpose of the Union, other than the English language.

- **About:**

- **Article 348(1)(a)** states that unless Parliament by law provides otherwise, all proceedings before the **Supreme Court** and in every High Court shall be **conducted in English**.
- **Article 348(2)** provides further that notwithstanding the provisions of Article 348(1), the **Governor of a state may, with the previous consent of the President, authorise the use of Hindi or any other language** used for any official purpose, in proceedings in the High Court.
 - States of **Uttar Pradesh, Bihar, Rajasthan and Madhya Pradesh have already authorised the use of Hindi** in proceedings before their respective high courts and taking a cue, Tamil Nadu is also working in that direction – to authorise the use of Tamil before its high court.
- A further provision states that nothing in this clause would apply to any judgement, decree, or order made by the High Court.

- Therefore, **the Constitution recognizes English as the primary language of the Supreme Court and the High Courts**, with the caveat that when some other language is used in the proceedings of High Courts, judgments of the High Courts must be delivered in English.
- **Official Languages Act 1963:**
 - It empowers **the Governor of a state to, with previous consent of the President, authorise the use of Hindi/the official language of the state, in addition to English**, for the purpose of any judgement, decree or order passed by the High Court of that state.
 - It further **provides that where any judgement/decreed/order is passed in any such language it shall be accompanied by a translation** of the same in English.
 - Read with the constitutional provisions, it is clear that **primacy is given to English even by this Act.**
 - The Official Languages Act **makes no mention of the Supreme Court, where English is the only language in which proceedings are conducted.**

Note:

- The litigant has the **fundamental right** to understand and participate in the courtroom proceedings as it arguably confers a bundle of rights under **Article 19 and Article 21.**
- The **litigant has the right to speak in the language he/she understands before the magistrate.** Similarly “right to justice” is also recognised under Article 21 of the Constitution.
- So, **the constitution has conferred the right to justice on the litigant** which further encompasses that he shall have the right to understand the whole proceedings and the judgement

		<p>delivered.</p> <ul style="list-style-type: none"> ● Language of Subordinate Courts: <ul style="list-style-type: none"> ○ The language of all courts subordinate to High Courts generally remains the same as the language on the commencement of the Civil Procedure Code 1908, till the state government determines. ○ There are two provisions regarding the use of language in subordinate courts. Under Section 137 of the Code of Civil Procedure, the language of the district courts shall be similar to the language of the act. ○ The state government has the power to declare any regional language as an alternative for the proceedings of the court. <ul style="list-style-type: none"> ■ However, judgments, orders, and decree may be passed by the magistrate in English. ■ The recording of the evidence shall be done in the prevailing language of the state. ■ In case of a pleader being unacquainted with English, a translation into the language of the court shall be supplied to him on his request and the court shall bear such costs. ○ Section 272 of the Code of Criminal Procedure 1973, states that the State government shall determine the language of all courts other than the High Courts. So, broadly it means that the language used in the district courts shall be in the regional language as the state government directs.
19.	b	<p>Both international and domestic buyers have rejected a series of tea consignments due to the presence of pesticides and chemicals beyond</p>

		<p>permissible limits.</p> <p>https://indianexpress.com/article/business/world-market/high-pesticides-indian-tea-7951300/</p>
20.	d	
21.	c	<p>Stop caste survey immediately, High Court tells Bihar govt.</p> <p>The Patna High Court ordered a stay on the caste-based survey being conducted by the Nitish Kumar government.</p> <p>Advocate said the Bihar government was misusing the contingency fund and the right to conduct such surveys was beyond the State's jurisdiction.</p> <p>State, said the survey was being conducted to make plans for public welfare.</p> <p>Data security concerns</p> <p>The petitioners have made out a prima facie case against the continuation of the caste-based survey. There is also the question raised of data integrity and security, which has to be more elaborately addressed by the State</p> <p>Prima facie, HC of the opinion that the State has no power to carry out a caste-based survey, in the manner in which it is fashioned now, which would amount to a census, thus impinging upon the legislative power of the Union Parliament</p>
22.	d	<p>https://www.newslaundry.com/2023/05/04/behind-manipur-flare-up-st-list-clamour-migration-anxieties</p>

23.	b	<p>Channapatna Toys:</p> <ul style="list-style-type: none"> ● Channapatna toys are a particular form of wooden toys and dolls that are manufactured in the town of Channapatna in the Ramanagara district of Karnataka. ● Channapatna is also known as Gombegala Ooru (toy-town). ● History: <ul style="list-style-type: none"> ○ The historic ruler of Mysore, Tipu Sultan, is the one attributed to introducing these wooden toys to the current town of Channapatna. ○ He invited artists from Persia to train the local artists in wooden toy making, which then helped this industry thrive locally. ● Features: <ul style="list-style-type: none"> ○ Most of these toys are handmade. ○ They are also painted in organic colours extracted from vegetables and plants and natural dyes, making the Channapatna Toys 100% chemical free. ○ Traditionally, they are mostly made of Ivory Wood. However, nowadays, sandalwood and mango wood are also used. ○ Their shapes are mostly round and cubes with blunt edges, so they are completely safe for kids. ● They received the geographical indication (GI) tag in 2005.
24.	a	
25.	a	
26.	d	<ul style="list-style-type: none"> ● The 38th Amendment Act of 1975 made the declaration of National Emergency immune to judicial review. But, this

		<p>provision was subsequently deleted by the 44 Amendment Act of 1978.</p> <ul style="list-style-type: none"> • In Minerva Mills case (1980), the Supreme Court held that National Emergency can be challenged in the court on the ground of malafide or that the declaration was based on wholly extraneous and irrelevant facts.
27.	a	<p>UN Official To Visit Russia This Week For Diplomatic Push To Revive Black Sea Grain Deal</p> <ul style="list-style-type: none"> • It was set up to resume vital food and fertilizer exports from Ukraine to the rest of the world. • It was brokered between Russia and Ukraine by the United Nations and Turkey. • The initiative allowed exports of grain, other foodstuffs, and fertilizer, including ammonia, to resume through a safe maritime humanitarian corridor from three key Ukrainian ports: Chornomorsk, Odesa, and Yuzhny/Pivdennyi, to the rest of the world. • Joint Coordination Centre (JCC): <ul style="list-style-type: none"> ○ A JCC was established to monitor the implementation of the Initiative. ○ JCC Centre is hosted in Istanbul and includes representatives from Russia, Türkiye, Ukraine, and the United Nations. ○ The UN acts as the Secretariat for the Centre. • Procedure: <ul style="list-style-type: none"> ○ Vessels wishing to participate in the Initiative will undergo inspection off Istanbul to ensure they are empty of cargo. ○ They then sail through the maritime humanitarian

		<p>corridor to Ukrainian ports to load.</p> <ul style="list-style-type: none"> ○ The corridor is monitored 24/7 to ensure the safe passage of vessels. ○ Vessels on the return journey will also be inspected at the inspection area off Istanbul. <p><i>Black Sea:</i></p> <ul style="list-style-type: none"> ● It is an inland sea between Eastern Europe and Western Asia. ● It is bound by Ukraine to the north and northwest, Russia and Georgia to the east, Turkey to the south, and Bulgaria and Romania to the west. ● It links to the Sea of Marmara through the Strait of Bosphorus and then to the Aegean through the Strait of Dardanelles.
28.	a	
29.	b	<p>Madhya Pradesh: 2000-year-old modern society unearthed from Bandhavgarh National Park</p> <ul style="list-style-type: none"> ● It is located in the Umariya district of Madhya Pradesh. ● It is spread over the Vindhya hills. ● It was declared a national park in 1968 and then became Tiger Reserve in 1993. ● It is known for the Royal Bengal Tigers. The density of the tiger population at Bandhavgarh is the highest known in India as well as in the world. ● The park derives its name from the most prominent hillock in the area, which was said to be given by Hindu Lord Rama to his brother Lakshmana to keep a watch on Lanka. Hence the name Bandhavgarh (Sanskrit: Brother's Fort). ● The national park was the former hunting preserve of the

		<p>Maharaja of Rewa.</p> <ul style="list-style-type: none"> ● Topography: Varies between steep ridges, undulating forests and open meadows. ● Vegetation: It is mostly of dry deciduous type. ● Flora: <ul style="list-style-type: none"> ○ The vegetation of Bandhavgarh is specially filled with Sal forest in the valleys, and Bamboo stretches on the lower slopes of the region. ○ Some of the most famous floral species include Saj (<i>Terminalia tomentosa</i>), Dhaora (<i>Anogeissus latifolia</i>), Tendu, Arjun (<i>Terminalia arjuna</i>), Amla (<i>Emblica officinalis</i>), Palas (<i>Butea monosperma</i>) etc. ● Fauna: <ul style="list-style-type: none"> ○ The important prey species consists of chital, sambhar, barking deer, nilgai, chinkara, wild pig, chowsingha, langur and rhesus macaque. ○ Dependent upon them are the major predators like tiger, leopard, wild dog, wolf and jackal.
30.	a	<p><i>Kaladan Multi-Modal Transit Transport Project:</i></p> <ul style="list-style-type: none"> ● Kaladan Project would link India and Myanmar via the Bay of Bengal. ● It was jointly identified by India and Myanmar to create a multi-modal mode of transport for the shipment of cargo from the eastern ports of India to Myanmar as well as to the North-Eastern part of India through Myanmar. ● It is being constructed by India under the Grant in Aid Scheme. ● Once completed, it will link Kolkata with the Sittwe seaport in Rakhine state in Myanmar, primarily over the Bay of Bengal –

		<p>covering over 500 km.</p> <ul style="list-style-type: none"> ● The project envisaged four important stages: <ul style="list-style-type: none"> ○ Kolkata to Sittwe waterway; ○ Sittwe to Paletwa inland (River Kaladan) waterway; ○ Paletwa to India-Myanmar border post in Myanmar; ○ Finally, linking the road to Lawngtlai in Mizoram as part of the project's last leg; ● Benefits: <ul style="list-style-type: none"> ○ The project is expected to contribute to the economic development of the North-Eastern States of India. ○ It also provides a strategic link to the North-East, thereby reducing pressure on the Siliguri Corridor.
31.	d	
32.	d	
33.	b	
34.	b	
35.	b	
36.	c	
37.	b	<ul style="list-style-type: none"> ● Aims: <ul style="list-style-type: none"> ○ To nudge all stake-holders to create Rain Water Harvesting Structures (RWHS) suitable for the climatic conditions and subsoil strata to store rainwater. ○ To engage people at the grassroots through effective campaigning and Information, Education and Communication (IEC) activities for implementation of the campaign.

- **Activities:**

- **Drives** to make water harvesting pits, rooftop RWHS and check dams.
- **Removal of encroachments** and **desilting of tanks** to increase their storage capacity.
- **Removal of obstructions** in the channels which bring water from the catchment areas.
- **Repairs to traditional WHS** like step-wells and using defunct bore-wells and old wells to put the water back to aquifers.
- As a preparatory phase of **Jal Shakti Abhiyan (JSA) II**, NYKS will undertake an **awareness campaign** through various IEC activities, to cover 623 districts from December 2020 to March 2021.
 - IEC activities will include conducting education and motivational programs, mass awareness campaigns, environment building including wall writing, etc.
- States have been requested to **open Rain Centers in each district**, which will act as a **technical guidance centre** to all in the district.

- **Significance:**

- Emphasized focus on water conservation and rainwater harvesting will make **youngsters understand the importance of water**.
- **Highest priority to the issue of water conservation** will lead to the adoption of an integrated approach towards water management.
- The idea of “No or only limited will water to flow out of the compound” will help in **improving soil moisture and rising groundwater table**.

- In urban areas it will **reduce water gushing onto roads**, damaging them and will prevent urban flooding.

Steps Taken for Water Conservation

- **Mahatma Gandhi National Rural Employment Guarantee Act:**
 - Aims to improve groundwater harvesting, build water conservation and storage mechanisms and has enabled the government to introduce water conservation as a project under the Act.
- **Jal Kranti Abhiyan:**
 - Active efforts to revolutionise villages and cities through block-level water conservation schemes.
 - For example, the **Jal Gram Scheme** under it aimed at developing two model villages in water-starved areas for water conservation and preservation.
- **National Water Mission:**
 - Aims to conserve water, minimise wastage and ensure more equitable distribution both across and within states through integrated water resources development and management.
- **NITI Aayog's Composite Water Management Index:**
 - Aims to achieve effective utilization of water.
- **Jal Shakti Ministry and Jal Jeevan Mission:**
 - Jal Shakti Ministry was formed to tackle water issues holistically.
 - Jal Jeevan mission aims to provide piped water to all rural households by 2024.
- **Atal Bhujal Yojana:**
 - Central sector scheme for sustainable management of groundwater with community participation through the formation of **Water User Associations**, water budgeting,

		<p>preparation and implementation of Gram-panchayat-wise water security plans, etc.</p> <ul style="list-style-type: none"> ● Jal Shakti Abhiyan: <ul style="list-style-type: none"> ○ Launched in July 2019 as a campaign for water conservation and water security in the country. ● National Water Awards: <ul style="list-style-type: none"> ○ Organised by the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti. ○ Focus on the good work and efforts made by individuals and organisations across the country, and the government's vision for the path to Jal Samridh Bharat.
38.	d	
39.	c	
40.	c	
41.	c	
42.	d	
43.	b	
44.	d	<ul style="list-style-type: none"> ● Methane hydrate is a crystalline solid that consists of a methane molecule surrounded by a cage of interlocking water molecules. It is an "ice" that only occurs naturally in subsurface deposits where temperature and pressure conditions are favourable for its formation. ● Regions with suitable temperature and pressure conditions for the formation and stability of methane hydrate– sediment and sedimentary rock units below the Arctic permafrost;

		<p>sedimentary deposits along continental margins; deep-water sediments of inland lakes and seas; and, under Antarctic ice.</p> <ul style="list-style-type: none"> • Methane hydrates, the sensitive sediments, can rapidly dissociate with an increase in temperature or a decrease in pressure. The dissociation produces free methane and water, which can be triggered by global warming. Hence, statement 1 is correct. • Methane is removed from the atmosphere in about 9 to 12-year period by oxidation reaction where it is converted into Carbon Dioxide. Hence, statement 3 is correct.
45.	c	
46.	c	
47.	c	<ul style="list-style-type: none"> • Satkosia Gorge Sanctuary owes its name to the narrow stretch of River Mahanadi i.e. “ Sat – kosh”. It is located in the state of Odisha. • The sanctuary has been recognized as a critical tiger habitat by the National Tiger Conservation Authority (NTCA). • Satkosia Tiger Reserve comprises of two adjoining Sanctuaries of central Odisha named as Satkosia Gorge Sanctuary and Baisipalli Sanctuary. These two sanctuaries together covering an area of 963.87 sq.km. have been notified as Satkosia Tiger Reserve. • Flora: It is home to a diverse range of flora, including dry deciduous forests, moist deciduous forests, and tropical moist forests. The sanctuary is known for its Sal forests, which cover a large part of the area. • Fauna: Elephants, Tigers, Leopards, Wild dogs, Sloth bears, Gaurs, sambar deer, spotted deer etc.
48.	b	

49.	d	
50.	d	
51.	a	<p>Governance Model of New Delhi</p> <ul style="list-style-type: none"> ● The status of Delhi being a Union Territory under Schedule 1 of the Constitution but christened the 'National Capital Territory' under Article 239AA. ● The 69th amendment to the Constitution of India inserted Article 239AA, which declared the Union Territory of Delhi to be administered by a L-G who works on aid and advice of the elected legislative assembly. <ul style="list-style-type: none"> ○ However, the 'aid and advice' clause pertains only to matters on which the elected Assembly has powers under the State and Concurrent Lists with the exception of public order, police, and land. ● Further, the Article 239AA also notes that L-G has to either act on the aid and advice of the Council of Ministers, or he is bound to implement the decision taken by the President on a reference being made by him. ● Also, Article 239AA, empowers the L-G to refer a difference of opinion on 'any matter' with the Council of Ministers to the President. ● Thus, this dual control between L-G and the elected government leads to a power tussle.
52.	d	<ul style="list-style-type: none"> ● Pronuclear transfer involves the transfer of pronuclei from one zygote to another. This technique first requires fertilisation of healthy donated eggs (provided by the mitochondrial donor) with the intended male parent sperm. Simultaneously, the intending

		<p>mother's affected oocytes are fertilised with the intending father's sperm.</p> <ul style="list-style-type: none"> By using a technique, called 'Maternal Spindle transfer', the maternal DNA is put into the egg of a donor woman, which is then fertilized using the father's sperm. The procedure was developed to help existing In-vitro-Fertilization (IVF) treatments in which mothers have mitochondrial diseases. Mutations in maternal DNA are a cause of mitochondrial disease, a heterogeneous group of diseases that can lead to premature death, sometimes in infancy or childhood. Most mitochondrial diseases lack specific treatments, and women who carry the causative mutations are at high risk of transmitting the diseases to their offspring. Therefore, option (d) is the correct answer.
53.	b	
54.	b	
55.	a	
56.	d	
57.	d	
58.	b	
59.	a	<p>Dugong:</p> <ul style="list-style-type: none"> The dugong (Dugong dugon), also called the sea cow, is a herbivorous mammal. Scientific Name: Dugong dugon Distribution: <ul style="list-style-type: none"> They have a broad but fragmented range inhabiting the

		<p>warm coastal waters of the Indian and Pacific oceans.</p> <ul style="list-style-type: none"> ○ The largest population of sea cows is found in the northern waters of Australia. ○ The second largest population is found in the Arabian Gulf. <ul style="list-style-type: none"> ● Dugongs are not considered migratory but are known to travel great distances within their range in order to find food. ● Habitat: They generally inhabit shallow waters, remaining at depths of around 10 m. ● Features: <ul style="list-style-type: none"> ○ Dugongs range in length from about 2.2 to 3.4 metres and weigh 230 to 420 kg. ○ It has a tapered body that ends in a deeply notched tail or fluke. ○ The forelimbs are rounded flippers lacking nails; there are no hind limbs nor any discernible neck. ○ They are long-lived animals (up to 73 years). ● Conservation Status: <ul style="list-style-type: none"> ○ IUCN: Vulnerable
60.	d	
61.	d	<p>Sahyadri Tiger Reserve (STR):</p> <ul style="list-style-type: none"> ● Location: It is located in the Sahyadri Ranges of Western Ghats in Maharashtra. ● It combines the Koyna Wildlife Sanctuary and the Chandoli National Park in the southern part of Maharashtra. ● The region of the Sahyadri Tiger Reserve includes the area around the Koyna Dam, Warna River and many other small rivers and streams originating from the Western Ghats and

		<p>flowing to the east.</p> <ul style="list-style-type: none"> ● Vegetation: Evergreen, semi-evergreen and moist deciduous forests. ● The habitat of Sahyadri is composed of woodlands, grasslands and plateau, the latter locally referred to as "Sadaa", which are lateritic in nature with considerable habitat value. ● Flora: Fodder species such as karvi, bamboo, kumbal are few, but fruit species such as Zizyphus rugosa, Ficus racemosa, Sideroxylon tomentosa, Ficus arnottiana, Acacia concinna, Terminalia chebula, Terminalia bellerica, Vangueria spinosa, Emblica officinalis, Carissa conjestaare abundant. ● Fauna: <ul style="list-style-type: none"> ○ The Tiger Reserve is home to the endangered species of top carnivores such as the Tiger, Wild dog, and Leopard. ○ The herbivores include Gaur, Sambar, Four Horned Antelope, Mouse Deer and Giant Squirrel. ○ The Atlas Moth, Moon Moth and many endangered Butterflies have been documented in the area, and the Indian long-billed Vulture has been noticed on the crest line.
62.	a	
63.	b	
64.	c	
65.	a	
66.	c	<ul style="list-style-type: none"> ● The technological development allows nearly complete replacement of the cytoplasm of egg/ embryo, eliminating the transmission of undesired defective mitochondria for patients

		<p>with inherited mitochondrial diseases, which is called mitochondrial replacement therapy (MRT).</p> <ul style="list-style-type: none"> • Despite the fact that it is called mitochondrial replacement therapy, the treatment functionally works by transferring the mother's nuclear genetic material from an egg (oocyte) with diseased mitochondria into a donor egg that has healthy mitochondria and whose original nuclear genetic material has been removed. The healthy mitochondria in the donor egg can allow for normal development and stop the transmission of mitochondrial disease. • These processes use assisted reproductive technology, including in vitro fertilization. The father's sperm can fertilize the patient egg before the maternal genetic material is removed or after the maternal genetic material has been transferred to the donor egg. • The energy-producing organelle mitochondria contains its own compact genome, which is separate from the nuclear genome. In nearly all mammals, this mitochondrial genome is inherited exclusively from the mother, and transmission of paternal mitochondria or mitochondrial DNA (mtDNA) has not been convincingly demonstrated in humans. • Mitochondrial diseases are chronic (long-term), genetic, often inherited disorders that occur when mitochondria fail to produce enough energy for the body to function properly. As the mitochondrial genome is inherited exclusively from the mother, the child inherits mitochondrial diseases entirely from mother and not from father.
67.	b	<ul style="list-style-type: none"> • Stem cells are undifferentiated or "blank," cells capable of developing into cells that serve numerous functions in different parts of the body. Most cells in the body are differentiated cells. These cells can only serve a specific purpose in a particular organ.

		<p>For example, red blood cells are specifically designed to carry oxygen through the blood.</p> <ul style="list-style-type: none"> ● Stem cells are not only found in mammals, but also found in plants and other organisms. ● Since stem cells have the ability to turn into various other types of cells, scientists believe that they can be useful for treating and understanding diseases. According to the scientists, stem cells can be used to: <ul style="list-style-type: none"> ○ Grow new cells in a laboratory to replace damaged organs or tissues. ○ Correct parts of organs that do not work properly ○ Research causes of genetic defects in cells. ○ Research how diseases occur or why certain cells develop into cancer cells. ○ Test new drugs for safety and effectiveness. ○ To carry out medical therapies.
68.	a	<p><i>Declaring a Heatwave</i></p> <ul style="list-style-type: none"> ● The Heatwave is considered when the maximum temperature of a station reaches at least 40°C for Plains and at least 30°C for Hilly regions. ● If the normal maximum temperature of a station is less than or equal to 40°C, then an increase of 5°C to 6°C from the normal temperature is considered to be heat wave condition. <ul style="list-style-type: none"> ○ Further, an increase of 7°C or more from the normal temperature is considered a severe heat wave condition. ● If the normal maximum temperature of a station is more than 40°C, then an increase of 4°C to 5°C from the normal temperature is considered to be heat wave condition. Further, an increase of 6°C or more is considered a severe heat wave

		<p>condition.</p> <ul style="list-style-type: none"> ○ Additionally, if the actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, a heat wave is declared. ● In 2016, the National Disaster Management Authority (NDMA) issued comprehensive guidelines to prepare national level key strategies for mitigating the impact of heatwaves.
69.	d	<p>On May 11, 1998, India conducted three nuclear bomb test explosions at the Indian Army's Pokhran Test Range. Two days later, on May 13, two more bombs were tested.</p> <p>Codenamed Operation Shakti (literally, "strength"), these tests would display India's capability to build fission and thermonuclear weapons with yields up to 200 kilotons, helping India enter the highly guarded club of countries with capability to deploy nuclear weapons.</p> <p>https://indianexpress.com/article/explained/explained-history/25th-anniversary-pokhran-ii-8604356/</p>
70.	c	<ul style="list-style-type: none"> ● Productivity = production/unit area/unit time. ● Production/unit area depends on the number and diversity of producers. ● Ecotones have greater productivity compared to the surrounding ecosystems. Mangroves and grasslands are ecotones. (Tropical Rainforests is an exception as it has productivity comparable to wetlands because of its rich diversity of primary producers). ● Note: Grasslands are not transitional all the time. E.g. Steppe. Non-transitional grasslands have very low productivity because of very limited diversity of primary producers. (Grasslands become

		<p>transitional only when they are narrow).</p> <ul style="list-style-type: none"> • So, the order of decreasing productivity will be like • Mangroves ,..... , , • Oceans = very deep and hence productivity is limited to the surface only (Below in the aphotic zone productivity is negligible. Aphotic zone in oceans is few kilometres). • Also, surface water in oceans is very poor in nutrients. Nutrient-rich cold water flows as a sub-surface flow lying in the aphotic zone. Sunlight and nutrients are far apart, and hence primary productivity is very low except in regions where there is an upwelling of nutrient-rich cold water (Cold and Warm current mixing zones). • So open ocean ecosystem has the least productivity. (Desert ecosystem also has very low productivity, lesser than oceans). • So, the answer will look like Mangroves,,, Oceans.
71.	d	<p><i>Illicit liquor (Hooch):</i></p> <ul style="list-style-type: none"> • Any alcoholic beverage made under unlicensed conditions is called illicit liquor. Usually, sub-standard raw material is used, often this is spiked with other chemicals. • The term hooch is popular slang for illicit liquor. The origin of the term hooch is said to come from the Hoochinoo Indians of Alaska. <p><i>What makes it poisonous?</i></p> <ul style="list-style-type: none"> • Under unregulated conditions, methanol or methyl alcohol can be produced with the desired ethanol. • Sometimes, industrial methyl alcohol or denatured spirit (mixture of ethanol and methanol) is added by illicit brewers to save costs and in the mistaken belief that it'll increase potency. • Methyl alcohol is extremely toxic — 10 ml can cause blindness

and 30 ml can cause death within 10 to 30 hours. It is like ethyl alcohol in taste and smell.

Treatment:

- **Ethyl alcohol and fomepizole are used as antidotes**, inhibiting the metabolizing of methyl alcohol so that it passes through urine. Advanced treatment requires **haemodialysis** to remove toxic substances from the bloodstream.

Alcohol prohibition in India

- Alcohol prohibition is in ****the states of **Bihar, Gujarat, Mizoram, and Nagaland**. All other Indian states and union territories permit the sale of alcohol.
- The **directive principles of state policy (DPSP)** in the constitution of India (**article 47**) state that "the State shall endeavour to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health".The Directive Principles are not-justiciable rights of the people but fundamental in the governance of the country. It shall be the duty of the State to apply these principles in making policy laws per Article 47. As Per Article 38, state and union governments, as duty, shall make further detailed policies and laws for implementation considering DPSPs as fundamental policy.
- **National prohibition was advocated by Mahatma Gandhi, as well as by many Indian women**. Prohibition in the states of India that have implemented the policy has led to lower rates of drinking among men, as well as a decreased incidence of violence against women.

72.

d

Permafrost

- Permafrost is essentially any ground that stays frozen — 0 degree Celsius or lower — for at least two years straight. These permanently frozen grounds are often found in Arctic regions such as Greenland, Alaska (the United States), Canada, Russia and Eastern Europe.
- According to the National Aeronautics and Space Administration (NASA), permafrost is composed of “a combination of soil, rocks and sand that are held together by ice. The soil and ice in permafrost stay frozen all year long.” However, although the ground remains perennially frozen, permafrost regions aren't always covered with snow.
- Arctic is getting warmer nearly four times as fast as the rest of the planet due to **climate change**, permafrost is thawing rapidly, which could destabilise not only the industrial sites but also the contaminated areas. And once the destabilisation takes place, toxic substances would be unleashed across the region, threatening numerous species living there and the health of people who depend on them.
- Although the ground is frozen, permafrost regions are not always covered in snow.
- Permafrost is made of a combination of soil, rocks and sand that are held together by ice. The soil and ice in permafrost stay frozen all year long.
- Near the surface, permafrost soils also contain large quantities of organic carbon—a material leftover from dead plants that couldn't decompose, or rot away, due to the cold. Lower permafrost layers contain soils made mostly of minerals.
- A layer of soil on top of permafrost does not stay frozen all year. This layer, called the active layer, thaws during the warm summer

		<p>months and freezes again in the fall.</p> <ul style="list-style-type: none"> • In colder regions, the ground rarely thaws—even in the summer. • There, the active layer is very thin—only 4 to 6 inches (10 to 15 centimeters). • In warmer permafrost regions, the active layer can be several meters thick
73.	b	<p><i>How Sikkim joined India</i></p> <ul style="list-style-type: none"> • Sikkim's state council or assembly had some elected members and others nominated by the king. In the early years, it saw some political tussle over the representation for various communities, and the Chogyal's reluctance to let go of his control. • The 1960s and 1970s would see several events change the course of Sikkim's status. • The two states decided to alter existing wording to indicate a "permanent relationship" between them, but the Chogyal wanted further clarity on Sikkim's independence. • Anti-monarchy protests grew in Sikkim in 1973, following which the royal palace was surrounded by thousands of protesters. Indian troops arrived after the monarch was left with no choice but to ask New Delhi to send assistance. Finally, a tripartite agreement was signed in the same year between the chogyal, the Indian government, and three major political parties, so that major political reforms could be introduced. • A year later, in 1974, elections were held, where the Sikkim Congress led by Kazi Dorji won. That year, a new constitution was adopted, which restricted the role of the monarch to a titular post. A referendum was held in Sikkim in 1975, where two-thirds of eligible voters took part. Here, 59,637 votes were cast in favour of abolishing the monarchy and joining India, with 1,496 voting

		<p>against.</p> <ul style="list-style-type: none"> India's Ministry of External Affairs introduced the Constitution (Thirty-Sixth Amendment) Bill in the Lok Sabha to recognise Sikkim as a state in the Union of India. This was passed in the Parliament and assented to by President Fakhruddin Ali Ahmed, coming into effect on May 16, 1975.
74.	a	<p>Burachapori Wildlife Sanctuary:</p> <ul style="list-style-type: none"> Location: It is located on the southern bank of the river Brahmaputra in the Sonitpur district, Assam. It is actually a part of the Laokhowa Wildlife Sanctuary. Though these two wildlife sanctuaries in Assam have two different names, they are ecologically and geographically a singular entity. The area was declared a Reserved forest in 1974; it became a sanctuary in 1995. Vegetation: It comprises of a mosaic of wet alluvial grassland, riparian and semi-evergreen forests dotted by wetland and river systems. Flora: <ul style="list-style-type: none"> A unique vegetation of this sanctuary is the abundance of freshwater mangrove trees. There are many species of trees and medicinal plants in the sanctuary. Trees like simul, korai, ajar and hijal etc are found in the area. Fauna: <ul style="list-style-type: none"> It is well known for the Bengal Florican and One-horned Rhinoceros that was once on the verge of extinction. Other important wildlife include otter, civet cat, leopard

		cat, Asiatic buffalo , wild boar and barking deer.
75.	b	<ul style="list-style-type: none"> ● Samudra Shakti is aimed at enhancing interoperability, jointness and mutual cooperation between both the navies. <ul style="list-style-type: none"> ○ The Harbour phase will comprise Cross deck visits, professional Interactions, Subject Matter Expert Exchanges, and sports fixtures. ○ During the Sea Phase, weapon firing, Helicopter Operations, Anti-submarine warfare & air defence exercises and boarding operations are planned. ● Samudra Shakti -23 will showcase the high level of interoperability between the two navies and their shared commitment towards peace and stability in the region. ● The Indonesian Navy will be represented by KRI Sultan Iskandar Muda, CN 235 Maritime Patrol Aircraft and AS565 Panther Helicopter.
76.	a	<ul style="list-style-type: none"> ● Parliamentary Committees are of two kinds – Standing Committees and Ad Hoc Committees. The former are elected or appointed every year or periodically and their work goes on, more or less, on a continuous basis. The latter are appointed on an ad hoc basis as the need arises and they cease to exist as soon as they complete the task assigned to them. ● In India, there are 24 Department Related Standing Committees that comprise members from both Houses of Parliament. These committees are Ministry specific, and may review the working of regulators within their respective departments. For example, in August 2012, the Standing Committee on Energy presented a report on the functioning of the ‘Central Electricity Regulatory Commission’.

		<ul style="list-style-type: none"> ● Ad Hoc Committees set up by the Parliament may examine the working of regulators. For instance, the terms of reference of the Joint Parliamentary Committee (JPC) on the allocation of 2G spectrum include the review of the policy on spectrum pricing and grant of telecom licences. ● Role of Finance Commission and NITI Aayog is advisory in nature and they do not review independent regulators. **** ● The Financial Sector Legislative Reforms Commission (FSLRC) was constituted by the Ministry of Finance in March 2011 to comprehensively review and redraw the legislations governing India's financial system. It has no role in reviewing the independent regulators.
77.	a	<ul style="list-style-type: none"> ● <i>Controlling Dengue Using Bacteria:</i> <ul style="list-style-type: none"> ○ Recently researchers from the World Mosquito Program have used mosquitoes infected with Wolbachia bacteria to successfully control dengue in Indonesia. ○ Method: <ul style="list-style-type: none"> ■ The scientists infected some mosquitoes with Wolbachia and then released them in the city where they bred with local mosquitoes, until nearly all mosquitoes in the area were carrying Wolbachia bacteria. This is called the Population Replacement Strategy. ■ At the end of 27 months, the researchers found that the incidence of dengue was 77% lower in areas where Wolbachia-infected mosquitoes had been released, as compared to areas without such deployments.

78.

a

SC transfers endosulfan case to Kerala HC for monitoring government's medical and palliative measures for victims

The Supreme Court transferred to Kerala High Court the responsibility of monitoring the measures taken by the State to provide medical and palliative care for victims of endosulfan contamination.

EndoSulfan

- Endosulfan is an **organochlorine insecticide** which was first introduced in the 1950s and is commonly known by its **trade name Thiodan**.

Use of Endosulfan

- Sprayed on crops like **cotton, cashew, fruits, tea, paddy, tobacco etc.** for control of pests such as whiteflies, aphids, beetles, worms etc.

Impact of Endosulfan

- Environment
 - Endosulfan in the environment **gets accumulated in food chains** leading to higher doses causing problems.
 - If Endosulfan is **released to water**, it is expected to absorb to the sediment and may **bioconcentrate in aquatic organisms**.
- Humans And Animals
 - The endosulfan ingestion results in **diseases ranging from physical deformities, cancer, birth disorders** and **damage to the brain and nervous system**.

Ban on Endosulfan

		<ul style="list-style-type: none"> • The Supreme Court in India has banned the manufacture, sale, use, and export of endosulfan throughout the country, citing its harmful health effects in 2015. • Endosulfan is listed under both Rotterdam Convention on the Prior Informed Consent and the Stockholm Convention on Persistent Organic Pollutants. <p><i>Rotterdam convention 1998</i></p> <ul style="list-style-type: none"> • The convention aims to promote cooperation and responsibility sharing measures amongst different countries dealing with trade in hazardous chemicals and pesticides. • PIC, Prior Informed Consent is the main feature of the convention and is legally binding on the party members. • PIC facilitates information exchange about nature and trade-related information amongst the party members. • The Convention creates obligations for the implementation of the Prior Informed Consent (PIC) procedure. <p><i>Stockholm convention 2001</i></p> <ul style="list-style-type: none"> • The convention aims to reduce the concentration of persistent organic pollutants (POPs) which are chemical substances that not only remain in the atmosphere for longer periods but also possess the ability to bio-accumulate. • The convention listed 12 POPs as 'dirty dozen'.
79.	d	
80.	c	
81.	a	

82.

a

Greenwashing

- **About:**

- **Greenwashing** refers to the practice of making **false or exaggerated claims about the environmental benefits of a product, service, or company** in order to present a **misleading image of sustainability or eco-friendliness.**

- It is a form of **deceptive marketing** that aims to capitalize on the growing consumer demand for environmentally friendly products and practices.

- The RBI recognizes the increasing number of investment products marketed as **"green" or making wider sustainability claims.**

- Exaggerated, misleading or unsubstantiated claims about **Environmental, Social and Governance (ESG)** credentials damage confidence of the public in the product

- **Major Forms of Greenwashing:**

- **Vague or Misleading Labels:** Companies may use terms like **"eco-friendly," "green," or "natural"** without providing specific information or clear standards for what those terms mean.

- **Irrelevant Claims:** Companies may highlight a **minor environmental improvement while ignoring more significant environmental issues** related to their products or operations.

- For example, a **car manufacturer might promote a fuel-efficient model** while downplaying the environmental impact of its manufacturing processes.

- **Hidden Trade-offs:** This occurs when a product is

		<p>marketed as environmentally friendly in one aspect but neglects to mention other negative environmental impacts.</p> <ul style="list-style-type: none"> ■ For instance, a disposable product might be labeled as biodegradable, but the production process still has a significant carbon footprint. <ul style="list-style-type: none"> ● Impacts of Greenwashing: <ul style="list-style-type: none"> ○ Dilution of Genuine Efforts: Companies genuinely committed to sustainability and implementing eco-friendly practices can suffer because greenwashing makes it harder for consumers to differentiate between genuinely sustainable products and those that are falsely marketed. <ul style="list-style-type: none"> ■ Legitimate sustainability initiatives may be overshadowed and undermined by companies engaging in greenwashing. ○ Stifling Innovation: Greenwashing can discourage genuine innovation in sustainability. <ul style="list-style-type: none"> ■ When companies can deceive consumers with superficial or misleading green claims, there may be less motivation to invest in developing truly sustainable solutions. This hinders the overall progress in creating environmentally friendly products and practices.
83.	c	
84.	d	<p>London Interbank Offered Rate (LIBOR):</p> <ul style="list-style-type: none"> ● It is a benchmark interest rate at which major global banks lend to one another in the international interbank market for

short-term loans.

- It acts as a **benchmark for short-term interest rates.**
- It is an **indicator of the health of the financial system** and provides an idea of the trajectory of impending policy rates of central banks.
- LIBOR is **also the basis for consumer loans in countries around the world**, so it impacts consumers just as much as it does financial institutions.
- **How is LIBOR calculated?**
 - The rate is **calculated** and will continue to be **published each day by the Intercontinental Exchange (ICE).**
 - It is **computed for five currencies** with seven different maturities ranging from overnight to a year.
 - The five currencies for which LIBOR is computed are the **Swiss franc, euro, pound sterling, Japanese yen and US dollar.**
 - **Each day, ICE asks major global banks how much they would charge other banks** for short-term loans.
 - **ICE benchmark administration consists of 11 to 18 banks** that contribute for each currency. **Only those banks that have a significant role in the London market are considered** eligible for membership on the ICE LIBOR panel, and the selection process is held annually.
 - The **rates received from the banks are arranged in descending order**, and the **top and bottom quartiles are excluded** to remove outliers.
 - The **arithmetic mean of the remaining data is then computed to get the LIBOR rate.**
 - The process is **repeated for each of the 5 currencies and 7 maturities**, thereby producing 35 reference rates.
 - The **most commonly quoted rate is the three-month**

		<p>U.S. dollar rate, usually referred to as the current LIBOR rate.</p> <p>https://www.forbes.com/advisor/investing/what-is-libor/</p>
85.	b	<p>Workshop to mark 20 years of Himalayan Chandra Telescope to highlight the science it produced.</p> <p>About:</p> <ul style="list-style-type: none"> ● Himalayan Chandra Telescope has been used in many coordinated international campaigns to monitor stellar explosions, comets, and exo-planets, and has contributed significantly to these studies. ● The Himalayan Chandra Telescope is a 2.01 meters (6.5 feet) diameter optical-infrared telescope. ● It is named after India-born Nobel laureate Subrahmanyam Chandrasekhar. ● It contains a modified Ritchey-Chretien system with a primary mirror made of ULE ceramic which is designed to withstand low temperatures it experiences. ● Operated and placed at- It is placed in the cold, dry desert of Ladakh, 4500 meters above the mean sea level at the Indian Astronomical Observatory (IAO). <ul style="list-style-type: none"> ○ The telescope remotely operated from the Centre for Research & Education in Science & Technology (CREST), Indian Institute of Astrophysics (IIA), Hosakote. Hosakote is about 35 km northeast of Bangalore. ○ The telescope is remotely operated via an INSAT-3B satellite link.

		<p>Significance:</p> <ul style="list-style-type: none"> • The telescope has been used in many coordinated international campaigns to monitor stellar explosions, comets, and exoplanets, and has contributed significantly to these studies. • Some of the thrust research areas are the study of solar system bodies like; comets, asteroids, the study of star formation processes and young stellar objects, the study of open and globular clusters and variable stars in them. • It has helped in analysis of elements in the atmosphere of evolved stars, star formation in external galaxies, Active Galactic Nuclei, stellar explosions like novae, supernovae, gamma-ray bursts and so on.
86.	a	<p>Palamu Tiger Reserve (PTR):</p> <ul style="list-style-type: none"> • Location: <ul style="list-style-type: none"> ○ It is located in the western side of Latehar district on the Chhotanagpur plateau in Jharkhand. ○ The reserve forms a part of the Betla National Park. • It is one of the first 9 tiger reserves created in the country at the inception of 'Project Tiger'. • It is the first reserve in the world in which a tiger census was carried out as a pugmark count, as early as 1932 under the supervision of J.W. Nicholson • Terrain: It is undulating with valleys, hills and plains. • Rivers: <ul style="list-style-type: none"> ○ Three rivers namely North Koyal, Auranga and Burha flow through the valleys. ○ The area is draught drone with Burha being the only perennial river.

		<ul style="list-style-type: none"> ● The Reserve is very rich in minerals like Bauxite and Coal. ● Vegetation: <ul style="list-style-type: none"> ○ It is primarily dominated by Northern Tropical Dry Deciduous Sal forest and its associates. ○ Smaller patches of Northern tropical Moist Deciduous forests exist too in the Reserve. ● Flora: <i>Shorea robusta</i>, <i>Acacia catechu</i>, <i>Madhuca indica</i>, <i>Terminalia tomentosa</i>, <i>Butea monosperma</i>, <i>Pterocarpus marsupium</i>, <i>Anogeisus latifolia</i>, <i>Indigofera pulchela</i> etc. ● Fauna: Some keystone and principal species found in the reserve include Tiger, Asiatic Elephant, Leopard, Grey wolf, Wild dog, Gaur, Sloth bear and Four horned antelope.
87.	c	<ul style="list-style-type: none"> ● Established in 1951, IOM is the leading intergovernmental organization in the field of migration and works closely with governmental, intergovernmental and non-governmental partners. ● History: It was born in 1951 out of the chaos and displacement of Western Europe following the Second World War. ● Status: IOM was granted Permanent Observer status to the UN General Assembly in 1992, and a cooperation agreement between IOM and the UN was signed in 1996. ● Members: With 175 member states, a further 8 states holding observer status and offices in over 100 countries, IOM is dedicated to promoting humane and orderly migration for the benefit of all. It does so by providing services and advice to governments and migrants. India is a member of IOM. ● IOM works in the four broad areas of migration management: <ul style="list-style-type: none"> ○ Migration and development ○ Facilitating migration ○ Regulating migration

		<ul style="list-style-type: none"> ○ Forced migration.
88.	a	
89.	c	
90.	c	<ul style="list-style-type: none"> ● Some Members of the Rajya Sabha made complaints to the chairman that frequent disruptions by some members were a breach of their privilege. ● A Member can't directly make complaints to Privilege Committee, therefore the matter came to the Chairman, who as per rule referred it to Privilege Committee to examine, investigate and report. <p>Parliamentary Privileges</p> <ul style="list-style-type: none"> ● Article 105 and Article 194 of the Indian Constitution mentioned certain privileges for the Member of Parliament and State Assembly respectively so that they can perform their duties without any obstruction. ● They are the special rights, immunities and exemptions enjoyed by the Members of Parliament/State Assembly, its committees and their members. <ul style="list-style-type: none"> ○ These privileges do not extend to the president who is also an integral part of the Parliament. ● These privileges are necessary to secure their independence in working. ● Without these privileges; <ul style="list-style-type: none"> ○ The Houses cannot maintain their authority, dignity and honour. ○ The House cannot protect its members from any obstacle in the discharge of their parliamentary responsibilities.

		<ul style="list-style-type: none"> ● The Indian Constitution has also extended these privileges to the persons who are authorised to speak and take part in the Parliamentary procedures or any of its committees. <ul style="list-style-type: none"> ○ These include the attorney general of India and Union ministers. ● These Privileges can be classified into two broad categories: <ul style="list-style-type: none"> ○ Collective Privileges - Those that are collectively enjoyed by the each House of Parliament. ○ Individual Privileges - Those that are individually enjoyed by the members.
91.	d	
92.	a	
93.	a	
94.	c	
95.	b	<p>Recently, a greater flamingo was rescued from Najafgarh wetland, bordering Haryana.</p> <p>Greater flamingo (<i>Phoenicopterus roseus</i>) is the state bird of Gujarat. They are found in the middle east, including Iran, Turkey, Dubai, Oman, and Afghanistan. They are also common in south and southwest Asia. They are mainly found in shallow waters of lagoons, lakes, estuaries, and muddy beaches. Of the six species of flamingos in the world, two are found in India: the tallest of them, the greater flamingo and the smallest one, the lesser flamingo (<i>Phoeniconaias minor</i>). They are taller, with black-tipped light pinkish beaks, yellowish eyes and pinkish-white body colour.</p> <p>In the IUCN Red List of Threatened Species, they are categorized as</p>

		"least concern (LC)".
96.	c	
97.	d	
98.	b	
99.	d	
100.	c	
101.	b	<p>These neurotransmitters play a lot of different roles in your nervous system and especially in your brain. Monoamines neurotransmitters regulate consciousness, cognition, attention and emotion. Many disorders of your nervous system involve abnormalities of monoamine neurotransmitters, and many drugs that people commonly take affect these neurotransmitters.</p> <ul style="list-style-type: none"> • Serotonin. Serotonin is an inhibitory neurotransmitter. Serotonin helps regulate mood, sleep patterns, sexuality, anxiety, appetite and pain. Diseases associated with serotonin imbalance include seasonal affective disorder, anxiety, depression, fibromyalgia and chronic pain. Medications that regulate serotonin and treat these disorders include selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs). • Histamine. Histamine regulates body functions including wakefulness, feeding behavior and motivation. Histamine plays a role in asthma, bronchospasm, mucosal edema and multiple sclerosis. • Dopamine. Dopamine plays a role in your body's reward system, which includes feeling pleasure, achieving heightened arousal

		<p>and learning. Dopamine also helps with focus, concentration, memory, sleep, mood and motivation. Diseases associated with dysfunctions of the dopamine system include Parkinson's disease, schizophrenia, bipolar disease, restless legs syndrome and attention deficit hyperactivity disorder (ADHD). Many highly addictive drugs (cocaine, methamphetamines, amphetamines) act directly on the dopamine system.</p> <ul style="list-style-type: none"> ● Epinephrine. Epinephrine (also called adrenaline) and norepinephrine (see below) are responsible for your body's so-called "fight-or-flight response" to fear and stress. These neurotransmitters stimulate your body's response by increasing your heart rate, breathing, blood pressure, blood sugar and blood flow to your muscles, as well as heighten attention and focus to allow you to act or react to different stressors. Too much epinephrine can lead to high blood pressure, diabetes, heart disease and other health problems. As a drug, epinephrine is used to treat anaphylaxis, asthma attacks, cardiac arrest and severe infections. ● Norepinephrine. Norepinephrine (also called noradrenaline) increases blood pressure and heart rate. It's most widely known for its effects on alertness, arousal, decision-making, attention and focus. Many medications (stimulants and depression medications) aim to increase norepinephrine levels to improve focus or concentration to treat ADHD or to modulate norepinephrine to improve depression symptoms.
102.	d	
103.	b	
104.	c	Recently, the Indian Council for Medical Research tweeted about the

ways to reduce salt intake by avoiding the addition of salt while cooking and going in for salt substitutes. It rightly pointed out that children, younger than 12 years, require only three grams of salt per day.

The World Health Organization had cautioned a couple of months ago that the world is off track to achieve its global target of reducing salt intake by 30% by 2025.

The report shows that only 5% of the WHO member states have mandatory and comprehensive sodium-reducing policies. Additionally, seventy-three per cent of the WHO member states lack the full range implementation of the policies.

Implementing highly cost effective sodium reducing policies could save an estimated seven million lives globally by 2030.

Reducing sodium in diet

WHO has suggested the following measures — reformulation of food to contain less salt; controlled procurement of high sodium food in public institutions like schools, workplaces and hospitals; labelled promotion of packed foods with low sodium choices and achieving behavioural changes in population through campaigning in media.

The WHO has also established a scorecard for various countries. According to that card, India does not have a national policy but it does have voluntary measures to reduce sodium.

Only persons who have hypertension or kidney disease are advised by their personal physicians to reduce salt in the diet.

The population at large is still not aware of the danger of hidden salt — salt that is present in ready-made and packed foods.

		<p><i>The effects of excess salt</i></p> <p>Sodium labelling is not mandatory in India. A recent study from Sweden has shown a connection between salt consumption and atherosclerosis, even in the absence of hypertension.</p> <p>Atherosclerosis is a disease which blocks the blood vessels. The study included 10,788 individuals between 50 to 64 years. Every gram of extra sodium was associated with a 9% occurrence of plaques in the carotid arteries which supplies blood to the brain; and a 17% increase in coronary artery plaques.</p> <p><i>To reduce salt consumption</i></p> <p>The U.K. has been the leading country in the world to have reduced salt consumption in the population. This has resulted in preventing thousands of strokes and cardiovascular events. According to a Cochrane review, reducing salt in the diet in diabetic patients is associated with slower progression of kidney disease, with fewer drugs required to control blood pressure.</p> <p>During the COVID-19 pandemic, there were notable studies from China and Germany which pointed out the association between high salt intake and decreased immunity in the body. Salt reduction in the diet is the most cost-effective measure to control non-communicable diseases. India should wake up to this reality. Improving the quality of life by avoiding strokes and heart attacks is the goal — not just prolonging longevity.</p>
105.	c	<p>Baralacha La Pass:</p> <ul style="list-style-type: none"> ● Location: <ul style="list-style-type: none"> ○ It is a high mountain pass located along the Leh-Manali

		<p>highway that connects Leh district in Ladakh and Lahaul district in Himachal Pradesh.</p> <ul style="list-style-type: none"> ○ It is situated in the Zaskar range. ● It lies close to River Bhaga, which originates from the Surya Taal Lake & is a tributary of the River Chenab. ● Elevation: It is located at the height of 16,040 feet above the sea level and is one of the highest motorable passes in India. ● It also finds mention in Rudyard Kipling's celebrated novel 'Kim', wherein the source of the Suraj Tal is used by the novel's character Lama to enter into India from Tibet.
106.	b	<p>Forum for India-Pacific Islands cooperation (FIPIC) is a multinational grouping developed in 2014 for cooperation between India and 14 Pacific Islands nations which include Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Samoa, Solomon Islands, Palau, Papua New Guinea, Tonga, Tuvalu and Vanuatu. The first and second editions of the FIPIC took place in Fiji (2015) and Jaipur (2016). During the FIPIC Summits Prime Minister articulated India's desire to be a close partner of the Pacific Island nations and its readiness to work closely to advance their developmental agenda.</p> <p>To further enhance people-to-people contact, PM announced a Distinguished Visitors Programme under which eminent persons from these countries can visit India. India would also welcome the visit of a Parliamentary delegation from the Pacific Island Countries to India. To continue High-Level engagement, PM extended an invitation to all the leaders for the 3rd FIPIC Summit to be held in Port Moresby in first half of 2020.</p>

107.	c	<p><i>FIPIC</i></p> <ul style="list-style-type: none"> • Forum for India-Pacific Islands cooperation (FIPIC) is a multinational grouping developed in 2014 for cooperation between India and 14 Pacific Islands nations which include Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Samoa, Solomon Islands, Palau, Papua New Guinea, Tonga, Tuvalu and Vanuatu. • The first and second editions of the FIPIC took place in Fiji (2015) and Jaipur (2016). During the FIPIC Summits Prime Minister articulated India's desire to be a close partner of the Pacific Island nations and its readiness to work closely to advance their developmental agenda. • To further enhance people-to-people contact, PM announced a Distinguished Visitors Programme under which eminent persons from these countries can visit India. • India would also welcome the visit of a Parliamentary delegation from the Pacific Island Countries to India.
108.	c	
109.	c	
110.	c	<p>Sunflower:</p> <p>Sunflower (<i>Helianthus annuus</i> L.), popularly known as "Surajmukhi" (it follows the sun by day) is an annual flowering plant, native to North and Central America but is now cultivated worldwide for its versatile uses. It is known for its large, bright yellow flowers.</p> <p>Sunflowers are relatively easy to grow and are adaptable to different climates and soil types. They require full sun exposure and well-</p>

		<p>drained soil. They are known for their ability to extract heavy metals from the soil, making them useful in phytoremediation efforts to clean up polluted areas.</p>
111.	d	<ul style="list-style-type: none"> • Chinese scientists decoded rice genome in 2002. The Indian Agricultural Research Institute (IARI) scientists used the genome sequencing to develop better varieties of rice such as Pusa Basmati-1 and Pusa Basmati-1121, which currently makes up substantially in India's rice export. Several transgenic varieties have also been developed, including insect resistant cotton, herbicide tolerant soybean, and virus resistant papaya. • In conventional breeding, plant breeders scrutinize their fields and search for individual plants that exhibit desirable traits. These traits arise spontaneously through a process called mutation, but the natural rate of mutation is very slow and unreliable to produce all the plant traits that breeders would like to see. However, in genome sequencing it takes less time, thus it is more preferable. • The host-pathogen interaction is defined as how microbes or viruses sustain themselves within host organisms on a molecular, cellular, organism or population level. The genome sequencing enables the study of the entire DNA sequence of a crop, thus it aids in understanding of pathogens' survival or breeding zone.
112.	b	
113.	c	
114.	d	<p>Septic shock:</p> <ul style="list-style-type: none"> • It is a serious medical condition that can occur when an

infection in your body causes extremely low blood pressure and organ failure due to sepsis.

- Septic shock is **life-threatening** and **requires immediate medical treatment**.
- It's the **most severe stage of sepsis**.
- It occurs most **often in the very old and the very young**. It may also **occur in people with weakened immune systems**.
- It is **typically diagnosed when the signs of severe sepsis are present**, along with low blood pressure and signs of organ dysfunction.
- **Risk factors for septic shock include:**
 - **Diabetes;**
 - Diseases of the genitourinary system, biliary system, or intestinal system;
 - Diseases that weaken the immune system, such as AIDS;
 - **Leukemia;**
 - **Heart failure;**
 - **Kidney failure;**
 - Abnormal blood clotting;

What's the difference between Septic shock and Sepsis?

- Sepsis **occurs when your body has an extreme reaction to an infection**.
- This **reaction causes drastic changes** in the body and can be very dangerous and **potentially life threatening**.
- Doctors have identified **three stages of sepsis:**
 - **Sepsis**. An **infection reaches the bloodstream** and **causes inflammation** in the body.
 - **Severe sepsis**. The **infection is severe** enough to affect organ function.
 - **Septic shock**. There's a **significant drop in blood**

		<p>pressure that can lead to respiratory or heart failure, stroke, dysfunction of other organs, and possibly death.</p> <ul style="list-style-type: none"> • Sepsis is most often caused by bacterial infections, but almost any infection can cause sepsis if left untreated. • The transition from the onset of sepsis to severe sepsis and septic shock can happen quickly, and once the condition has transitioned, the mortality rate increases.
115.	c	<p>Kambalakonda Wildlife Sanctuary:</p> <ul style="list-style-type: none"> • Kambalakonda Wildlife Sanctuary is a vast forest reserve located near Vishaka- patnam, Andhra Pradesh. • The name of the place referred to the local hill, Kambalakonda. • The sanctuary has been under the Andhra Pradesh Forest Department since 1970. • Topography: It is considerably hilly with steep slopes. • Flora: <ul style="list-style-type: none"> ○ The forest cover in the sanctuary is mostly considered as a dry evergreen forest mixed with scrub and meadows. ○ One of the most stunning flowers found in the region includes the Indian screw tree. Other flowers and fruits like flowers of the Bush plum tree, Jungle berry bunches can be found all across the landscape. • Fauna: <ul style="list-style-type: none"> ○ Quite a few animals are extremely rare, these animals include the Indian leopard, Indian pangolin, Madras treeshrew, Barking Deer, Jackal etc. ○ Russel's viper or Daboia russelii (Rare breed of snake). ○ Some uncommon birds include the Indian Golden oriole, Indian peafowl, Banded bay cuckoo.

116.

b

Jaisamand Wildlife Sanctuary:

- **Location:** It is located in the **Udaipur district of Rajasthan surrounding Debar Lake** (Jaisamand Lake).
- The forest of the Sanctuary **used to be a Shikargah (Game Reserve)** of the **erstwhile Maharanas of Mewar**.
- It was declared a **Wildlife Sanctuary in the year 1957**.
- **Vegetation:** **Dry deciduous forests, and scrub forests**.
- **Flora:** The flora of this Sanctuary comprises of **thickly wooded forests of mainly Teak wood**.
- **Fauna:**
 - It is habitat to a large variety of animals like **Bears, Black Bucks, Blue Bulls, Chinkaras, Chittal or Spotted Deer**, Civets, Common Langurs, Four-horned Antelope, Foxes etc.
 - It is also home to a huge variety of over 300 species of **resident as well as migratory birds like Babblers, Buzzards, Curlews, Dalmatian Pelicans**, Darters, Doves, Eagles, Egrets, Falcons, etc.

Key Facts about Debar Lake (Jaisamand Lake):

- It is renowned for being the **second largest artificial lake in Asia**.
- **In 1685, Maharana Jai Singh built** this lake while making a dam on the Gomti River.
- This lake covers an area of **36sq km**, stretches to the **length of 14 km and width of 9 km**. The lake is **deep to the maximum of 102 feet** and has a circumference of 30 miles.
- The lake **receives water from four main rivers, the Gomti, Jhamari, Rooparel and Bagaar**.
- **The massive dam** was constructed on this lake **also houses a**

		<p>centrally located Shiva temple.</p> <ul style="list-style-type: none"> ● The northern end of the lake has a palace with a courtyard while its southern end has a pavilion of 12 pillars. ● Islands: <ul style="list-style-type: none"> ○ There are seven islands on the lake and the tribe of Bhil Minas inhabit these islands. ○ There are two main islands which are large in size. The biggest island is called Babaka Bhagra while the smallest is called "Piari".
117.	c	<p>Supercomputer 'AIRAWAT':</p> <ul style="list-style-type: none"> ● The supercomputer has been named in the 61st edition of the Top 500 Global Supercomputing List released recently. ● The AI supercomputer AIRAWAT' is installed at C-DAC, Pune. The system is installed under National Program on AI by the Government of India. ● AIRAWAT's manufacturer is Netweb Technologies. ● Airawat PSAI, stands as India's largest and fastest AI supercomputing system, with a remarkable speed of 13,170 teraflops. ● Benefits: <ul style="list-style-type: none"> ○ It will empower the Academia, Research Labs, Scientific Community, Industry and Start-Ups to develop indigenous AI-enabled products/solutions especially for solving India-specific grand challenges and complex real-life problems. ○ It has the potential to revolutionize various sectors, including weather forecasting, drug discovery, climate modelling, and artificial intelligence research. <p>About Centre for Development of Advanced Computing (C-DAC):</p>

		<ul style="list-style-type: none"> • It is a prominent R&D organization under the Ministry of Electronics and Information Technology. • It focuses on research and development in various domains, including information technology, electronics, and supercomputing. • It was established in the year 1988. • It was set up to build Supercomputers in context of denial of import of Supercomputers by USA. • C-DAC build India's first indigenously built supercomputer Param 8000 in 1991.
118.	c	<p>Leprosy:</p> <ul style="list-style-type: none"> • Leprosy, also known as Hansen's disease, is a chronic infectious disease caused by a type of bacteria, Mycobacterium leprae. • The disease predominantly affects the skin and peripheral nerves. Left untreated, the disease may cause progressive and permanent disabilities. • It is more common in tropical and subtropical areas. • It is a neglected tropical disease (NTD) which still occurs in more than 120 countries, with more than 200 000 new cases reported each year. • It is known to occur at all ages ranging from early childhood to old age. • Transmission: It is transmitted via droplets, from the nose and mouth, during close and frequent contact with untreated cases. • Symptoms: <ul style="list-style-type: none"> ○ The main symptom of leprosy is disfiguring skin sores, lumps, or bumps that don't go away after several weeks or months.

		<ul style="list-style-type: none"> ○ Nerve damage can lead to: <ul style="list-style-type: none"> ■ Loss of feeling in the arms and legs ■ Muscle weakness ● Treatment: It is curable with multidrug therapy (MDT) and treatment during early stages can prevent disability. <p>National Leprosy Eradication Programme (NLEP):</p> <ul style="list-style-type: none"> ● It is a centrally sponsored Health Scheme under the National Health Mission of the Ministry of Health and Family Welfare, Govt. of India. ● The Programme is headed by the Deputy Director of Health Services (Leprosy) under the administrative control of the Directorate General Health Services, Govt. of India. ● While the NLEP strategies and plans are formulated centrally, the programme is implemented by the States/UTs. ● The major concern of the Programme is to detect cases of leprosy at an early stage and provide complete treatment, free of cost, in order to prevent occurrence of Grade II Disability (G2D) in affected persons.
119.	d	
120.	b	
121.	b	<p>ExoMars Trace Gas Orbiter (TGO):</p> <ul style="list-style-type: none"> ● TGO is the first in a series of joint missions between the European Space Agency (ESA) and Roscosmos, the Russian space agency. ● Goal: To gain a better understanding of methane and other atmospheric gases that are present in small concentrations (less than 1% of the atmosphere) in the Martian atmosphere.

		<ul style="list-style-type: none"> ● The orbiter's sensitivity to hydrogen has also allowed it to search for water buried underneath shallow layers of Martian soil. ● It's also meant to test technology for future missions. ● It was launched in March 2016 and began operations after entering Mars orbit on Oct. 19, 2016. ● TGO carried the Schiaparelli lander with it to Mars. However, it was crashed during landing. ● The spacecraft itself is a 3.2 meter by 2 meter by 2 meter box, fitted with one antenna to communicate with Earth and another to communicate with spacecraft on the surface of Mars. ● It is powered by a pair of solar arrays that protrude from its sides like wings, along with two small batteries to keep it running during eclipses, when it doesn't receive any sunlight. ● It carries several instruments including, <ul style="list-style-type: none"> ○ NOMAD(Nadir and Occultation for MArS Discovery); ○ ACS (Atmospheric Chemistry Suite); ○ CaSSIS (Colour and Stereo Surface Imaging System); ○ FREND (Fine Resolution Epithermal Neutron Detector);
122.	a	<p>Angel Tax:</p> <ul style="list-style-type: none"> ● It is a tax levied on the capital raised via the issue of shares by unlisted companies if the share price of issued shares is seen in excess of the fair market value of the company. ● The excess funds raised at prices above fair value is treated as income, on which tax is levied. ● Angel tax essentially derives its genesis from section 56(2)(viib) of the Income Tax Act, 1961. ● The finance act, 2012 introduced section 56(2)(viib) in the IT act which taxes any investment, received by any unlisted Indian company, valued above the fair market value by treating it as

		<p>income.</p> <ul style="list-style-type: none"> ● Rate: It is levied at a rate of 30.9% on net investments in excess of the fair market value. ● Objective: To deter the generation and use of unaccounted money through subscription of shares of a closely held company, at a value which is higher than fair market value. ● In 2019, the Government announced an exemption from the Angel Tax for startups on fulfillment of certain conditions. These are, <ul style="list-style-type: none"> ○ The startup should be recognized by the Department for Promotion of Industry and Internal Trade (DPIIT) as an eligible startup. ○ The aggregate amount of paid-up share capital and share premium of the Startup cannot be more than ₹25 crores. This amount does not include the money raised from Non-Resident Indians (NRIs), Venture Capital Firms, and specified companies. ○ For angel investors, the amount of investment that exceeds the fair market value can be claimed for a 100% tax exemption. However, the investor must have a net worth of ₹2 crores or an income of more than ₹25 Lakh in the past 3 fiscal years. ● Previously, angel tax provisions were applicable only for investments received from resident investors. ● However, Finance Bill 2023 has extended its applicability to non-resident investors as well.
123.	c	<p>South China Sea Dispute: It is a dispute over territory and sovereignty over ocean areas, and the Paracels and the Spratlys – two island chains claimed in whole or in part by a number of countries. Alongside the fully-fledged islands, there are dozens of rocky outcrops, atolls, sandbanks,</p>

		and reefs, such as the Scarborough Shoal.
124.	b	
125.	b	
126.	a	<p>Sarnaism is a religious belief based on worship at Sarna, the sacred groves in the Chota Nagpur Plateau region in Jharkhand, West Bengal, Bihar, Chhattisgarh and Odisha.</p> <p>Mission Antyodaya was adopted in the Union Budget 2017-18.</p> <p>The National Commission for Scheduled Tribes (NCST) has suggested that the Sarna religion be accorded an independent category in the religion code of the Census of India</p>
127.	a	<ol style="list-style-type: none"> 1. Aral Sea Central Asia, 2. The Dead Sea Middle East, 3. Salton Sea California
128.	d	
129.	a	<p>https://indianexpress.com/article/opinion/columns/what-the-niemann-carlsen-cheating-controversy-reveals-about-the-relationship-between-chess-and-technology-8235967/</p>
130.	c	<p>Son Gharial Wildlife Sanctuary:</p> <ul style="list-style-type: none"> ● The Son Gharial Wildlife Sanctuary in Sidhi District of Madhya Pradesh. ● It was declared a wildlife sanctuary in 1981 by the State government to protect and preserve the faunal diversity of the river, specifically the critically endangered Gharial and the vulnerable Marsh Crocodile.

		<ul style="list-style-type: none"> • Sanctuary consists an altogether length of 210 km encompassing lengths of 161 km of Son river, 23 km of Banas river, and 26 km of Gopad River. • Fauna: <ul style="list-style-type: none"> ○ The sanctuary is home to a significant population of Gharials, as well as other species of fauna such as Indian flapshell turtles, smooth-coated otters, Indian Skimmer and a variety of fish species. ○ It is also a breeding ground for the Indian Skimmer. ○ About 101 species of birds registered in the sanctuary make it rich in aquatic and avifaunal biodiversity.
131.	d	
132.	c	
133.	c	
134.	b	
135.	b	
136.	d	
137.	b	
138.	a	
139.	a	
140.	d	
141.	c	
142.	d	

143.	d	
144.	a	
145.	b	
146.	c	<ul style="list-style-type: none"> • The 'Goldilocks Zone' refers to the habitable zone around a star where the temperature is just right – not too hot and not too cold – for liquid water to exist on a planet. • Since liquid water is essential for life as it has potential to accommodate biotic organism, thereby, it is called 'habitable zone'.
147.	a	
148.	b	<p>Chicory:</p> <ul style="list-style-type: none"> • The Chicory is an herb native to Europe and Asia. • The Chicory root contains inulin, a starchy substance, which is good for health. • The Chicory root has a mild laxative effect and decreases swelling. • The Chicory is also a rich source of beta-carotene, which protects cells from oxidative damage, better than coffee. • The Chicory does not contain caffeine which induces restlessness and insomnia, which coffee does. • The Chicory is grown mainly in Uttar Pradesh and Gujarat. <p>The coffee plantations across India:</p> <ul style="list-style-type: none"> • The coffee reached India from the Middle East in the 14th-15th century, named 'coha', which later became coffee. • India is the sixth largest producer of coffee in the world after

		<p>Brazil, Vietnam, Colombia, Indonesia, Ethiopia and Honduras.</p> <ul style="list-style-type: none"> The coffee ****plantations are mostly done in the hilly regions of Karnataka, Kerala and Tamil Nadu, Andhra Pradesh (Araku Valley), Odisha, Manipur, Mizoram, and the other North-eastern states of India. <p>Coffee with milk:</p> <ul style="list-style-type: none"> The coffee with milk may have an anti-inflammatory effect. The combination of proteins and antioxidants in milk helps in the action of immunity****producing cells.
149.	a	
150.	c	