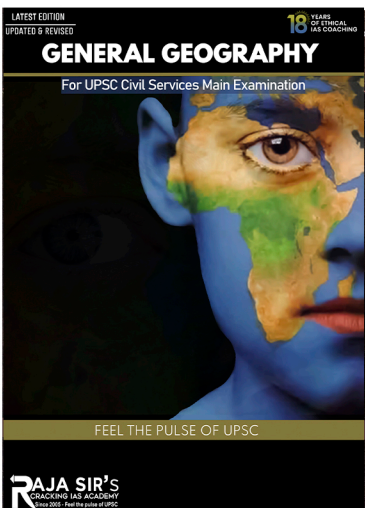
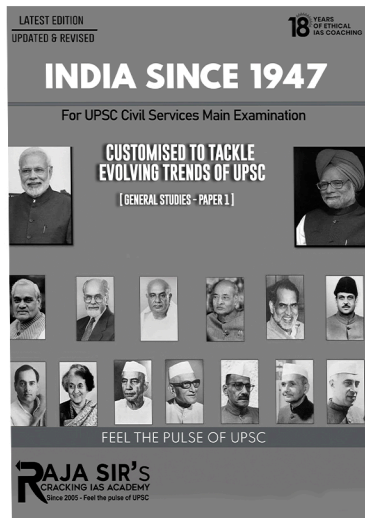
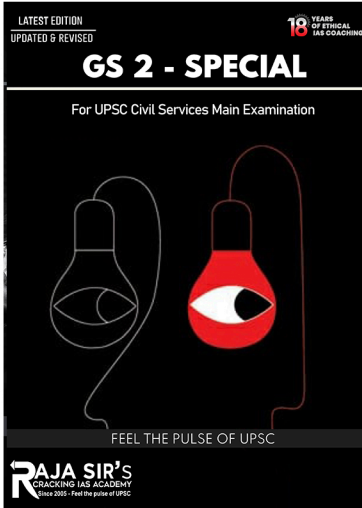


# MONTHLY GENERAL STUDIES QUIZ



Consider the following statements

1. Perfume making in India enters during Vardhana dynasty, under the ruler .....
2. Kannauj in Uttar Pradesh —still known as the perfume capital of India

Select the correct answer using the code given.....

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

**'MPOWER measures' developed by WHO deals...**

- (a) Elimination of malaria
- (b) protect people from tobacco smoke
- (c) declaration of Monkeypox as a Global Public Health Emergency
- (d) Strategy to eliminate of tuberculosis

**Belem Declaration is related to**

- (a) Partnership for critical minerals.
- (b) Gender equality.
- (c) protection of the Amazon forest.
- (d) One health approach.

**Textile**

**Place**

1. Pattu weave - Himachal Pradesh
2. Jamdani weave - West Bengal
3. Apatani weave - Odisha
4. Kasavu weave - Tamil Nadu
5. Pashmina - Jammu & Kashmir

**Which of the following pairs are correctly ?**

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

1. Assertion (A) : Ocean over regions with high concentrations of phytoplankton will appear in green.  
Reason (R) : Chlorophyll in phytoplankton absorbs the red and blue portions of the light spectrum and reflects green light.  
(a) Both Assertion (A) and Reason (R) are the true and Reason (R) is a correct explanation of Assertion (A).  
(b) Both Assertion (A) and Reason (R) are the true but Reason (R) is not a correct explanation of Assertion (A).  
(c) Assertion (A) is true and Reason (R) is false.  
(d) Assertion (A) is false and Reason (R) is true.
2. Kuril islands is a disputed area between  
(a) China - Japan.  
(b) Japan - Russia.  
(c) China - Indonesia.  
(d) Vietnam - China.
3. 'Project NETRA' is  
(a) an early warning system in space to detect debris.  
(b) National Programme For Control Of Blindness  
(c) a geoportal of ISRO with 3D imaging capabilities of India  
(d) a space telescope developed by India
4. 'Road transect method' which is recently seen in news refers to  
(a) type of road surfaces and pavement construction method  
(b) method of warfare.  
(c) to detect concentrations of birds.  
(d) a technique used for flood control.
5. Consider the following statements regarding Lokmanya Tilak  
1. He actively supported the eradication of social evils like untouchability and child marriage and promoted education for women.  
2. He established the Deccan Education Society.  
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.
6. Consider the following statements regarding Bikaner Usta Kala Craft  
1. Bikaner Usta Kala Craft traditionally created on cotton, silk or velvet with a variety of fine stitches.  
2. The weaving of fabrics by hand used to be done by the Meghwal community  
3. It is given GI tag recently  
Select the correct answer using the code given below:  
(a) Only one statement is true.  
(b) Only Two statements are true.  
(c) All three statements are true.

- (d) None of the statements are true.
7. Consider the following statements
1. Perfume making in India enters during Vardhana dynasty, under the ruler Harshvardhana.
  2. Kannauj in Uttar Pradesh — still known as the perfume capital of 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.
8. Yudh Abhyas is a bilateral military exercise between
- (a) India - USA  
(b) India - UK  
(c) India - France  
(d) India - Russia
9. With reference to India, consider the following Central Acts:
1. Import and Export (Control) Act, 1947
  2. Mining and Mineral Development (Regulation) Act, 1957
  3. Customs Act, 1962
  4. Indian Forest Act, 1927
- Which of the above Acts have relevance to/bearing on the biodiversity conservation in the country?
- (a.) 1 and 3 only  
(b.) 2, 3 and 4 only  
(c.) 1, 2, 3 and 4  
(d.) None of the above Acts

10. The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of
- (a) biosphere reserves  
(b) botanical gardens  
(c) national parks  
(d) wildlife sanctuaries
11. Consider the following statements regarding
1. The idea of a constituent assembly was put forward for the first time by Nehru.
  2. The demand for a constituent assembly was accepted by the British through 'August offer' of 1940.
- 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.
12. Consider the following statements
1. The State Governments grant mineral concessions for all the minerals located within the boundary of the State, under the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 and Mineral Concession Rules, 1960.
  2. Approval of the Central Government is necessary for minerals specified in the First Schedule.
- 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.

13. Consider the following statements

1. Superconducting materials creates its own equal and opposite (magnetic field) under magnetic field.
2. The first material to have been discovered to show super conductive properties was Aluminum.

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.

14. Hydrogen breath test is used

- (a) to test for an H. pylori infection
- (b) to measure the amount of alcohol in the blood
- (c) a test for detecting microRNA molecules
- (d) to determine lactose intolerance

15. Consider the following statements:

1. Union Territories are not represented in the Rajya Sabha.
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 Lok Sabha and the Rajya Sabha only.

Which of the statements given above is/are correct?

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

16. Which of the following is/are discoveries of Voyager mission

1. Presence of active volcanoes in Jupiter
2. Titan's atmosphere was composed of 90 per cent nitrogen
3. First human-made object to fly by Neptune

- (a) Only one statement is true.
- (b) Only Two statements are true.
- (c) All three statements are true.
- (d) None of the statements are true.

17. Consider the following statements regarding Hiuen Tsang

1. He attended the court of King Bhaskar Varman.
2. He wrote the book 'si yu ki' after visiting Harshavardhana court

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 regarding

1. Pure tungsten has melting point around 2000 °C.
2. It has very high vapor pressure.
3. Tungsten has great tensile

strength out of all the metals.

Select the correct answer using the code given below:

- (a) Only one statement is true.
- (b) Only Two statements are true.
- (c) All three statements are true.
- (d) None of the statements are true.

19. There is a concern: over the increase in harmful algal blooms in the seawaters of India. What could be the causative factors for this phenomenon?

- 1. Discharge of nutrients from the estuaries.
- 2. Run-off from the land during the monsoon.
- 3. Upwelling in the seas.

Select the correct answer from the codes given below:

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

20. Biomass gasification is considered to be one of the sustainable solutions to the power crisis in India. In this context, which of the following statements is/are correct?

- 1. Coconut shells, groundnut shells and rice husk can be used in biomass gasification.
- 2. The combustible gases generated from biomass gasification consist of hydrogen and carbon dioxide only.
- 3. The combustible gases

generated from biomass gasification can be used for direct heat generation but not in internal combustion engines.

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

21. Consider the following statements

- 1. Pepper is denoted as Yavanika in ancient Sanskrit texts.
- 2. Black pepper requires high rainfall and humidity.

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

- 1. The Lok Sabha has the right to reject the Rajya Sabha's recommendations when it comes to Money Bills.
- 2. No one can introduce or move Money Bills in the Lok Sabha, except on the President's recommendation.

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.

23. Consider the following statements regarding ECOWAS
1. It serves as a peacekeeping force in the region.
  2. It was established through the Treaty of Pelindaba.
- 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. Consider the following statements regarding Cell-free DNA (cfDNA)
1. cfDNA refers to fragments of DNA that exist in body fluids.
  2. 'GEMINI' test utilizes cfDNA sequencing to detect cancer.
- 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.
25. What is/are the advantage/advantages of zero tillage in agriculture?
1. Sowing of wheat is possible without burning the residue of previous crop.
  2. Without the need for nursery of rice saplings, direct planting of paddy seeds in the wet soil is possible.
  3. Carbon sequestration in the soil is possible.
- Select the correct answer using the code given below:
- (a) 1 and 2 only  
(b) 2 and 3 only  
(c) 3 only  
(d) 1, 2 and 3
26. In the Parliament of India, the purpose of an adjournment motion is
- (a) to allow a discussion on a definite matter of urgent public importance  
(b) to let opposition members collect information from the ministers  
(c) to allow a reduction of specific amount in demand for grant  
(d) to postpone the proceedings to check the inappropriate or violent behaviour on the part of some members
27. 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
28. Consider the following statements:



1. Biodiversity is normally greater in the lower latitudes as compared to the higher latitudes.
2. Along the mountain gradients, biodiversity is normally greater in the lower altitudes as compared to the higher altitudes.

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

29. The Himalayan Range is Very rich in species diversity. Which one among the following is the most appropriate reason for this phenomenon?

- (a.) It has a high rainfall that supports luxuriant vegetative growth
- (b.) It is a confluence of different bio-geographical zones
- (c.) Exotic and invasive species have not been introduced in this region
- (d.) It has less human interference

30. Which of the following statements is/are applicable to Jain doctrine?

1. The surest way of annihilating Karma is to practice penance.
2. Every object, even the smallest particle has a soul.
3. Karma is the bane of the soul and must be ended.

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

31. With reference to Convention on International Liability for Damage Caused by Space Objects, consider the following statements:

1. The Convention makes the launching country absolutely liable to pay compensation for any damage caused by its space object.
2. The Liability Convention deals mainly with damage caused by space objects to other space assets, but it also applies to damage caused by falling objects on earth.

Which of the statement(s) given above is/are incorrect?

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

32. Consider the following statements regarding Conjunctivitis

1. Bacterial conjunctivitis is most often caused by staphylococcal or streptococcal bacteria from your own skin or respiratory system.
2. It is the swelling or inflammation of the transparent layer of tissue that lines the inner surface of the eyelid and covers the



- white part of the eye.  
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.
33. 'MPOWER measures' developed by WHO deals with  
(a) Elimination of malaria  
(b) protect people from tobacco smoke  
(c) declaration of Monkeypox as a Global Public Health Emergency  
(d) Strategy to eliminate of tuberculosis
34. Fuego volcano which is recently seen in news located in  
(a) Guatemala  
(b) Peru  
(c) Mexico  
(d) Japan
35. Bhu-Vision which is recently seen in news related to  
(a) Bomber plane of USA  
(b) Soil Testing System in agricultural field  
(c) calculating distances of far away stars.  
(d) collection of evidence gathered on ways to conserve mammal species.
36. Poly WB-1 is related to  
(a) Molecular scissors.  
(b) Bio-degradable Plastic.  
(c) Wave based weapon system.  
(d) Superconducting element.
37. Consider the following agricultural practices:  
1. Contour bunding  
2. Relay cropping  
3. Zero tillage  
In the context of global climate change, which of the above helps/help in carbon sequestration/storage in the soil?  
(a) 1 and 2 only  
(b) 3 only  
(c) 1, 2 and 3  
(d) None of them
38. Deepor Beel, a wetland located in  
(a) West Bengal  
(b) Odisha  
(c) Assam  
(d) Tamil Nadu
39. 'Gnanamuyarchi' which is recently seen in news refers to  
(a) Coin  
(b) Port city  
(c) Painting  
(d) manuscripts
40. Consider the following statements regarding Adichanallur archaeological site  
1. It is an ancient Iron-age burial site located in Tamil Nadu.  
2. It is one of the five sites selected as 'Iconic sites' in the budget 2020-21 for development.  
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.



41. Siang Unying Festival is celebrated in  
(a) Arunachal Pradesh  
(b) Tripura  
(c) Assam  
(d) Nagaland

42. What is the provision to safeguard the autonomy of the Supreme Court of India?

1. While appointing the Supreme Court Judges, the President of India has to consult the Chief Justice of India.
2. The Supreme Court Judges can be removed by the Chief Justice of India only.
3. The salaries of the Judges are charged on the Consolidated Fund of India to which the legislature does not have to vote.
4. All appointments of officers and staffs of the Supreme Court of India are made by the Government only after consulting the Chief Justice of India.

Which of the statements given above is/are correct?

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

43. 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

44. Consider the following statements

1. An amendment to the Constitution of India can be initiated by an introduction of a bill in the Lok Sabha only.
2. If such an amendment seeks to make changes in the federal character of the Constitution, the amendment also requires to be ratified by the legislature of all the States of India.

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

45. 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

46. Consider the following statements regarding Khajuraho
1. It was built by the Chandela Dynasty.
  2. The monuments include Hindu and Jain temples.
  3. The temples are famous for their Nagara-style architectural symbolism.
- Select the correct answer using the code given below:  
(a) Only one statement is true.  
(b) Only Two statements are true.  
(c) All three statements are true.  
(d) None of the statements are true.

47. Consider the following statements regarding Etikoppaka toys
1. These are traditional toys made by artisans of Karnataka.
  2. Etikoppaka toys has Geographical Indication status.
- 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.

48. Consider the following statements
1. Article 162 of the Constitution gives state governments the power to legislate on subjects where a central law does not occupy the field.
  2. The Economic and Social Planning is kept in the Concurrent List in the Constitution of 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.

49. Consider the following statements regarding Antardrishti
1. It is a financial inclusion dashboard launched by RBI.
  2. It will provide the required insight to assess and monitor the progress of financial inclusio
- 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.

50. Neerakshi which is recently seen in news related to  
(a) autonomous Underwater Vehicle  
(b) Port city  
(c) Painting

(d) Air-to-air missile

51. Consider the following statements regarding The Forest Rights Act of 2006

1. It empowered village assemblies to manage forest areas.
2. This law also made trees such as teak, sal and deodar a government property.

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.

52. Niyamgiri judgment is related to

- (a) rights of the tribe on the hills.
- (b) Scope of Article 32.
- (c) individuals right to die
- (d) right to privacy

53. Earendel which is recently seen in news related to

- (a) star
- (b) Port city
- (c) Painting
- (d) Pottery

54. Pilibhit Tiger Reserve is located in

- (a) Uttarakhand
- (b) Gujarat
- (c) Rajasthan
- (d) Uttar Pradesh

55. Consider the following statements

1. The 44th Amendment to the Constitution of India

introduced an Article placing the election of the Prime Minister beyond judicial review.

2. The Supreme Court of India struck down the 99th Amendment to the Constitution of India as being violative of the independence of the judiciary.

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

56. How is permaculture farming different from conventional chemical farming?

1. Permaculture farming discourages monocultural practices but in conventional chemical farming, monoculture practices are predominant.

2. Conventional chemical farming can cause an increase in soil salinity but the occurrence of such phenomenon is not observed in permaculture farming.

3. Conventional chemical farming is easily possible in semi-arid regions but permaculture farming is not so easily possible in such regions.

4. Practice of mulching is very important in permaculture farming but not necessarily so in conventional chemical farming.

Select the correct answer using



the code given below.

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

57. In the areas covered under the Panchayat (Extension to the Scheduled Areas) Act, 1996, what is the role/power of Gram Sabha?

- 1. Gram Sabha has the power to prevent alienation of land in the Scheduled Areas.
- 2. Gram Sabha has the ownership of minor forest produce.
- 3. Recommendation of Gram Sabha is required for granting prospecting licence or mining lease for any mineral in the Scheduled Areas.

Which of the statements given above is/are correct?

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

58. 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

59. A deadlock between the Lok Sabha and the Rajya Sabha calls for a joint sitting of the Parliament during the passage of

- 1. Ordinary Legislation
- 2. Money Bill
- 3. Constitution Amendment Bill

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

60. In India, other than ensuring that public funds are used efficiently and for intended purpose, what is the importance of the office of the Comptroller and Auditor General (CAG)?

- 1. CAG exercises exchequer control on behalf of the Parliament when the President of India declares national emergency/financial emergency.
- 2. CAG reports on the execution of projects or programmes by the ministries are discussed by the Public Accounts Committee.
- 3. Information from CAG reports can be used by investigating agencies to press charges against those who have violated the law while managing public finances.
- 4. While dealing with the audit and accounting of government companies, CAG has certain judicial

powers for prosecuting those who violate the law.

Which of the statements given above is/are correct?

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

61. Consider the following statements regarding

- 1. Antarctic Circumpolar Current is the only current that flows completely around the globe.
- 2. Gulf Stream is a warm current responsible for mild climate at the Eastern coast of North America as well as Europe.

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.

62. MOD 600, MOD 400 Which is recently seen in news related to

- (a) radio collars
- (b) AI Supercomputer.
- (c) Active Pharmaceutical Ingredient
- (d) a deep-space image captured by the James Webb Space Telescope.

63. Consider the following statements regarding Lassa Fever

- 1. Lassa Fever is endemic to parts of Europe.
- 2. It is a single-stranded RNA virus.
- 3. The fever is spread by rats.

Select the correct answer using the code given below:

- (a) Only one statement is true.
- (b) Only Two statements are true.
- (c) All three statements are true.
- (d) None of the statements are true.

64. Consider the following statements regarding Sponge city

- 1. It is an initiative aimed at reducing urban flood risks.
- 2. The sponge city concept comes from Indonesia.

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.

65. Consider the following statements

- 1. The use of the Hindi language, or any other language used for any official purposes of the State, in proceedings in the High Court only after the authorisation by the Governor and with the previous consent of the President.

- 2. District Judge possesses original and appellate jurisdiction in both civil as well as criminal matters.

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.

66. What is the difference between "vote-on-account" and "interim budget"?

1. The provision of a "vote-on-account" is used by a regular Government, while an "interim budget" is a provision used by a caretaker Government.
2. A "vote-on-account" only deals with the expenditure in Government's budget, while an "interim budget" includes both expenditure and receipts.

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. In India, if a religious sect/community is given "the status of a national minority, what special advantages it is entitled to?

1. It can establish and administer exclusive educational institutions.
2. The President of India automatically nominates a representative of the community to Lok Sabha.
3. It can derive benefits from the Prime Minister's 15-Point Programme.

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

68. With reference to the Delimitation Commission, consider the following statements :

1. The orders of the Delimitation Commission cannot be challenged in a Court of Law.
2. When the orders of the Delimitation Commission are laid before the Lok Sabha or State Legislative Assembly, they cannot effect any modifications in the orders.

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

69. According to the Constitution of India, it is the duty of the President of India to cause to be laid before the Parliament which of the following?

1. The Recommendations of the Union Finance Commission
2. The Report of the Public Accounts Committee
3. The Report of the Comptroller and Auditor General
4. The Report of the National Commission for Scheduled Castes

Select the correct answer using the codes given below :

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

70. The distribution of powers between the Centre and the States in the Indian Constitution is based on the scheme provided in the
- Morley-Minto Reforms, 1909
  - Montagu-Chelmsford Act, 1919
  - Government of India Act, 1935
  - Indian Independence Act, 1947
71. Belem Declaration is related to
- Partnership for critical minerals.
  - Gender equality.
  - protection of the Amazon forest.
  - One health approach.
72. Zayed Talwar which is a bilateral exercise between
- India & Kazakhstan
  - India & Oman
  - India & UAE
  - India & Kyrgyzstan
73. Consider the following statements regarding Bio-fuels
- 1st generation bio-fuel is considered to be carbon neutral.
  - Drop-in fuels are fuels made from bio-oil, used cooking oil, acid oil, and non-edible vegetable oils.
- Select the correct answer using the code given below:
- 1 only.
  - 2 only.
  - Both 1 and 2.
  - Neither 1 nor 2.

74. Nagzira Wildlife Sanctuary which is recently seen in news related to
- Karnataka
  - Madhya Pradesh
  - Maharashtra
  - Telangana
75. Consider the following statements regarding Adjournment Sine Die
1. It describes the temporary suspension of a parliamentary session.
  2. There is no specified date for the House to resume.
  3. The presiding officer of a House may convene a meeting of the House at any time after the House has been adjourned sine die or before the day or hour specified for suspension.
- Select the correct answer using the code given below:
- Only one statement is true.
  - Only Two statements are true.
  - All three statements are true.
  - None of the statements are true.
76. Consider the following statements
1. State Governments have the authority to declare drought-affected regions.
  2. The drought notification issued by state government is valid for six months.
- Select the correct answer using the code given below:
- 1 only.
  - 2 only.
  - Both 1 and 2.

(d) Neither 1 nor 2.

77. Which of the following are considered to be an indicator for drought determining

1. Rainfall deviation
2. Dry spell
3. agriculture
4. soil moisture

Select the correct answer using the code given below:

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All the above

78. Mushkbadji which recently got GI tag related to

- (a) Pottery
- (b) rice
- (c) handmade paper
- (d) saree

79. Consider the following statements

1. Hurricanes coming from the eastern Pacific weaken once they enter the central Pacific because of cooler ocean waters, dry air and wind shear.
2. Hurricane John, is an pacific storm which contributed to recent Hawaii wildfires.

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.

80.

Textile	Place
1. Pattu weave	Himachal Pradesh
2. Jamdani weave	West Bengal
3. Apatani weave	Odisha
4. Kasavu weave	Tamil Nadu
5. Pashmina	Jammu & Kashmir

Which of the following pairs are correctly matched?

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

81. BPaL regimen trail recently seen in news related to

- (a) Malaria
- (b) Tuberculosis
- (c) Sickle cell anemia
- (d) Covid 19

82. Consider the following statements

1. Mercury has a very thin atmosphere.
2. BepiColombo mission helped scientists discover that electrons raining down on the planet's surface.
3. Mercury emits an auroral glow in the form of X-rays.

Select the correct answer using the code given below:

- (a) Only one statement is true.



- (b) Only Two statements are true.  
(c) All three statements are true.  
(d) None of the statements are true.
83. Which of the following river was also known as Arjikuja of the Vedas, or Vipasa to the ancient Indians, and the Hyphasis to the Ancient Greeks.  
(a) Ravi  
(b) Satluj  
(c) Beas  
(d) Gandak
84. Lake Titicaca is located between  
(a) Ukraine and Russia  
(b) Peru and Bolivia  
(c) Ukraine and Poland  
(d) Niger and Mali
85. 1. She was a Poet  
2. She joined Mahatma Gandhi's non cooperation movement  
3. She was the first women satyagrahi to court arrest  
Who was the above mentioned freedom fighter ?  
(a) Kanaklata Barua  
(b) Subhadra Kumari Chauhan  
(c) Basanti Devi  
(d) Matangini Hazra
86. Which of the following animal is closest relative of the Elephants?  
(a) Dugongs  
(b) Rock Hyrax  
(c) Wolly mammoth  
(d) Manatee
87. Which of the following is / are the function/functions of the Cabinet Secretariat?  
1. Preparation of agenda for Cabinet Meetings  
2. Secretarial assistance to Cabinet Committees  
3. Allocation of financial resources to the Ministries  
Select the correct answer using the code given below.  
A. 1 only  
B. 2 and 3 only  
C. 1 and 2 only  
D. 1, 2 and 3
88. Consider the following statements : A Constitutional Government is one which  
1. Places effective restrictions on individual liberty in the interest of State Authority  
2. Places effective restrictions on the Authority of the State in the interest of individual liberty  
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
89. Which of the following can be said to be essentially the parts of Inclusive Governance?  
1. Permitting the Non-Banking Financial Companies to do banking  
2. Establishing effective District Planning Committees in all the districts  
3. Increasing the government spending on public health

4. Strengthening the Mid-day Meal Scheme  
Select the correct answer using the codes given below :
- (a) 1 and 2 only  
(b) 3 and 4 only  
(c) 2, 3 and 4 only  
(d) 1, 2, 3 and 4
90. In the areas covered under the Panchayat (Extension to the Scheduled Areas) Act, 1996, what is the role/power of Gram Sabha?
1. Gram Sabha has the power to prevent alienation of land in the Scheduled Areas.
  2. Gram Sabha has the ownership of minor forest produce.
  3. Recommendation of Gram Sabha is required for granting prospecting licence or mining lease for any mineral in the Scheduled Areas.
- Which of the statements given above is/are correct?
- (a) 1 only  
(b) 1 and 2 only  
(c) 2 and 3 only  
(d) 1, 2 and 3
91. Consider the following statements regarding 3D Printing
1. 3D printers build from the bottom up by piling on layer after layer.
  2. These construct the desired object by using subtractive manufacturing processes.
- 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.
92. Consider the following statements regarding Kalka-Shimla Railway
1. The British began to establish the hill station in 1830 after buying land from the Maharaja of Patiala and the Rana of Keonthal.
  2. It is a World Heritage Site declared by UNESCO.
- 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.
93. Sulina Channel connects:
- (a) Spain and Morocco in the Mediterranean Sea  
(b) Sudan and Saudi in the Red Sea  
(c) Major Ukrainian ports on the river to the Black Sea  
(d) Fishing region between Russia and the U.S.A
94. Consider the following statements regarding Blue carbon
1. Blue carbon is the carbon stored in coastal and marine ecosystems.
  2. These ecosystems sequester and store more carbon, per unit area than terrestrial forests.
- 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.

95. A Parliamentary System of Government is one in which
- (a) all political parties in the Parliament are represented in the Government
  - (b) off the Government is responsible to the Parliament and can be removed by it
  - (c) the Government is elected by the people and can be removed by them
  - (d) the Government is chosen by the Parliament but cannot be removed by it before the completion of a fixed term
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101. Consider the following statements regarding Chandrayaan-3
1. It has an onboard generator to provide heat and power to the instruments during night time.
  2. Landing site of Chandrayaan-3 is South Pole of the Moon, mainly because this area gets the most sunlight.
- 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.
102. Sulawesi which is recently seen in news is located in
- (a) Japan  
(b) Indonesia  
(c) Ukraine  
(d) Hawaii
103. Consider the following statements regarding Glucosinolates
1. Glucosinolates are a group of sulphur and nitrogen-containing compounds.
  2. Mustard seeds have high levels of glucosinolates.
- 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.
104. Side Channel Attacks which is recently seen in news related to
- (a) a technique used for flood control.  
(b) method of warfare.  
(c) method of seeding  
(d) method of hacking
105. Dachigam National Park is located in
- (a) Uttarakhand.  
(b) Jammu & Kashmir  
(c) Himachal Pradesh  
(d) Arunachal Pradesh
106. Which of the following are not necessarily the consequences of the proclamation of the President's rule in a state?
1. Dissolution of the State Legislative Assembly
  2. The removal of the Council of Ministers in the State
  3. Dissolution of the local bodies
  4. Takeover of the State administration by the Union Government
- Codes:
- (a) 1 and 3  
(b) 2 and 3  
(c) 1, 2 and 4  
(d) 1, 3 and 4
107. Which of the following are included in Article 78 of the Indian Constitution, defining the duties of the Prime Minister?
1. To communicate to the President all decisions of the Council of Ministers relating to the administration of the

affairs.

2. To take prior presidential sanction for the budget before submitting it in the Parliament.
3. To furnish the information called for by the budget before submitting it in the Parliament.
4. If the President so requires, to submit for consideration of the Council of Ministers a matter on which a Minister has taken a decision without submitting the same for consideration by the Council beforehand.

Codes:

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

108. Who of the following non-members of the Parliament can take part in the proceedings of the Parliament?

1. Chairman of Rajya Sabha
2. Attorney-General
3. Comptroller and Auditor-General

Codes:

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

109. Which of the following pairs are not correctly matched?

Call Attention Motion: To draw attention of the Minister on a matter of urgent public importance.

Adjournment Motion : To adjourn the house before the

expiry of the time.

Privilege Motion: To draw attention of the Speaker towards incorrect/ incomplete answer by a Minister.

Cut motion : The move a proposal to reduce expenditure in the Budget Proposals.

Codes:

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

110. Consider the following statements:

1. Articles 64 and 89 (1) of the Constitution of India provide that the Vice-President of India shall be Ex-officio Chairman of the Council of States and shall not hold any other office of profit.

2. There is no such office as that of the Vice-President of India in other Parliamentary systems of Governments in Commonwealth countries.

Codes:

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

111. Consider the following statements regarding *African Swine Fever (ASF)*

1. It a double-stranded DNA Virus.
2. It is not known to affect human beings.

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.
112. Consider the following statements regarding *Dibang River*
1. It flows through Arunachal Pradesh and Assam states of India.
  2. It is an upstream tributary of Brahmaputra.
- 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.
113. Piripkura Tribe are native to  
(a) Kenya  
(b) Brazil  
(c) Papa new Guinea  
(d) Mongolia
114. Consider the following statements regarding Bisphenol A (BPA)
1. BPA shortens the mosquito life cycle
  2. It is used for hardening plastics
- 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. Iriomote Island was in the news recently is located in:  
(a) Hawaii  
(b) Japan  
(c) Indonesia  
(d) South Korea
116. Which one of the following has been constituted under the Environment (Protection) Act, 1986?  
(a) Central Water Commission  
(b) Central Ground Water Board  
(c) Central Ground Water Authority  
(d) National Water Development Agency
117. In the nature, which of the following is/are most likely to be found surviving on a surface without soil?  
1. Fern  
2. Lichen  
3. Moss  
4. Mushroom
- Select the correct answer using the code given below.  
(a) 1 and 4 only  
(b) 2 only  
(c) 2 and 3  
(d) 1, 3 and 4
118. Recently, "oilzapper" was in the news. What is it?  
(a) It is an eco-friendly technology for the remediation of oily sludge and oil spills.  
(b) It is the latest technology developed for under sea oil exploration.  
(c) It is a genetically engineered high biofuel yielding maize variety.  
(d) It is the latest technology to control the accidentally caused flames from oil wells.

119. Vultures which used to be very common in Indian countryside some years ago are rarely seen nowadays. This is attributed to
- (a) the destruction of their nesting sites by new invasive species.
  - (b) a drug used by cattle owners for treating their diseased cattle.
  - (c) scarcity of food available to them.
  - (d) a widespread, persistent and fatal disease among them.

120. The "Red Data Books" published by the International Union for Conservation of Nature and Natural Resources (IUCN) contain lists of

1. Endemic plant and animal species present in the biodiversity hotspots.
2. Threatened plant and animal species.
3. Protected sites for conservation of nature and natural resources in various countries.

Select the correct answer using the codes given below;

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

121. A sandy and saline area is the natural habitat of an Indian animal species. The animal has no predators in that area but its existence is threatened due to the destruction of its habitat. Which one of the following could be that animal?
- (a) Indian wild buffalo
  - (b) Indian wild ass

- (c) Indian wild boar
- (d) Indian gazelle

122. Consider the following statements about Participatory Notes (P-notes):

1. P-notes are issued by Securities and Exchange Board of India (SEBI) for the participation of Foreign Institutional Investor (FII).

2. There is a view that it is being used in money laundering with wealthy Indians.

3. RBI has taken a number of steps to tighten rules on P-Notes to curb the anti-social activities. Select the correct answer given below:

- (a) 2, 3 only.
- (b) 1, 2 only.
- (c) 2 only.
- (d) All the above.

123. Chlorofluorocarbons, known as ozone-depleting substances, are used

1. In the production of plastic foams
2. In the production of tubeless tyres
3. In cleaning certain electronic components
4. As pressurizing agents in aerosol cans

Which of the statements given above is/are correct?

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

124. Regarding "carbon credits", which one of the following statements is not correct?

- (a) The carbon credit system

- was ratified in conjunction with the Kyoto Protocol
- (b) Carbon credits are awarded to countries or groups that have reduced greenhouse gases below their emission quota
- (c) The goal of the carbon credit system is to limit the increase of carbon dioxide emission
- (d) Carbon credits are traded at a price fixed from time to time by the United Nations Environment Programme
125. The formation of ozone hole in the Antarctic region has been a cause, of concern. What could be the reason for the formation of this hole?
- (a) Presence of prominent tropospheric turbulence; and inflow of chlorofluorocarbons
- (b) Presence of prominent polar front and stratospheric clouds; and inflow of chlorofluorocarbons
- (c) Absence of polar front and stratospheric clouds; and inflow of methane and chlorofluorocarbons.
- (d) Increased temperature at polar region due to global warming
126. Biodiversity forms the basis for human existence in the following ways
1. Soil formation
  2. Prevention of soil erosion
  3. Recycling of waste
  4. Pollination of crops
- (a) 1, 2 and 3 only
- (b) 2, 3 and 4 only
- (c) 2 and 3 only
- (d) 1, 2, 3 and 4
127. What would happen if phytoplankton of an ocean is completely destroyed for some reason?
1. The ocean as a carbon sink would be adversely affected.
  2. The food chains in the ocean would be adversely affected.
  3. The density of ocean water would drastically decrease.
- Select the correct answer using the codes given below:
- (a) 1 and 2 only
- (b) 2 only
- (c) 3 only
- (d) 1, 2 and 3
128. 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
129. Other than resistance to pests, what are the prospects for which genetically engineered plants have been created?
1. To enable them to withstand drought
  2. To increase the nutritive value of the produce
  3. To enable them to grow and do photosynthesis in spaceships and space stations
  4. To increase their shelf life
- Select the correct answer using the codes given below:
- (a) 1 and 2 only



- (b) 3 and 4 only  
(c) 1, 2 and 4 only  
(d) 1, 2, 3 and 4
130. The increasing amount of carbon dioxide in the air is slowly raising the temperature of the atmosphere, because it absorbs
- (a) the water vapour of the air and retains its heat  
(b) the ultraviolet part of the solar radiation  
(c) all the solar radiations  
(d) the infrared part of the solar radiation
131. What is Rio+20 Conference, often mentioned in the news?
- a) It is the United Nations Conference on Sustainable Development  
b) It is a Conference of the Inter governmental panel on Climate Change.  
c) World Summit on Sustainable Development  
d) United Nations Conference on Environment and Development (UNCED)
132. With reference to the radioactivity, which of the following statements is/are correct?
1. Radioactivity is the act of emitting radiation spontaneously and is a nuclear property.
  2. Atomic bombs are prepared on the principle of nuclear fusion.
- Select the correct answer using the given below.  
(a) 1 only
- (b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
133. When does a nuclear plant achieve criticality.?
- a) When each fission event releases a sufficient number of neutrons to sustain an ongoing series of reactions.  
b) When each fission event releases a sufficient number of protons to sustain an ongoing series of reactions.  
c) When each fission event releases a sufficient number of electrons to sustain an ongoing series of reactions.  
d) When each fission event releases a sufficient number of muons to sustain an ongoing series of reactions.
134. The Kigali agreement was an amendment to which of the following international conventions aimed at conserving the environment?
- (a) Montreal Protocol  
(b) Stockholm Convention  
(c) Bonn Convention  
(d) Kyoto Protocol
135. Consider the following statements on Zonal Councils in India:
1. Zonal Councils were set up under the provisions of the States Reorganization Act.
  2. Zonal Councils discuss various issues of common interest in the field of planning, river waters, inter-state transport.
  3. They enable the Centre and States to co-operate in

evolving uniform policies in social and economic matters.

4. Their decisions are binding on Centre as well as on State governments.

Codes:

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

136. According to the Constitution of India, for introduction of which of these Bills, previous sanction or recommendation of the President of India is required?

1. Bills for the formation of new States or reorganisation of State boundaries.
2. Money Bills.
3. State Bills imposing restrictions upon the freedom of trade.
4. Bills involving expenditure from the Consolidated Fund of India.

Codes:

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

137. Assertion (A): All legislatures are non-sovereign in character.

Reason (R): Presidential form government is an anti-thesis of parliamentary sovereignty.

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A).  
(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).

- (c) (A) is true but (R) is false.  
(d) (A) is false but (R) is true.

138. Assertion (A): Money Bill cannot be introduced in the Councils of State (Rajya Sabha).

Reason (R): Finance Minister belongs only to the House of the People (Lok Sabha).

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A).  
(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).  
(c) (A) is true but (R) is false.  
(d) (A) is false but (R) is true.

139. Consider the following statements:

1. The Vice-President of India may be removed from his office by a resolution of the Council of States passed by a majority of all the then members of the Council and agreed to by the House of the People.
2. An election to fill a vacancy caused by the expiration of the term of office of Vice-President shall be completed before the expiration of the term.
3. The Vice-President shall, notwithstanding the expiration of his term, continue to hold office until his successor enters upon his office.

Codes:

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

140. Which of the following global biodiversity hot spots are located in India either partly/completely?  
i) Eastern Himalayas  
ii) Indo-Burma Region  
iii) Western Ghats  
iv) Sundaland  
(a) i and iii only  
(b) ii, iii and iv  
(c) i, iii and iv  
(d) i, ii, iii and iv
141. Proclamation of emergency by the President of India can be made on the written advice of the Cabinet only. This provision has been added  
(a) after 44th Constitutional Amendment.  
(b) after 42nd Constitutional Amendment.  
(c) by the Constituent Assembly in the Constitution of India.  
(d) by the Supreme Court of India. in 1975.
142. The function of Pro-Term Speaker is  
(a) To conduct the proceedings in the absence of speaker  
(b) Officiate as speaker when speaker is unlikely to be elected  
(c) Swear in members and hold charge till a regular speaker is elected.  
(d) Checks if the election certificates of the members are in order.
143. Which of the following are termed as the privileges of the members of the Parliament?

1. Freedom of speech in Parliament.
2. Immunity to a member from any proceedings in any court in respect of anything said or any vote given by him in Parliament or any committee thereof.
3. Prohibition on the courts to inquire into proceedings of Parliament.
4. Freedom from arrest in civil cases during, forty days before and after, the parliamentary session.

Codes:

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

144. Which of the following customs and conventions are associated with Parliament of India?
1. Rulings given by the Chair may be criticized, directly or indirectly, only outside the house.
  2. A member should not give publicity in the press to the discussions held by him with the Speaker in his chamber.
  3. Information given to members in confidence or by virtue of their being members of committees should not be divulged.
  4. A notice should not be given publicity until it has been admitted by the speaker and circulated to members.

Codes:

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

- (d) 1, 2, 3 and 4
145. Which of the following types of authority are attributed to the President of India?
1. Real and Popular
  2. Titular and de jure
  3. Political and Nominal
  4. Constitutional and Nominal
- Codes:
- (a) 1 and 4  
(b) 2 and 4  
(c) 1 and 3  
(d) 2 and 3
146. Consider the following statements regarding Hoolock gibbons
1. Hoolock gibbons are the India's only ape.
  2. It is marked as endangered due to habitat loss and habitat fragmentation.
- 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.
147. Consider the following statements:
1. If a Bill other than Money Bill is returned by the President of India for reconsideration of the Houses and the Bill is again passed by both Houses of Parliament with or without amendment and again presented to the President, then it is not obligatory upon him to declare his assent to it.
  2. A Bill for the purpose of

formation of new States and alternation of areas, boundaries or names of existing States can be introduced in either House of Parliament and no recommendation of the President is required for the introduction of such a Bill.

Codes:

- (a) 1 only  
(c) Both 1 and 2  
(b) 2 only  
(d) Neither 1 nor 2
148. A member of Parliament can be disqualified on the ground of defection provided
1. he leaves the party as a result of a split in the party along with members who constitute only one-third of the total membership of the party.
  2. a nominated member joins any political party after the expiry of six months from the date on which he takes his seat in the house.
  3. he gives up membership of the political party on whose ticket he is elected.
  4. he votes or abstains from voting in the house against the direction of his political party without prior permission.
- Codes:
- (a) 1 and 2  
(b) 2 and 3  
(c) 3 and 4  
(d) 1 and 4
149. Which of the following are the exclusive powers of the Lok

Sabha?

1. To introduce money bills
2. To ratify the declaration of Emergency
3. To pass a motion of non-confidence against the Council of Ministers
4. To impeach the President

Codes:

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

150. Which of the following statements are true?

1. According to the order of

precedence Lok sabha Speaker is the fifth in position.

2. Speaker appoints the members of the various committees of the Parliament.

3. On election as the Speaker, he/she has to resign from the political party on whose ticket he/she was elected.

Codes:

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

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**ANSWERS**

1.	a	<p><b>Climate change is altering the colour of the oceans: What a new study says</b></p> <p>Although the change in the colour of the oceans doesn't impact marine life directly, it indicates that marine ecosystems are in a state of flux and they could completely go out of balance in the future, which could severely affect ocean life and humans dependent on them.</p> <p>The colour of the Earth's oceans has significantly altered over the past two decades, most likely due to human-induced climate change, according to a new study. Over 56 per cent of the oceans, more than the total land area on the planet, has experienced the shift in colour, it added.</p> <p><i>What makes the oceans colourful</i></p> <ul style="list-style-type: none"><li>• In most regions across the world, the oceans appear blue or navy blue for a reason. This happens due to "the absorption and scattering of light," according to a report by NASA. When the sunlight falls on deep and clear water, colours with longer wavelengths, such as red, yellow and green, are absorbed by the water molecules but blue and violet, which have a much shorter wavelength, are reflected back.</li><li>• But when the water isn't deep or clean, an ocean can appear to be of a different colour.</li><li>• For instance, along Argentina's coastline, where major rivers merge into the Atlantic Ocean, the ocean exudes a brown tint because of dead leaves and sediments spewing from the rivers.</li><li>• In other parts of the world, the oceans appear green, which happens due to the existence of phytoplankton on the upper</li></ul>
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surface of the water.

- Phytoplankton are microscopic marine algae that contain the green-coloured pigment chlorophyll. The pigment helps them absorb sunlight, which they use to capture carbon dioxide from the atmosphere and convert it into sugars. Moreover, chlorophyll absorbs the red and blue portions of the light spectrum — or photosynthesis — and reflects green light
- So, the ocean over regions with high concentrations of phytoplankton will appear as certain shades, from blue-green to green, depending upon the type and density of the phytoplankton population there

Moderate Resolution Imaging Spectroradiometer (MODIS), aboard NASA's Aqua satellite, which has been monitoring ocean colour since 2002 — the measurements are taken in terms of the amount of light coming off the surface of the oceans, at all seven of the different wavelengths of light, from violet to red.

Then, to check if the phenomenon has occurred due to **climate change**, researchers used a climate model – a computer representation of the Earth. this model simulated the planet's oceans under two scenarios: one with the addition of greenhouse gases, and the other without it. The greenhouse-gas model predicted that a significant trend should show up within 20 years and that this trend should cause changes to ocean colour in about 50 percent of the world's surface oceans

The study says one of the most affected areas is the Tropical ocean regions, near the equator, where the water is turning from blue to green.

The findings suggest that a shift in colour is happening in those regions

		<p>where the oceans are getting more stratified.</p> <p><b>Ocean stratification</b> is the natural separation of an ocean's water into horizontal layers by density, with warmer, lighter, less salty, and nutrient-poor water layering on top of heavier, colder, saltier, nutrient-rich water. Usually, ocean ecosystems, currents, wind, and tides mix these layers, creating smoothed temperature and salinity transitions between them.</p>
2.	b	<ul style="list-style-type: none"> <li>● The Kuril Islands are stretched from the <b>Japanese island of Hokkaido</b> to the southern tip of <b>Russia's Kamchatka Peninsula</b> separating the <b>Okhotsk Sea from the North Pacific Ocean</b>.</li> <li>● The chain is part of the belt of <b>geologic instability circling the Pacific (Ring of Fire)</b> and contains at least 100 volcanoes, of which <b>35 are still active, and many hot springs</b>.</li> <li>● <b>Significance:</b> <ul style="list-style-type: none"> <li>○ <b>Natural resources:</b> The islands are <b>surrounded by rich fishing grounds</b> and are thought to have offshore reserves of oil and gas.</li> <li>○ <b>Strategic Importance:</b> Russia has <b>deployed missile systems in the region</b>. Russia also plans a submarine project and intends to prevent any American military use of the islands.</li> <li>○ <b>Cultural Importance:</b> The <b>Japanese</b> people, especially conservatives in Hokkaido, are <b>emotionally attached to the islands</b>.</li> </ul> </li> </ul> <p><i>History of the Kuril Islands Dispute</i></p> <ul style="list-style-type: none"> <li>● The Kuril Islands dispute between <b>Japan and Russia</b> is over the</li> </ul>



**sovereignty of South Kuril Islands.**

- The South Kuril Islands comprise **Etorofu island, Kunashiri island, Shikotan island and the Habomai island.**
  - These islands are **claimed by Japan but occupied by Russia** as the successor state of the Soviet Union.
- **Treaty of Shimoda (1855):**
  - In **1855**, Japan and Russia concluded the **Treaty of Shimoda**, which gave control of the four southernmost islands to Japan and the remainder of the chain to Russia.
- **Treaty of Saint Petersburg (1875):**
  - In the **Treaty of Saint Petersburg**, signed between the two countries in **1875**, **Russia ceded possession of the Kurils to Japan in exchange for uncontested control of Sakhalin Island.**
  - However, these islands were again seized by the Soviet Union at the end of **World War II.**
- **Yalta Agreement (1945):**
  - In **1945**, as part of the **Yalta agreements (formalized in the 1951 Treaty of Peace with Japan)**, the islands were ceded to the Soviet Union, and the Japanese population was repatriated and replaced by the Soviets.
- **San Francisco Peace Treaty (1951):**
  - The **San Francisco Peace Treaty** signed between the Allies and Japan in 1951, states that Japan must give up “all right, title and claim to the Kuril Islands”, **but it also does not recognize the Soviet Union's sovereignty over them.**
    - In World War II, the main combatants were:
      - **Axis powers** (Germany, Italy, and Japan)
      - **Allies** (France, Great Britain, the United

States, the Soviet Union, and, to a lesser extent, China).

- **Japan-Soviet Joint Declaration (1956):**

- The dispute over the islands has **prevented the conclusion of a peace treaty to end World War II.**
- In 1956, diplomatic ties were restored between Japan and Russia by **Japan-Soviet Joint Declaration.**
- During that time, Russia offered to give away the two islands closest to Japan. But the offer was rejected by Japan as the two islands constituted **only 7% of the land** in question.

*Current Scenario*

- Despite a series of agreements, the dispute continues, and **Japan still claims historical rights to the southernmost islands** and has tried repeatedly to persuade the Soviet Union and, from 1991, Russia to return those islands to Japanese sovereignty.
- In **2018**, the Russian President and the Japanese Prime Minister (PM) met on the sidelines of the **East Asia Summit** and decided to end the territorial dispute by the Japanese PM agreeing to negotiate based on the 1956 declaration.
  - This implicitly showed that Japan has given up the two islands to maintain peace with Russia.
- However, Russia indicated that the joint declaration signed by Japan and the Soviet Union in 1956 **neither mentions a basis for returning Habomai and Shikotan nor clarifies which country has sovereignty over the islands.**
- Further, in **2019**, the Japanese PM made it clear that the country is **not in the favour of withdrawing control over the Islands.**

		<ul style="list-style-type: none"> <li>• Japan also believes that the islands are an inherent part of the nation's territory.</li> <li>• Therefore, <b>Japan mentioned that it aims to sign the peace treaty after the territorial issue is resolved.</b></li> </ul>
3.	a	an early warning system in space to detect debris and other hazards to Indian satellites.
4.	c	<p><b>Experts say 'road transect' method is most effective for vulture population estimation in Mudumalai Tiger Reserve</b></p> <ul style="list-style-type: none"> <li>• A group of researchers has ascertained that the road transect method, is the most effective method to estimate vulture populations in the Mudumalai Tiger Reserve (MTR), home to the southernmost, viable populations of at least three species of endangered vultures in India.</li> <li>• Road transects are a sampling methodology between two points along which a survey is undertaken to identify the species and number of individual animals seen along the line. If suitably planned, road transects can cover large areas with little chance of individuals being double-counted by volunteers undertaking the count.</li> <li>• A comparative population estimation method was conducted due to the challenges and limitations of each of these methods, including "limited access for assessing breeding populations because they are mostly located in inhospitable and undulating terrain that is difficult to cover by <b>road transect method</b>, nest counts being only viable option for nesting populations and carcass monitoring being dependant on the wildlife kills of cattle."</li> <li>• Of the three estimation methods evaluated, the researchers</li> </ul>

		<p>found that the road transect method was the most accurate method to estimate the vulture population in MTR. Road transects were successful in identifying all four species of vultures seen in the MTR —the white-rumped vulture, long-billed vulture, Asian king vulture and the Egyptian vulture. This would have been difficult otherwise, as only the nesting sites of white-rumped and long-billed vultures are accessible to researchers in MTR, while the nesting site of the Asian king vulture is yet to be identified and the Egyptian vulture is known to have stopped nesting in the Nilgiris altogether.</p> <ul style="list-style-type: none"> <li>• As vultures in general, move in and out of a territory, the road transect method is very effective in determining population change over a time.</li> <li>• It may be noted that the states of Tamil Nadu, Kerala and Karnataka recently conducted a synchronous vulture census.</li> </ul>
5.	c	<p><i>Lokmanya Tilak</i></p> <ul style="list-style-type: none"> <li>• <b>Bal Gangadhar Tilak</b>, commonly known as Lokmanya Tilak, was a prominent <b>Indian nationalist, freedom fighter, social reformer</b>, and <b>political leader</b> during the Indian independence movement.</li> <li>• He was one of the prime architects of modern India and probably the <b>strongest advocate of Swaraj or Self Rule for India.</b></li> <li>• He <b>is known for his slogan, "Swaraj is my birthright and I shall have it."</b></li> <li>• He was <b>born as Keshav Gangadhar Tilak</b> and his <b>followers bequeathed upon him the title of 'Lokmanya'</b>, meaning he who is revered by the people.</li> <li>• <b>Extremist:</b> <ul style="list-style-type: none"> <li>○ He was considered a <b>radical Nationalist.</b></li> </ul> </li> </ul>

- The **British Government** termed him the "**Father of Indian Unrest**".

- **Organisations:**

- He **joined the Indian National Congress Party in the year 1890**.
- He also **helped found the All India Home Rule League** in 1916–18 with G. S. Khaparde and Annie Besant.
- **Tilak started his Home Rule League in Maharashtra, Central Provinces, and Karnataka and Berar region**. Besant's League was active in the rest part of India. It aimed to advocate for self-rule and **raise public awareness about India's right to govern itself**.

- **Literary works:**

- Tilak was a prolific writer and journalist. He **used his newspaper, "Kesari" (meaning Lion) in Marathi and later "Maratha" in English to disseminate nationalist ideas**.
- Some of his notable literary works include "**The Arctic Home in the Vedas**," where he presented his theory that the Vedas originated in the Arctic region, and "**Shrimad Bhagavad Gita Rahasya**," an interpretation of the Bhagavad Gita from a nationalist perspective.

- **Educationist:**

- Tilak believed in the power of education and **established the Deccan Education Society in Pune in 1884**.
- The **society founded Fergusson College and the New English School**, which played crucial roles in promoting modern education in Maharashtra.
- **Tilak taught mathematics at Fergusson College**.

- **Social Reform:** Lokmanya Tilak was also an advocate of social reform. He actively **supported the eradication of social evils**

		<p>like untouchability and child marriage and promoted education for women.</p> <ul style="list-style-type: none"> <li>● <b>Lal-Bal-Pal:</b> He had popular leaders such as <b>Bipin Chandra Pal</b> and <b>Lala Lajpat Rai</b> as his political companions, and the three were popularly known as the 'Lal-Bal-Pal triumvirate.'</li> <li>● <b>Imprisonments:</b> He was arrested for sedition on multiple occasions. His most prolonged incarceration lasted from <b>1908 to 1914</b>, during which he wrote the famous book "Gita Rahasya" (The Secret of the Bhagavad Gita).</li> <li>● In 1916 he concluded the <b>Lucknow Pact</b> with <b>Mohammed Ali Jinnah</b>, which provided for <b>Hindu-Muslim unity in the nationalist struggle.</b></li> </ul>
6.	a	<p><b>GI tags for Goan mangoes and bebinca, crafts from Rajasthan and U.P.</b></p> <p>Seven products from across India, including four from Rajasthan, were given the Geographical Indication (GI) tag by the Geographical Indications Registry in Chennai.</p> <p>The GI tags were secured by '<b>Jalesar Dhatu Shilp</b>' (a metal craft), '<b>Goa Mankurad Mango</b>', '<b>Goan Bebinca</b>', '<b>Udaipur Koftgari Metal Craft</b>', '<b>Bikaner Kashidakari Craft</b>', '<b>Jodhpur Bandhej Craft</b>', and '<b>Bikaner Usta Kala Craft</b>'.</p> <p>The application for the mankurad mango was filed by the All Goa Mango Growers Association, Panaji. This variety of mango is also known as malcorada, cardozo mankurad, corado, and Goa mankur. The Portuguese named the fruit malcorada, which means 'poor coloured', and with time, it became mankurad <i>aamo</i> (mango) in Konkani.</p>

The application for the Goan bebinca was filed by the All Goa Bakers and Confectioners Association. Bebinca, also known as the 'queen of Goan desserts', is a traditional Indo-Portuguese pudding.

At Jalesar in Uttar Pradesh's Etah district, once the capital of Magadha king Jarasandha, over 1,200 small units are engaged in making 'Jalesar Dhatu Shilp', including *ghungrus* (anklets), *ghantis* (bells) and other decorative metal craft and brassware. The Thatheras community, which resides in a *mohalla* (locality) named Hathuras, makes these products.

#### *Rajathan's crafts*

- Four different crafts from Rajasthan given GI tags is 'Udaipur Koftgari Metal Craft', weapons are exquisitely ornamented by a complicated process of etching designs, heating, and then cooling, intertwined with embedding gold and silver wire into the metal, pressing and flattening it to a smooth surface with moonstone, and finally polishing it.
- Bikaner Kashidakari Craft traditionally created on cotton, silk or velvet with a variety of fine stitches and mirror-work, mainly for objects associated with marriage, especially gift items. The mirrors are believed to repel the 'evil eye' with their reflective surfaces. The weaving of fabrics by hand used to be done by the **Meghwal community** in Bikaner and nearby districts.
- The 'Jodhpur Bandhej Craft' is the Rajasthani art of tying and dyeing. Bandhej is one of the most famous textile art forms of Rajasthan. The fabrics used for Bandhej are muslin, silk and voile. Cotton thread is used for tying the fabric.
- The 'Bikaner Usta Kala Craft' is also known as gold *nakashi* or gold *manauti* work due to the prominence of its long-lasting golden colour. Untreated raw camel hide is processed and

		<p>moulded by the Dapgar community of leather craftspeople for the requirements of the Usta.</p>
7.	c	<p>By about 500 CE, perfume making in India enters the historical record. Kannauj in Uttar Pradesh — still known as the perfume capital of India — was then the capital of the Vardhana dynasty. The rich alluvial soil of this region, abutting the Ganga and Gomti rivers, was well suited to growing flowers such as the damask rose and jasmine, and perfumes were produced here under the founding ruler Harshvardhana, in the 6th and 7th centuries.</p> <p>The first alcohol based perfume came nearly a thousand years later. Hungary Water was created for Queen Elizabeth of Hungary in 14th-century Europe, combining rosemary scented oils with alcohol. It was a precursor to Eau de Cologne, which would be invented in the early 18th century in the German city of Cologne (then called Koln).</p> <p>By the 16th century, attar (derived from the Persian “atr”, for fragrance) had become an essential element of court etiquette under the Mughals. Historians have noted how the emperor Akbar (1542-1605) dedicated an entire department to developing scents to be used as perfumes.</p> <p>The Ain-e-Akbari (or Constitution of Akbar), a contemporary, commissioned chronicle of his rule, describes Akbar’s penchant for fragrances, and his standing instruction that furniture and doors in his palaces be daubed with perfume.</p> <p>By the late 19th century, Western imports from mechanised factories were starting to hurt the bottomlines of the labour- and cost-intensive attar industry in India. Even today, attar makers remain in Kannauj, distilling long-lasting floral and musky perfumes from organic raw</p>



		materials, to evoke the aura of a long-lost past.
8.	a	<p><b>INDO - US JOINT TRAINING EXERCISE TO COMMENCE IN UTTARAKHAND</b></p> <p><i>Yudh Abhyas</i></p> <ul style="list-style-type: none"> <li>● It is a <b>joint military exercise conducted annually</b> between the <b>armies of India and USA.</b></li> <li>● It has <b>been ongoing since 2004.</b></li> <li>● It is designed to <b>promote cooperation between the two militaries</b> while sharing training, cultural exchanges, and building joint operating skills.</li> <li>● <b>Yudh Abhyas 2023:</b> <ul style="list-style-type: none"> <li>○ This marks the <b>19th edition of the joint exercise</b>, which is <b>hosted alternately</b> between both countries.</li> <li>○ The training schedule <b>focuses on the employment of an integrated battle group under Chapter VII of the UN Mandate.</b></li> <li>○ The schedule will <b>include all operations related to peacekeeping and peace enforcement.</b></li> <li>○ The joint exercise will also <b>focus on Humanitarian Assistance and Disaster Relief (HADR)</b> operations.</li> <li>○ Troops from both nations will <b>practice launching swift and coordinated relief efforts</b> in the wake of any natural calamity.</li> <li>○ The exercise will <b>see the employment of the coalition-integrated battle</b> group in the mountain and extreme climatic conditions.</li> <li>○ The elements like <b>heliborne or airborne will be</b></li> </ul> </li> </ul>

		<p><b>employed.</b></p> <p><i>Exercises between India and USA:</i></p> <ul style="list-style-type: none"> <li>● <b>Army: Yudh Abhyas and Vajra Prahar</b></li> <li>● <b>Navy: MALABAR</b> (Multilateral)</li> <li>● <b>Air Force: Cope India, Red Flag</b> (Multilateral)</li> </ul>
9.	c	
10.	a	
11.	b	<p>The idea of a constituent assembly was put forward for the first time by MN Roy. In 1935, the Indian National Congress (INC), for the first time, officially called for a constituent assembly to frame a constitution for India. In 1938, J Nehru made this emphatic statement regarding the constitution- 'The constitution of free India must be framed, without outside interference, by a constituent assembly elected on the basis of adult franchise'</p> <p>The demand for a constituent assembly was accepted for the first time by the British through their 'August offer' of 1940. Eventually, a constituent assembly was established under the provisions of the Cabinet Mission plan.</p>
12.	c	<ul style="list-style-type: none"> <li>● The State Governments grant mineral concessions for all the minerals located within the boundary of the State, under the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 and Mineral Concession Rules, 1960.</li> <li>● However, for <b>minerals specified in the First Schedule</b> to the Mines and Minerals (Development and Regulation) Act, 1957</li> </ul>

		<p><b>approval of the Central Government is necessary. Schedule I</b> contains minerals such as coal and lignite, minerals of the “rare earths” group containing Uranium and Thorium.</p> <ul style="list-style-type: none"> <li>• Also, the <b>Central Government notifies certain minerals as ‘minor’ minerals</b> from time to time for which the absolute powers for deciding on procedures of seeking applications for and <b>granting mineral concessions</b>, fixing rates of royalty, dead rent, and power to revise orders rest only with the <b>State Government</b>. <ul style="list-style-type: none"> <li>○ <b>Example of minor minerals include</b> building stones, gravel, ordinary clay, ordinary sand.</li> </ul> </li> </ul>
13.	a	<p><a href="https://indianexpress.com/article/explained/explained-sci-tech/room-temperature-superconductivity-elusive-holy-grail-8872945/">https://indianexpress.com/article/explained/explained-sci-tech/room-temperature-superconductivity-elusive-holy-grail-8872945/</a></p>
14.	d	<p>Hydrogen breath test to determine lactose intolerance, these tests do not have much use in clinical practice.</p> <p><a href="https://www.thehindu.com/sci-tech/health/the-curious-case-of-lactose-intolerance/article67150820.ece">https://www.thehindu.com/sci-tech/health/the-curious-case-of-lactose-intolerance/article67150820.ece</a></p>
15.	d	
16.	c	<p><a href="https://indianexpress.com/article/explained/explained-sci-tech/voyager-mission-8874644/">https://indianexpress.com/article/explained/explained-sci-tech/voyager-mission-8874644/</a></p>
17.	c	<p>Hiuen Tsang, or Xuanzang, was a Chinese Buddhist monk and scholar who visited India during the reign of King Harsha Vardhan in the 7th century A.D.</p>

- Hiuen Tsang (Xuanzang) is famous for his extensive travels to India during the Tang Dynasty (618-907 CE). He also tried efforts to revive Buddhism in his native Tibet during the Yuan Dynasty.
- He translated many Buddhist texts from Sanskrit into Chinese. He increased their availability in China and contributed to spreading Buddhist philosophy and thought.
- Hiuen Tsang describes in detail the various kingdoms and rulers he met on his travels. He also describes the customs, beliefs, and practises of the people he met.
- He also discusses the economic conditions of the time, including descriptions of agriculture, trade, and commerce in various parts of India.
- In short, his travels and writings helped spread Buddhism and its practices throughout Asia. His legacy continues to inspire academics and Buddhists today.

Hiuen Tsang was born in 602 A.D. (debatable) in Guoshi Town Luozhou (near present-day Luoyang, Henan, China). He died in China in 664 A.D. Hiuen Tsang grew up in a family of scholars in Henan province but became interested in Buddhism at a young age. He converted to Buddhism at a young age and studied Buddhist texts and philosophy.

He travelled to Sichuan (where the main city, Chengdu, was a seat of Sanskrit learning then as it is today) and other places in China. He then embarked on his journey to India. Later, he decided to embark on a journey to India in 627 or 629 AD, at 27, to study with renowned Buddhist teachers such as Silabhadra and obtain Buddhist texts that were not yet available in China.

Finally, Hiuen Tsang arrived in India in 630 AD. He studied Buddhism

		<p>for many years at the Nalanda monastery in Bihar, one of ancient India's most renowned Buddhist learning centres. He visited Assam (Kamarupa) in the years 642-43 A.D. and attended the court of King Bhaskar Varman.</p> <p>Hiuen Tsang was honoured and respected for his achievements when he returned to China in 645 AD after a long journey to India. However, he refused all high civil appointments offered to him by Emperor Taizong of the Tang Dynasty. Instead, he retired to a monastery and spent the rest of his life translating Buddhist texts until he died in 664 AD</p>
18.	a	<ul style="list-style-type: none"> <li>• Pure tungsten has very high melting point (3400 °C) [An electric current can heat the filament around 2000-3000 °C, which stays below the melting point of tungsten].</li> <li>• It has very low vapor pressure, and greatest tensile strength out of all the metals.</li> </ul>
19.	d	
20.	a	
21.	c	<a href="https://indianexpress.com/article/research/pepper-the-spice-that-brought-the-world-to-india-8875758/">https://indianexpress.com/article/research/pepper-the-spice-that-brought-the-world-to-india-8875758/</a>
22.	c	<a href="https://indianexpress.com/article/explained/explained-politics/money-bills-vs-financial-bills-what-are-the-differences-what-the-court-has-ruled-8875134/">https://indianexpress.com/article/explained/explained-politics/money-bills-vs-financial-bills-what-are-the-differences-what-the-court-has-ruled-8875134/</a>
23.	a	The Economic Community of West African States (ECOWAS) was established through the Treaty of Lagos on May 28, 1975. ECOWAS is a regional organization comprising 15 member nations to promote

economic integration across various sectors. The primary objective of ECOWAS is to create a borderless region where abundant resources can be utilized to create sustainable opportunities for the people. Within ECOWAS, there are two sub-regional blocs: the West African Economic and Monetary Union, established in 1994, and the West African Monetary Zone (WAMZ), established in 2000. ECOWAS aims to govern the region based on democratic principles, the rule of law, and good governance.

- Before the creation of ECOWAS countries, it was known as West Africa.
- It comprised an aggregation of states that had emerged from different colonial experiences and administrations, broadly defining the boundaries of the 15 states domiciled in the area.
- Following post-colonial independence, the ECOWAS was initially composed of the former French, British, and Portuguese colonies in the area and independent Liberia (particularly in the 1960s and 1970s).
- Although it was first established to promote regional economic cooperation, it has expanded to promote political and military collaboration.
- On July 24, 1993, a revised version of the treaty was agreed upon and signed in Cotonou.
- In times of political turmoil and instability, member governments of the ECOWAS occasionally dispatch joint military forces to intervene in the bloc's member nations as a peacekeeping force in the area.
- These include operations in recent years in the Ivory Coast (2003), Liberia (2003), Guinea-Bissau (2012), Mali (2013), and The Gambia (2017).
- Since the 1990s, the ECOWAS, which covers an area formerly

		<p>known as the “coup belt,” has tried to preserve the region’s transition to democracy against authoritarian attacks. When three member nations had military coup d’états in the early 2020s—two in Mali, one attempt in Niger, and one in Guinea—the group was criticized for its feeble and inadequate reactions.</p> <ul style="list-style-type: none"> <li>• Vision 2020, the Economic Community Of West African States (ECOWAS)’ development strategy for the following ten years, and a Policy on Science and Technology were enacted in 2011.</li> </ul>
24.	c	<p><b>Cell-Free DNA (cfDNA)</b></p> <ul style="list-style-type: none"> <li>• cfDNA refers to <b>fragments of DNA that exist outside of cells</b>, specifically in various body fluids. Unlike the majority of <b>DNA which is enclosed within cells</b>.</li> <li>• Scientists have been aware of <b>cfDNA since 1948, but only in the last two decades have they figured out what to do with it</b>.</li> <li>• cfDNA is released into the <b>extracellular environment</b> under different circumstances, including <b>cell death or other cellular processes</b>.</li> <li>• These cfDNA fragments contain <b>genetic information</b> and can offer insights into a person's health status, potential diseases, and genetic variations.</li> <li>• <b>Applications:</b> <ul style="list-style-type: none"> <li>○ <b>Non-Invasive Prenatal Testing (NIPT):</b> <ul style="list-style-type: none"> <li>■ Cell-free DNA serves as a valuable tool for <b>screening chromosomal abnormalities</b> in developing fetuses, such as Down syndrome.</li> <li>■ NIPT replaces invasive procedures such as amniocentesis, minimizing risks for both expectant mothers and fetuses.</li> </ul> </li> </ul> </li> </ul>

- Analysis of **cfDNA in maternal blood** provides crucial information about the **foetus's genetic health**.
- **Early Cancer Detection:**
  - Identifying **cancers at their initial stages** for prompt treatment.
  - The '**GEMINI**' test utilizes **cfDNA sequencing to detect lung cancer with high accuracy**.
  - Combining cfDNA analysis with existing methods enhances overall cancer detection.
- **Monitoring Organ Transplants:**
  - Donor-derived cfDNA offers a promising approach to monitor the **health and acceptance of transplanted organs**.
  - Fluctuations in cfDNA levels can **indicate organ rejection or acceptance** before other markers become evident.
  - Early detection of rejection allows for timely intervention and improved outcomes in organ transplantation.
- **Neurological Disorder Biomarkers:**
  - Investigating cfDNA's potential as a **biomarker for neurological disorders**.
  - Aiding in the **diagnosis and monitoring of conditions like Alzheimer's disease**, neuronal tumours, and stroke.
- **Metabolic Disorder Insights:**
  - Exploring cfDNA's role as a biomarker for metabolic disorders.
  - Detection and management of conditions such as **type-2 diabetes** and **non-alcoholic fatty liver**



		<p><b>disease.</b></p> <ul style="list-style-type: none"> <li>○ <b>Advancing Disease Research:</b> <ul style="list-style-type: none"> <li>■ Researchers use cfDNA analysis to study disease mechanisms, monitor treatment effectiveness, and gain insights into disease pathways.</li> <li>■ The versatility of cfDNA applications contributes to a deeper understanding of complex diseases and their underlying genetic factors.</li> </ul> </li> </ul>
25.	d	
26.	a	
27.	b	
28.	c	
29.	b	
30.	d	
31.	d	<p>ISRO has agreed with the assessment, saying the debris could be from one of its Polar Satellite Launch Vehicle (PSLV) rockets.</p> <p>— There are international regulations governing space debris, which include junk falling back on the earth. Most space-faring countries are signatories to the Convention on International Liability for Damage Caused by Space Objects.</p> <p>— This convention is one of the several international agreements that complement the Outer Space Treaty, the overarching framework guiding the behaviour of countries in space.</p> <p>— The Liability Convention deals mainly with damage caused by space</p>

		<p>objects to other space assets, but <b>it also applies to damage caused by falling objects on earth.</b></p> <p>— The Convention makes the launching country “absolutely liable” to pay compensation for any damage caused by its space object on the earth or to a flight in air.</p> <p>— The country where the junk falls can stake a claim for compensation if it has been damaged by the falling object.</p>
32.	c	<p>According to the American Optometric Association (AOA), conjunctivitis, “often referred to as “pink eye”, is the swelling or inflammation of the conjunctiva, the thin, transparent layer of tissue that lines the inner surface of the eyelid and covers the white part of the eye.”</p> <p>— Conjunctivitis infections are broadly classified as:</p> <p><b>Allergic Conjunctivitis</b></p> <p>— It can be caused by common allergens like pollen, or due to the long-term presence of a foreign body in the eye, like hard contact lenses.</p> <p><b>Bacterial Conjunctivitis</b></p> <p>— Bacterial conjunctivitis is most often caused <b>by staphylococcal or streptococcal bacteria</b> from your own skin or respiratory system.</p> <p><b>Viral Conjunctivitis</b></p> <p>— It is most commonly <b>caused by contagious viruses associated with the common cold.</b> It can develop through exposure to the coughing or sneezing of someone with an upper respiratory tract</p>

		<p>infection.</p> <p><b>Chemical Conjunctivitis</b></p> <p>— It can be caused by irritants like air pollution, chlorine in swimming pools, and exposure to noxious chemicals.</p>
33.	b	<p>Fifteen years ago, <b>WHO had developed the MPOWER measures</b> – monitor tobacco use and prevention policies; protect people from tobacco smoke; offer help to quit tobacco; warn about dangers of tobacco; enforce bans on tobacco advertising; and raise taxes on tobacco products. The report assesses the implementation of these measures.</p> <p><b>What does the report say?</b></p> <p>— In the 15 years since the MPOWER measures were first introduced, 5.6 billion people in the world – or 71 per cent of the entire population – remain protected by at least one of the measures. This has increased from just 5 per cent of the population in 2008.</p> <p>— The number of countries implementing at least one MPOWER measure has increased from 44 countries in 2008 to 151 in 2022, according to the report. <b>At least four countries – Brazil, Turkiye, Netherlands, and Mauritius – have implemented all the measures.</b></p> <p>— “WHO urges all countries to put in place all of the MPOWER measures at best-practice level to fight the tobacco epidemic, which kills 8.7 million people globally, and push back against the tobacco and nicotine industries, who lobby against these public health measures,” said Dr Ruediger Krech, WHO, Director for Health Promotion.</p>

		<p>— With a focus on second-hand smoking, <b>the report says that almost 40 per cent countries now have completely smoke-free indoor public spaces.</b></p> <p><b>What is the bad news in the report?</b></p> <p>— There are at least <b>44 countries in the world that still do not implement any MPOWER measure.</b> There are 53 countries that do not completely ban smoking in healthcare facilities. And only half of the countries have smoke-free workplaces and restaurants.</p>
34.	a	
35.	b	<p><i>Bhu-Vision</i></p> <ul style="list-style-type: none"> <li>● It is also known as KRISHI-RASTAA <b>Soil Testing System.</b></li> <li>● It has been jointly developed by <b>ICAR-IIRR(Indian Council of Agricultural Research -Indian Institute of Rice Research) and KrishiTantra.</b></li> <li>● This system seamlessly <b>conducts 12 key soil parameter tests in just 30 minutes.</b></li> <li>● It provides quick and accurate results directly to farmers and stakeholders through a soil health card on their mobile devices.</li> </ul> <p><i>Indian Institute of Rice Research</i></p> <ul style="list-style-type: none"> <li>● It was established as All India Coordinated Rice Improvement Project (AICRIP) by the Indian Council of Agricultural Research (ICAR) in 1965.</li> <li>● Headquarter: Hyderabad.</li> <li>● <b>Mandate</b></li> <li>● Basic and strategic research for enhancing rice productivity under irrigated ecosystem</li> </ul>

		<ul style="list-style-type: none"> <li>• Coordination of multi-location testing to develop location specific varieties and technologies for various ecosystems.</li> <li>• Dissemination of technologies, capacity building and establishing linkages</li> </ul>
36.	c	<a href="https://www.engadget.com/2014-12-09-china-poly-wb-1-microwave-gun.html">https://www.engadget.com/2014-12-09-china-poly-wb-1-microwave-gun.html</a>
37.	b	
38.	c	<p>Deepor Beel, a <b>vital wetland in Guwahati, Assam</b>, faces <b>anthropogenic</b> threats despite its protected status. Indigenous names like “beel” signify <b>cultural and ecological connections</b>, with local livelihoods intertwined with the wetland’s resources.</p> <p>Efforts to sustainably coexist with the wetland include initiatives by <b>local women who convert water hyacinths into products</b>, offering employment and improving the ecosystem’s health. Similarly, <b>“Kumbhi Kagaz”</b> produces <b>biodegradable paper</b> from water hyacinths, enhancing the <b>wetland’s condition and supporting alternative livelihoods</b>.</p> <p><b>Usage:</b> The example can be used to highlight how local knowledge and communities can be incorporated into sustainable conservation efforts.</p> <p><b>About the Deepor Beel:</b></p> <p>Situated in the <b>southwest of Guwahati, Assam</b>, <b>Deepor Beel</b> is not only one of the <b>largest</b> freshwater lakes in the region but also holds the <b>distinction of being the state’s sole Ramsar</b> site. It’s recognized as an <b>Important Bird Area by Birdlife International</b> and was once a</p>

		water channel of the Brahmaputra River.
39.	d	<a href="https://www.thehindu.com/news/national/tamil-nadu/tamil-manuscripts-from-18th-century-found-in-armenian-monastery-in-northern-italy/article67162471.ece">https://www.thehindu.com/news/national/tamil-nadu/tamil-manuscripts-from-18th-century-found-in-armenian-monastery-in-northern-italy/article67162471.ece</a>
40.	c	
41.	a	
42.	a	
43.	a	
44.	d	
45.	d	
46.	c	<p><b>Khajuraho Temples:</b></p> <ul style="list-style-type: none"> <li>● Khajuraho Temples (in Madhya Pradesh) are among the most beautiful medieval monuments in the country.</li> <li>● Built between 950-1050 AD by <b>the Chandela Dynasty</b>.</li> <li>● The monuments include Hindu and Jain temples.</li> <li>● The temple site is situated within Vindhya Mountain range.</li> <li>● These Temples got the status of <b>UNESCO's World Heritage Sites in 1986</b>.</li> <li>● The temples are famous for their <b>Nagara-style architectural symbolism</b>.</li> <li>● Reported for the first time by Abu Rihan al Biruni in AD 1022 and Ibn Battuta in AD 1335.</li> </ul>

47.	b	<p><b>Etikoppaka toys:</b></p> <ul style="list-style-type: none"> <li>● These are <b>traditional toys</b> made by <b>artisans of Etikoppaka village</b> located on the banks of Varaha River in Visakhapatnam district <b>of Andhra Pradesh.</b></li> <li>● These toys are <b>made out of wood</b> and are <b>coloured with natural dyes</b> derived from seeds, lacquer, bark, roots and leaves.</li> <li>● The artisans <b>mainly use the wood from trees known as 'ankudu' (Wrightia Tinctoria)</b> that is <b>soft</b> in nature.</li> <li>● These toys have <b>no sharp edges.</b> They are <b>rounded on all sides.</b></li> <li>● Etikoppaka toys received Geographical Indication (GI) tag IN 2017.</li> <li>● <b>Why are they called lacquer toys?</b> <ul style="list-style-type: none"> <li>○ While making the Etikoppaka toys, lac, a colourless resinous secretion of numerous insects, is used.</li> <li>○ The already prepared vegetable dyes are further mixed to the lac, during the process of oxidation.</li> <li>○ After this process, the end product obtained is rich and colored lacquer.</li> <li>○ The lac dye is used for decorating the Etikoppaka toys, which are exported all over the world.</li> <li>○ Thus, the toys are also called lacquer toys because of the application of lacquer coating.</li> </ul> </li> </ul>
48.	c	
49.	c	
50.	a	<p><b>'Neerakshi'</b> designed for mine detection (currently in the prototype</p>

		<p>stage)</p> <p><b>Developed by:</b> Garden Reach Shipbuilders and Engineers (GRSE) Ltd and AEPL, an MSME entity.</p> <p><b>Features:</b> 2.1-meter-long cylindrical AUV, weighing around 45 kg, can perform various tasks such as mine detection, disposal, and underwater surveys.</p> <p>It has an <b>endurance of four hours and a depth of up to 300 meters</b>, making it a versatile tool for ensuring coastal safety and protection.</p> <p><b>Significance:</b> Important for Indian Navy, Coast Guard, and Army</p>
51.	a	<p><a href="https://www.downtoearth.org.in/blog/forests/india-was-a-tree-planting-laboratory-for-200-years-here-are-the-results-91141">https://www.downtoearth.org.in/blog/forests/india-was-a-tree-planting-laboratory-for-200-years-here-are-the-results-91141</a></p>
52.	a	<p><b>Niyamgiri Case:</b></p> <ul style="list-style-type: none"> <li>• The Orissa Mining Corporation Ltd (OMC) vs Ministry Of Environment &amp; Forest was the legal battle.</li> <li>• The Vedanta-OMC joint venture wanted to mine bauxite in the Niyamgiri Hills which was protested by the Dongoria Kondhs, a PVTG from Rayagada in Odisha.</li> <li>• The company wanted to create an open-cast mine, violating Niyam Dongar, disrupting its rivers and ending the Dongria Kondh's status as a distinct group.</li> </ul> <p><b>Dongoria Kondhs</b></p> <ul style="list-style-type: none"> <li>• They are a particularly vulnerable tribal group (PVTG) from Rayagada in Odisha.</li> <li>• They inhabit the Niyamgiri hills, which fall under the Rayagada</li> </ul>



and Kalahandi District in Odisha.

- They worship Niyam Raja, the supreme god of the Niyamgiri forest.
- They sustain themselves on the resources of the Niyamgiri forests, also practice horticulture and shifting cultivation.

### **The Supreme Court judgment**

- The apex court recognized the cultural, religious, and spiritual rights of the tribe on the hills.
- It gave the Gram Sabha the authority to examine possible infringements on their rights due to the proposed project.
- It also ordered a referendum to be held amongst the affected Gram Sabhas to obtain consent on the project from the community.
- The referendum resulted in a unanimous vote against the project.
- However, the judgment did not mention the Free and Prior Informed Consent (FPIC) norm or cite any other international human rights.
- India is not a signatory to the Indigenous and Tribal Peoples Convention, 1989 (also called the International Labour Organization Convention 169) and the United Nations Declaration on Rights of Indigenous Peoples (UNDRIP) that defines FPIC as a non-binding instrument.

### **Free and Prior Informed Consent (FPIC)**

- Free means there should not be any intimidation, coercion and manipulation while obtaining consent;
- Prior means consent must be taken before any project activity;
- Informed means that all necessary and material information must have been shared transparently with the community for

		<p>an informed choice.</p> <p><b>Significance</b></p> <ul style="list-style-type: none"> <li>• The referendum resulted in the establishment of a rare registration of the Dongoria Kondhs' claim for sovereignty, self-determination, and territorial autonomy.</li> <li>• The Gram Sabha was authorized to examine possible infringements on their rights as per Section 4(d) of the Panchayat Extension to Scheduled Areas (PESA) Act, 1996.</li> <li>• Section 6 of the The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 was invoked, that confers power on the Gram Sabha to process individual or community forest claims.</li> </ul>
53.	a	<p><i>Earendel</i></p> <ul style="list-style-type: none"> <li>• It is a <b>star discovered</b> by the Hubble Space Telescope in 2022 and it is the most distant and earliest known star.</li> <li>• It is a <b>massive B-type star</b> that is more <b>than twice as hot as our Sun</b> and about a million times more luminous.</li> <li>• It is located in the Sunrise Arc Galaxy and is around 12.9 billion years away.</li> <li>• Both Webb and Hubble were only able to detect it due to a <b>natural phenomenon called gravitational lensing.</b></li> <li>• The star happened to be aligned behind a wrinkle in space-time created by the galaxy <b>cluster WHL0137-08</b>, which is located between us and Earendel.</li> </ul>
54.	d	<p><b>Pilibhit Tiger Reserve, TSA join hands for turtles and tortoises</b></p>

		<p><b>conservation</b></p> <p><i>Pilibhit Tiger Reserve</i></p> <ul style="list-style-type: none"> <li>● It <b>is located</b> in Pilibhit District, Lakhimpur Kheri District and Bahraich District of <b>Uttar Pradesh</b>.</li> <li>● It lies along the India-Nepal border in the <b>foothills of the Himalayas and the plains of the 'terai' in Uttar Pradesh</b>.</li> <li>● The river <b>Gomti originates from the reserve</b>, which is also the catchment of several others like Sharda, Chuka and Mala Khannot.</li> <li>● <b>The Sharda Sagar Dam</b> extending up to a length of 22 km (14 mi) is on the boundary of the reserve.</li> <li>● Vegetation: North Indian moist deciduous type.</li> <li>● <b>Flora:</b> <ul style="list-style-type: none"> <li>○ It is characterized by <b>sal forests</b>, tall grasslands and swamps, maintained by periodic flooding from rivers.</li> <li>○ The <b>sal woodland</b> is very dense with good natural regeneration, amounting to almost 76% of the reserve area.</li> <li>○ The forest patches are interspersed with grass meadows with several species like Sacchrum, Sclerostachya, Imperata, Themeda, Bothriochloa, Vetiveria, Apluda, Dichanthium, Digitaria and Cyperus.</li> </ul> </li> <li>● <b>Fauna:</b> It is home to a myriad of wild animals including the endangered tiger, swamp deer, Bengal florican, hog deer, leopard, etc.</li> </ul>
55.	b	
56.	b	

57.	b	
58.	d	
59.	a	
60.	c	
61.	c	<ul style="list-style-type: none"> <li>● <b>AMOC:</b> <ul style="list-style-type: none"> <li>○ <b>It is a large system of ocean currents.</b></li> <li>○ It is the <b>Atlantic branch of the ocean conveyor belt or ThermoHaline Circulation (THC)</b>, and distributes heat and nutrients throughout the world's ocean basins.</li> </ul> </li> <li>● <b>Working of AMOC:</b> <ul style="list-style-type: none"> <li>○ AMOC carries <b>warm surface waters from the tropics</b> towards the Northern Hemisphere, where it cools and sinks.</li> <li>○ It then <b>returns to the tropics</b> and then to the <b>South Atlantic as a bottom current</b>. From there it is <b>distributed to all ocean basins</b> via the <b>Antarctic Circumpolar Current</b>. <ul style="list-style-type: none"> <li>■ The <b>ACC</b> is the <b>most important current in the Southern Ocean</b>, and the <b>only current</b> that flows <b>completely around the globe</b>.</li> </ul> </li> </ul> </li> <li>● <b>Implications of decline of AMOC:</b> <ul style="list-style-type: none"> <li>○ <b>Without a proper AMOC and Gulf Stream</b>, Europe will be <b>very cold</b>. <ul style="list-style-type: none"> <li>■ Gulf Stream, a part of the AMOC, is a <b>warm current responsible for mild climate</b> at the Eastern coast of North America as well as Europe.</li> </ul> </li> <li>○ An <b>AMOC shutdown would cool the northern hemisphere</b> and <b>decrease rainfall over Europe</b>.</li> </ul> </li> </ul>

- It can also have **an effect on the El Nino**.
  - El Nino is a **climate pattern** that describes the **unusual warming of surface waters** in the eastern tropical Pacific Ocean.
- It can also **shift monsoons** in **South America and Africa**.
- **Causes:**
  - Climate models have long predicted that **global warming** can cause a **weakening of the major ocean systems of the world**.
  - **Freshwater inflow** from the melting of the Greenland ice sheet.
    - In July 2021, **researchers noted** that a **part of the Arctic's ice called "Last Ice Area" has also melted**.
    - The **freshwater from the melting ice** reduces the **salinity and density of the water**.
    - Now, the water is unable to sink as it used to and weakens the AMOC flow.
  - **Indian Ocean** may also be helping the slowing down of AMOC.
  - **Increasing precipitation** and river run-off.
- **Importance of AMOC:**
  - It plays a **critical role in redistributing heat and regulating weather patterns** around the world.
- **Concerns:**
  - The AMOC decline is **not just a fluctuation or a linear response to increasing temperatures** but likely means the **approaching of a critical threshold** beyond which the **circulation system could collapse**.

62.	a	<a href="https://indianexpress.com/article/explained/kuno-cheetahs-radio-collars-experts-8887031/">https://indianexpress.com/article/explained/kuno-cheetahs-radio-collars-experts-8887031/</a>
63.	b	<p><b>Lassa Fever</b></p> <ul style="list-style-type: none"> <li>● The Lassa fever-causing virus is found in West Africa and was <b>first discovered in 1969 in Lassa, Nigeria.</b></li> <li>● The virus is a <b>single-stranded RNA virus</b> belonging to the virus family <b>Arenaviridae.</b></li> <li>● The fever is spread by rats and is primarily found in countries in West Africa including Sierra Leone, Liberia, Guinea, and Nigeria where it is endemic.             <ul style="list-style-type: none"> <li>○ Mastomys rats have the potential to spread the deadly Lassa virus.</li> </ul> </li> <li>● The death rate associated with this disease is low, at around 1%. But the death rate is higher for certain individuals, such as pregnant women in their third trimester.</li> <li>● According to the <b>European Centre for Disease Prevention and Control</b>, about 80% of the cases are asymptomatic and therefore remain undiagnosed.</li> <li>● <b>Transmission:</b> <ul style="list-style-type: none"> <li>○ A person can become infected if they come in contact with household items of food that is contaminated with the urine or feces of an <b>infected rat (zoonotic disease).</b></li> <li>○ It can also be spread, though rarely, if a person comes in contact with a sick person's infected bodily fluids or through mucous membranes such as the eyes, nose or the mouth.</li> </ul> </li> <li>● <b>Symptoms:</b> <ul style="list-style-type: none"> <li>○ Mild symptoms include <b>slight fever, fatigue, weakness and headache.</b></li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>○ Serious symptoms include bleeding, difficulty breathing, vomiting, facial swelling, pain in the chest, back, and abdomen and shock.</li> <li>○ Death can occur from two weeks of the onset of symptoms, usually as a result of multi-organ failure.</li> <li>● <b>Treatment:</b> <ul style="list-style-type: none"> <li>○ The <b>antiviral drug ribavirin seems to be an effective treatment</b> for Lassa fever if given early on in the course of clinical illness.</li> <li>○ There are no vaccines currently licensed for the prevention of Lassa fever.</li> </ul> </li> </ul>
64.	a	<a href="https://indianexpress.com/article/explained/explained-climate/can-extreme-flooding-be-prevented-explained-8881804/">https://indianexpress.com/article/explained/explained-climate/can-extreme-flooding-be-prevented-explained-8881804/</a>
65.	c	<p>Clause 1 of Article 348 (“Language to be used in the Supreme Court and in the High Courts and for Acts, Bills, etc.”) says that “until Parliament by law otherwise provides”, “all proceedings in the Supreme Court and in every High Court”, and all Bills, Acts, ordinances, rules, and orders etc. at the Union and state levels, “shall be in the English language”</p> <ul style="list-style-type: none"> <li>● <b>Subordinate Courts:</b> <ul style="list-style-type: none"> <li>○ The state judiciary consists of a <b>high court and a hierarchy of subordinate courts</b>, also known as lower courts.</li> <li>○ The Subordinate Courts are so-called because of their subordination to the state High Court.</li> </ul> </li> <li>● <b>District Judge:</b> <ul style="list-style-type: none"> <li>○ The <b>District Judge</b> is the highest judicial authority in the district.</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>○ He possesses original and appellate jurisdiction in <b>both civil as well as criminal matters.</b></li> <li>○ In other words, the District Judge is also the Sessions Judge. When he deals with <b>civil cases</b>, he is known as the <b>District Judge</b> and when he hears <b>criminal cases</b>, he is called as the <b>Sessions Judge.</b></li> <li>○ The District Judge exercises both judicial and administrative powers.</li> <li>○ He also has <b>supervisory powers</b> over all the Subordinate Courts in the district.</li> <li>○ Appeals against his orders and judgements are taken to the High Court.</li> <li>○ The Sessions Judge has the power to <b>impose any sentence including life imprisonment and capital punishment</b> (death sentence).</li> <li>● <b>Appointment of District Judges:</b> <ul style="list-style-type: none"> <li>○ The appointment, posting and promotion of District Judges in a state <b>are made by the governor of the state in consultation with the high court. Hence option 2 is Correct.</b></li> <li>○ A person to be appointed as District Judge should have the following <b>qualifications:</b> <ol style="list-style-type: none"> <li>1. He should not already be in the service of the Central or the state government.</li> <li>2. He should have been an advocate or a pleader for seven years.</li> <li>3. He should be recommended by the high court for appointment.</li> </ol> </li> </ul> </li> </ul>
66.	b	




67.	c	
68.	c	
69.	c	
70.	c	
71.	c	<p><b>Belem Declaration:</b></p> <p>The Belem Declaration is a statement released during the <b>Amazon Summit</b>, involving leaders from Amazon countries.</p> <ul style="list-style-type: none"> <li>• It emphasizes the <b>importance of Indigenous knowledge</b> for biodiversity conservation and calls for Indigenous Peoples' participation in decision-making.</li> <li>• The declaration promotes <b>sustainable forest use and diverse economic solutions</b>, addressing concerns about deforestation and degradation in the Amazon region.</li> <li>• It also underlines the need to <b>protect land rights to prevent deforestation</b> and preserve biodiversity within Indigenous territories.</li> </ul>
72.	c	<p>The Indian Navy's ships <b>INS Visakhapatnam</b> and <b>INS Trikand</b> have arrived in Dubai to conduct the bilateral exercise '<b>Zayed Talwar</b>' with the <b>UAE Navy</b>.</p> <p><b>Aim:</b> The exercise aims to <b>enhance interoperability and cooperation</b> between the two naval forces. The visit seeks to <b>strengthen the maritime partnership</b>, share best practices, and <b>foster a common understanding of security challenges</b> in the region.</p>

		<p><b>Other exercises between India and UAE:</b></p> <ul style="list-style-type: none"> <li>● Exercise Desert Flag (Air Force)</li> <li>● In-UAE BILAT (bilateral naval exercise)</li> <li>● Desert Eagle (bilateral air force exercise)</li> </ul>
73.	d	<p><b>Important Bio-Fuel Categories in India</b></p> <ul style="list-style-type: none"> <li>● <b>Bioethanol</b> is ethanol produced from biomass, which includes sugar and starch containing plants like corn, cassava, rotten potatoes, and algae, as well as cellulosic materials like bagasse, wood waste, agricultural and forestry residues, as well as other renewable resources like industrial waste.</li> <li>● <b>Biodiesel:</b> a methyl or ethyl ester of fatty acids made from bio-oil, used cooking oil, acid oil, and non-edible vegetable oils;</li> <li>● <b>Bio-CNG:</b> a refined form of biogas produced from food waste, MSW, animal manure, and sewage water. Its energy potential and composition are comparable to those of natural gas derived from fossil fuels.</li> <li>● <b>Drop-in fuel:</b> Any liquid fuel made from biomass, agricultural residues, wastes, such as Municipal Solid Wastes (MSW), plastic wastes, industrial wastes, etc. that satisfies Indian standards for MS, HSD, and jet fuel, in pure or blended form, for use in vehicles without requiring engine system modifications and that can use the existing petroleum distribution system is referred to as a drop-in fuel.</li> <li>● <b>Advanced Biofuels:</b> Fuels which are made of agricultural and forest residues (rice, wheat, straw, corn, woody biomass) and non food crops (grasses and algae). Such types of biofuels have low CO2 emission and are classified as Green Fuels. Examples: Ethanol, Drop in fuels, Bio-Hydrogen, Bio-Methanol, Algae</li> </ul>

		based 3G biofuel, etc.
74.	c	
75.	c	<p><b>Adjournment Sine Die?</b></p> <ul style="list-style-type: none"> <li>• It describes the <b>indefinite temporary suspension of a parliamentary session.</b></li> <li>• In other words, an adjournment sine die occurs when there is <b>no specified date for the House to resume.</b></li> <li>• The authority to adjourn sine die <b>rests with the House's presiding officer.</b></li> <li>• The presiding officer of a House may convene a meeting of the House at any time after the House has been adjourned sine die or before the day or hour specified for suspension.</li> </ul>
76.	c	<p>State Governments <b>have the authority to declare drought-affected regions.</b></p> <p>The first step involves examining two mandatory indicators: 1) <b>Rainfall deviation</b> 2) <b>Dry spell</b></p> <p>The second step involves <b>evaluating four impact indicators:</b> agriculture, vegetation indices (remote sensing), soil moisture, and hydrology. <b>States may choose any three of the four impact indicators (one from each)</b> to assess drought intensity and categorize it as severe or moderate.</p> <p><b>If all three chosen impact indicators are in the 'severe' category,</b> it indicates severe drought. If <b>two of the three chosen impact indicators</b> are in the 'moderate' or 'severe' category, it indicates</p>

		<p>moderate drought.</p> <p>After the previous triggers are set off, <b>States conduct a sample survey on the ground to determine the final intensity of drought.</b> Field verification findings determine if the drought is <b>'severe' or 'moderate'</b>.</p> <p>Once the intensity of the drought is determined, the <b>state government issues a notification specifying the geographical extent of the drought-affected area.</b> The notification is valid for six months unless de-notified earlier.</p>
77.	d	<p>The first step involves examining two mandatory indicators:</p> <p>Rainfall deviation</p> <p>Dry spell</p> <p>The second step involves <b>evaluating four impact indicators:</b> agriculture, vegetation indices (remote sensing), soil moisture, and hydrology. <b>States may choose any three of the four impact indicators (one from each)</b> to assess drought intensity and categorize it as severe or moderate.</p>
78.	b	<p>An <b>aromatic rice named "Mushkbudji"</b> from Kashmir received a <b>Geographical Indication (GI) Tag recently.</b></p> <ul style="list-style-type: none"> <li>• Mushkbudji rice, which was granted the GI tag along with eight other products from Jammu and Kashmir**, is known for its short, bold grains and rich aroma**.</li> </ul> <p>In the past, <b>the consumption of this aromatic rice was restricted</b></p>

		<p><b>to special events due to its limited availability and high cost.</b></p> <p>The government's efforts to <b>revive this rice variety in 2007 after its decline in the 1970s due to blast disease have also contributed to its resurgence.</b> More farmers are <b>now drawn to cultivate this unique and fragrant rice variety due to its promising qualities and potential for higher income.</b></p>
79.	a	<p><a href="https://www.washingtonpost.com/weather/2023/08/11/hurricane-dora-typhoon-hawaii-record/">https://www.washingtonpost.com/weather/2023/08/11/hurricane-dora-typhoon-hawaii-record/</a></p>
80.	c	 <p>1. Kutch embroidery - Gujarat 2. Pithu weave - Himachal Pradesh 3. Jamdani weave - West Bengal 4. Kurbi weave textile - Goa 5. Fine kat - Odisha 6. Pashmina kari woven textile - Jammu &amp; Kashmir 7. Banarasi weave - Uttar Pradesh 8. Pattachi weave - Maharashtra 9. Kantha embroidery - West Bengal 10. Naga woven textile - Nagaland</p>
81.	b	<p><a href="https://www.thehindu.com/sci-tech/science/tb-over-85-cure-rate-seen-in-modified-bpal-regimen-trial/article67132762.ece">https://www.thehindu.com/sci-tech/science/tb-over-85-cure-rate-seen-in-modified-bpal-regimen-trial/article67132762.ece</a></p>
82.	c	<p>The BepiColombo spacecraft carried out its first close Mercury flyby on October 1, 2021. At the time, the spacecraft approached the planet from the night side of the northern hemisphere and made a close approach near the morning side of the southern hemisphere. It made observations of the magnetosphere on the daytime side of the southern hemisphere and then passed out of the magnetosphere back into the solar wind.</p> <p><a href="https://indianexpress.com/article/technology/science/electron-rains-on-mercury-cause-x-ray-auroras-finds-bepicolombo-during-">https://indianexpress.com/article/technology/science/electron-rains-on-mercury-cause-x-ray-auroras-finds-bepicolombo-during-</a></p>

		<a href="https://www.youtube.com/watch?v=close-flyby-8848269/">close-flyby-8848269/</a>
83.	c	<p><b>Pong dam water release and relentless rainfall submerge 50 villages in Punjab's Gurdaspur</b></p> <p><i>Pong Dam</i></p> <ul style="list-style-type: none"> <li>● The Pong Dam, also known as the Beas Dam, is an <b>earth-fill embankment dam on the Beas River</b> in the state of <b>Himachal Pradesh</b>.</li> <li>● The purpose of the dam is <b>water storage for irrigation</b> and <b>hydroelectric power generation</b>.</li> <li>● <b>The construction of the dam began</b> in the year 1961 and <b>was completed in 1974</b> and at that time was known as the tallest of its type in the country.</li> <li>● The raised water level thus invariably <b>created an artificial lake called the Maharana Pratap Sagar</b>, after the great ruler of Mewar. The lake <b>became a renowned bird sanctuary for birds</b> of numerous species including Bar-headed Goose and the Red-necked Grebe.</li> <li>● <b>Features:</b> <ul style="list-style-type: none"> <li>○ The Pong Dam is a <b>133 m tall and 1,951 m long earth-fill embankment dam</b> with a <b>gravel shell</b>.</li> <li>○ The dam is <b>13.72 m wide at its crest</b>, which sits at an <b>elevation of about 435.86 m above sea level</b>.</li> <li>○ The <b>base of the Pong Dam is about 610 m wide</b> and has a total volume of 35,500,000 metre cube.</li> </ul> </li> </ul> <p><i>Beas River</i></p> <ul style="list-style-type: none"> <li>● The Beas River is a <b>river in north India</b>.</li> <li>● <b>Origin:</b> The River rises <b>4,361 metres</b> above sea-level on the</li> </ul>

		<p>southern face of <b>Rohtang Pass in Kullu, Himachal Pradesh.</b></p> <ul style="list-style-type: none"> <li>● <b>Course:</b> It flows for some <b>470 kilometres to the Sutlej River in</b> the Indian state of <b>Punjab.</b></li> <li>● The river was <b>also known as Arjikuja of the Vedas,</b> or Vipasa to the ancient Indians, and the Hyphasis to the Ancient Greeks.</li> <li>● <b>Tributaries:</b> <ul style="list-style-type: none"> <li>○ <b>The main tributaries</b> are <b>Bain, Banganga, Luni, Uhlal, Awa, Banner, Chakki, Gaj, Harla, Mamuni,</b> Parvati, Patlikuhlal, Sainj, Suketi and Tirthan.</li> <li>○ The tributaries that branch out in the <b>Northern part are snow fed and hence, perennial.</b></li> <li>○ The tributaries down the <b>South are seasonal and get their water from the rains.</b></li> </ul> </li> </ul>
84.	b	<p><a href="https://phys.org/news/2023-08-high-andes-lake-titicaca-fall.html">https://phys.org/news/2023-08-high-andes-lake-titicaca-fall.html</a></p> <p><a href="https://www.reuters.com/world/americas/lake-titicaca-drying-up-heat-wave-turns-winter-upside-down-2023-08-04/">https://www.reuters.com/world/americas/lake-titicaca-drying-up-heat-wave-turns-winter-upside-down-2023-08-04/</a></p>
85.	b	<ul style="list-style-type: none"> <li>● Subhadra Kumari Chauhan (16 August 1904 – 16 February 1948) was an Indian poet.</li> <li>● She wrote in the Khariboli dialect of Hindi, in a simple, clear style.</li> <li>● One of her most popular poems is "Jhansi ki Rani" (about the courageous Queen of Jhansi).</li> <li>● This and her other poems, Jallianwala Bagh mein Vasant, Veeron Ka Kaisa Ho Basant, Rakhi Ki Chunauti, and Vida, openly talk about the freedom movement.</li> <li>● They are said to have inspired great numbers of Indian youth to participate in the Indian Freedom Movement.</li> </ul>

		<ul style="list-style-type: none"> <li>The ICGS Subhadra Kumari Chauhan, an Indian Coast Guard ship, was named for the poet.</li> </ul>
86.	b	
87.	c	
88.	b	
89.	c	
90.	b	
91.	a	<p>India's first 3D-printed post office was virtually inaugurated by Union Minister Ashwini Vaishnaw in Bengaluru's Cambridge Layout. Its construction was completed in just 43 days.</p> <p>— 3D printing, also known as additive manufacturing, is a process that uses computer-created design to make three-dimensional objects layer by layer.</p> <p>— It is an additive process, in which layers of a material like plastic, composites or bio-materials are built up to construct objects that range in shape, size, rigidity and colour.</p> <p>— To carry out 3D printing, one needs a personal computer connected to a 3D printer. All they need to do is design a 3D model of the required object on computer-aid design (CAD) software and press 'print'.</p> <p>— 3D printers construct the desired object by using a layering method, which is the complete opposite of the subtractive manufacturing processes.</p> <p>— 3D printers build from the bottom up by piling on layer after layer</p>



		until the object looks exactly like it was envisioned.
92.	c	<a href="https://indianexpress.com/article/explained/explained-history/story-of-kalka-shimla-railway-8898142/">https://indianexpress.com/article/explained/explained-history/story-of-kalka-shimla-railway-8898142/</a>
93.	c	
94.	c	<ul style="list-style-type: none"> <li>● <b>Blue carbon is the carbon stored in coastal and marine ecosystems.</b></li> <li>● The coastal ecosystems of mangroves, tidal marshes and seagrass meadows contain large stores of carbon deposited by vegetation and various natural processes over centuries.</li> <li>● <b>These ecosystems sequester and store more carbon, often referred to as 'blue carbon' per unit area than terrestrial forests.</b></li> <li>● The ability of these vegetated ecosystems to remove carbon dioxide (CO<sub>2</sub>) from the atmosphere makes them significant net carbon sinks, and they are now being recognised for their role in mitigating climate change.</li> <li>● Coastal ecosystems such as mangroves, tidal marshes and seagrass meadows sequester and store more carbon per unit area than terrestrial forests and are now being recognised for their role in mitigating climate change.</li> <li>● These ecosystems also provide essential benefits for climate change adaptation, including coastal protection and food security for many coastal communities.</li> <li>● However, if the ecosystems are degraded or damaged, their carbon sink capacity is lost or adversely affected, and the carbon stored is released, resulting in emissions of carbon dioxide (CO<sub>2</sub>) that contribute to climate change.</li> <li>● Conserving and restoring terrestrial forests, and more recently</li> </ul>

		<p>peatlands, has been recognised as an important component of climate change mitigation.</p> <ul style="list-style-type: none"> <li>• Several countries are developing policies and programmes in support of sustainable development through initiatives that reduce the carbon footprint associated with the growth of their economies.</li> <li>• These include actions to conserve and sustainably manage natural systems relevant to the United Nations Framework Convention on Climate Change (UNFCCC), including through the reducing emissions from deforestation and forest degradation in developing countries (REDD+) mechanism and Nationally Determined Contributions (NDCs).</li> </ul>
95.	b	
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		<p>which is the complete opposite of the subtractive manufacturing processes.</p> <p>— 3D printers build from the bottom up by piling on layer after layer until the object looks exactly like it was envisioned.</p>
97.	c	<p><a href="https://indianexpress.com/article/explained/explained-history/story-of-kalka-shimla-railway-8898142/">https://indianexpress.com/article/explained/explained-history/story-of-kalka-shimla-railway-8898142/</a></p>
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		<p>carbon sink capacity is lost or adversely affected, and the carbon stored is released, resulting in emissions of carbon dioxide (CO<sub>2</sub>) that contribute to climate change.</p> <ul style="list-style-type: none"> <li>• Conserving and restoring terrestrial forests, and more recently peatlands, has been recognised as an important component of climate change mitigation.</li> <li>• Several countries are developing policies and programmes in support of sustainable development through initiatives that reduce the carbon footprint associated with the growth of their economies.</li> <li>• These include actions to conserve and sustainably manage natural systems relevant to the United Nations Framework Convention on Climate Change (UNFCCC), including through the reducing emissions from deforestation and forest degradation in developing countries (REDD+) mechanism and Nationally Determined Contributions (NDCs).</li> </ul>
100.	b	
101.	d	<p><b>As Chandrayaan-3 and Luna 25 prepare to land on Moon, two questions</b></p> <p>India's Chandrayaan-3 and Russia's Luna 25 are both in lunar orbit, preparing for a landing on the Moon next week. Luna 25 is expected to go first, on August 21, while Chandrayaan-3 is likely to touch down two days later, on August 23. Both missions are aiming to land in a region where no spacecraft has gone before, near the South Pole of the Moon.</p> <p><i>What determines the landing time of the two spacecraft?</i></p> <ul style="list-style-type: none"> <li>• Luna 25 rode on a powerful rocket to reach lunar orbit in just</li> </ul>

six days after launch on August 10. Chandrayaan-3 took 23 days after launching on July 14, because ISRO still does not have a powerful enough rocket to go directly to lunar orbit. Chandrayaan-3's circuitous route, however, helped save energy and costs.

- August 23 is the beginning of daytime on the Moon. One lunar day is equivalent to about 14 days on Earth, when sunlight is continually available. The instruments on Chandrayaan-3 have a life of just one lunar day, or 14 Earth days. That is because they are solar-powered instruments, and require sunlight to remain operational.
- The Moon gets extremely cold during night time, well below minus 100 degree Celsius. Electronics not specifically designed to operate at such low temperatures can freeze and become non-functional.
- To maximise the time for observations and experiments, it is crucial for Chandrayaan-3 to land at the beginning of the lunar day. If for some reason, it is unable to attempt the landing on August 23, another attempt is supposed to be made the next day. If that too is not feasible, it would wait for one full month — about 29 days — for the lunar day and lunar night to get over.
- Luna 25 has no such restrictions. It too is solar powered, but it also has an onboard generator to provide heat and power to the instruments during night time. It has a life of a year, and the choice of its landing date is not dictated by how much Sun is shining on the Moon.

*How far apart will the Indian and Russian missions land?*

But these are still much farther to the south than any other landing on the Moon. All landings have so far happened in the equatorial

		<p>region, mainly because this area gets the most sunlight.</p> <p>The actual distance between the landing sites of Chandrayaan-3 and Luna 25 could be several hundred kilometres on the lunar surface.</p> <p>The polar region of the Moon is expected to get busier in the future, with several upcoming missions seeking to explore this part, mainly because of the greater potential of finding frozen water.</p>
102.	b	<p>Most of the nickel is on Sulawesi, a K-shaped, jungle-draped island that is roughly the size of Oklahoma. Despite its expanse, Sulawesi has long been an outlier in a nation of 17,000 islands whose political and economic spheres are dominated by the one that holds the bulk of the population: Java.</p> <p><a href="https://indianexpress.com/article/explained/explained-climate/geopolitics-complicating-clean-energy-move-nickel-8899569/">https://indianexpress.com/article/explained/explained-climate/geopolitics-complicating-clean-energy-move-nickel-8899569/</a></p>
103.	c	<p>Mustard seeds have high levels of glucosinolates, a group of sulphur and nitrogen-containing compounds contributing to the characteristic pungency of their oil and meal. While that limits the oil's acceptability among consumers – especially those preferring cooking medium having less strong flavour and odour – the problem is even more with the meal. Rapeseed meal is unpalatable to poultry and pigs, while having to be mixed with fodder grass and water for giving to cattle and buffaloes. Besides reducing their feed intake, high glucosinolates are also known to cause goiter (swelling of neck) and internal organ abnormalities in livestock.</p> <p><a href="https://indianexpress.com/article/explained/explained-">https://indianexpress.com/article/explained/explained-</a></p>

		<a href="https://www.economics/gene-edited-mustard-less-pungent-more-useful-8901549/">economics/gene-edited-mustard-less-pungent-more-useful-8901549/</a>
104.	d	<p><b>What are Acoustic Side Channel Attacks and how is AI used to increase its accuracy?</b></p> <p><i>Acoustic Side Channel Attack</i></p> <ul style="list-style-type: none"> <li>• This technique uses the <b>sounds produced by typing on a keyboard</b> to determine what keys are being pressed.</li> <li>• By analysing these unique sounds, <b>hackers equipped with the right tools can decode</b> the precise letters and numbers being typed.</li> <li>• Researchers investigated the use of audio recordings taken <b>from Zoom video conferencing calls, smartphone microphones</b>, and off-the-shelf equipment and algorithms to launch ASCA attacks.</li> <li>• The study found that when trained on keystrokes by a nearby phone, the classifier <b>achieved an accuracy of 95%</b>, the highest accuracy seen without the use of a language model.</li> <li>• <b>Accuracy</b> <ul style="list-style-type: none"> <li>○ When a deep learning model was <b>trained on the data with default values</b>, the model was able to acquire a <b>meaningful interpretation of the data</b>.</li> <li>○ On a MacBook Pro, which features a keyboard identical in switch design to Apple's models from the last two years, the model <b>was able to achieve state-of-the-art accuracy</b> with minimal training data.</li> <li>○ Additionally, when <b>the AI model</b> was made to recognise keystrokes using audio captured through a smartphone microphone, it was able to <b>achieve 95% accuracy</b>.</li> </ul> </li> <li>• <b>Implications</b></li> </ul>

		<ul style="list-style-type: none"> <li>○ This form of hacking <b>could expose sensitive information</b> like passwords and personal messages.</li> </ul> <p><i>Side Channel Attacks (SCAs)</i></p> <ul style="list-style-type: none"> <li>● These are a method of <b>hacking a cryptographic algorithm</b> based on the analysis of auxiliary systems used in the encryption method.</li> <li>● These can be performed using a collection of signals emitted by devices, including <b>electromagnetic waves, power consumption, mobile sensors</b> as well as sound from keyboards and printers to target devices.</li> <li>● Once collected, these signals are used to interpret signals that can be then used to <b>compromise the security of a device.</b></li> </ul>
105.	b	<p><b>Hangul population witnesses marginal rise in Kashmir</b></p> <p><i>Kashmir stag</i></p> <ul style="list-style-type: none"> <li>● It is also called Hangul which is a <b>subspecies of Central Asian red deer</b> endemic to Kashmir and surrounding areas.</li> <li>● It is found in dense riverine forests in the high valleys and mountains of Jammu and Kashmir and northern Himachal Pradesh.</li> <li>● In Kashmir, it is found primarily in <b>the Dachigam National Park</b> where it receives protection.</li> <li>● A small population has also been witnessed in <b>Overa-Aru Wildlife Sanctuary</b> in south Kashmir.</li> <li>● <b>Conservation status</b> <ul style="list-style-type: none"> <li>○ <b>IUCN:</b> Critically Endangered</li> <li>○ <b>CITES :</b> Appendix I</li> </ul> </li> </ul>



		<p><i>Dachigam National Park</i></p> <ul style="list-style-type: none"> <li>• The actual beauty of the park lies in the <b>deep valleys, rocky outcrops, steep wooded</b> slopes and rolling alpine pastures.</li> <li>• Being located in a mountainous area, Dachigam National Park faces a huge variation in <b>altitude</b> that ranges from <b>1600 m to 4200 m above sea level</b>.</li> <li>• This variation in altitude categorises Dachigam National Park into <b>two regions- the upper region and the lower region</b>.</li> <li>• <b>Flora:</b> It is extremely rich in Wild Cherry, Pear, Plum, Peach, Apple, Apricot, Walnut, Chestnut, Oak and Willow etc.</li> <li>• <b>Fauna:</b> Hangul (Kashmir Stag), Musk deer, Brown Bear, Leopards, Jungle Cats, Himalayan black bear, and a few species of wild goats like the markhor and ibex.</li> </ul>
106.	a	
107.	d	
108.	c	
109.	b	
110.	c	
111.	c	<p><b>African Swine Fever:</b></p> <ul style="list-style-type: none"> <li>• It is a <b>highly contagious viral disease</b> that <b>attacks pigs and boars</b></li> <li>• It is <b>endemic to sub-Saharan Africa</b> but has spread to many other regions of the world, including Asia and Europe.</li> <li>• It has a <b>high mortality rate</b>.</li> <li>• It is <b>not known to affect human beings</b>.</li> </ul>

		<ul style="list-style-type: none"> <li>• There is <b>no cure</b> or precaution available for the infection yet.</li> <li>• It can interfere with various cellular signalling pathways resulting in immunomodulation, thus making the development of an efficacious vaccine very challenging.</li> <li>• In the acute form pigs develop a high temperature (40.5 degrees C or 105 degrees F), then become dull and go off their food. Other symptoms may include vomiting, diarrhoea (sometimes bloody), laboured breathing and coughing, abortion, still births and weak litters and unwillingness to stand.</li> </ul>
112.	c	<p><i>Dibang River</i></p> <ul style="list-style-type: none"> <li>• It <b>flows through Arunachal Pradesh and Assam</b> states of India.</li> <li>• It is an <b>upstream tributary of Brahmaputra</b>.</li> <li>• <b>Origin:</b> The Dibang originates near <b>Keya Pass on the Indo-Chinese border</b> in the Upper <b>Dibang Valley district of Arunachal Pradesh</b>.</li> <li>• <b>Tributaries:</b> The <b>Sisar, Mathun, Tangon, Dri, Ithun and Emra</b> are the major tributaries of the Dibang.</li> <li>• The <b>Mishmi Hills are found along the upper course</b> of the Dibang River.</li> </ul>
113.	b	<p><i>Piripkura Tribe</i></p> <ul style="list-style-type: none"> <li>• They are a nomadic tribe from the Mato <b>Grasso region of Brazil</b>.</li> <li>• The tribe is known for its isolation and efforts to maintain its traditional way of life.</li> <li>• These people have faced significant <b>challenges due to</b></li> </ul>

		<p><b>encroachment</b> on their land by illegal logging, mining, and other forms of land exploitation.</p> <ul style="list-style-type: none"> <li>Their territory has been under threat from <b>deforestation and resource extraction.</b></li> </ul>
114.	a	<p><a href="https://www.downtoearth.org.in/news/pollution/accelerated-breeding-plastic-waste-in-urban-drains-can-lead-to-an-explosion-of-mosquitoes-here-s-how-85496#:~:text=This gets shortened to nine,the physiology of the larvae.">https://www.downtoearth.org.in/news/pollution/accelerated-breeding-plastic-waste-in-urban-drains-can-lead-to-an-explosion-of-mosquitoes-here-s-how-85496#:~:text=This gets shortened to nine,the physiology of the larvae.</a></p>
115.	c	<p>Amami-Oshima Island, Tokunoshima Island, the Northern part of Okinawa Island, and <b>Iriomote Island</b> encompass 42,698 hectares of subtropical rainforests on four islands on a chain located in the southwest of <b>Japan</b>.</p> <p>— The serial site forms an arc on the boundary of the East China Sea and Philippine Sea whose highest point, Mount Yuwandake on Amami-Oshima Island, rises 694 metres above sea level.</p> <p>— These islands are influenced by the <b>Kuroshio Current</b> and a subtropical high-pressure system, the property has a warm and humid subtropical climate and is covered mainly with evergreen broadleaved subtropical rainforests.</p>
116.	c	<p>Central Ground Water Authority</p> <p>It has been constituted under Section 3 (3) of the Environment (Protection) Act, 1986 to regulate and control the development and management of groundwater resources in the country. Hence, Option 3 is correct. The Authority has been conferred with the following powers: Exercise of powers under section 5 of the Environment</p>

		(Protection) Act, 1986 for issuing directions and taking such measures in respect of all the matters referred to in sub-section(2) of section 3 of the said Act. To resort to penal provisions contained in sections 15 to 21 of the said Act. To regulate and control, manage, and development of groundwater in the country and to issue necessary regulatory directions for the purpose. Exercise of powers under section 4 of the Environment (Protection) Act, 1986 for the appointment of officers.
117.	d	
118.	a	
119.	b	
120.	b	<ul style="list-style-type: none"> <li>● <b>Red Data Books:</b> <ul style="list-style-type: none"> <li>○ The "Red Data Books" published by the International Union for Conservation of Nature and Natural Resources (IUCN) is the world's most comprehensive inventory of the global <b>conservation status of plant and animal species</b>.</li> <li>○ Red data book is beneficial for providing detailed information for studies and researches. It also helps in monitoring programs on rare and endangered species. It thus helps in protecting the species that are on the verge of extinction. <b>Hence, statement 2 is correct.</b></li> <li>○ The red list contains only the names of the endangered species, however, the Red Data Book contains information about the species that are on the verge of extinction.</li> <li>○ It divides species into nine categories: Not Evaluated, Data Deficient, Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct</li> </ul> </li> </ul>

		in the Wild and Extinct. <b>Hence, statement 1 and 3 are incorrect.</b>
121.	b	
122.	c	
123.	c	Use of CFCs Refrigeration Making of plastic foams; As pressurising agent in aerosol cans; As cleaning agent for electronic products.
124.	d	<ul style="list-style-type: none"> <li>● <b>Carbon Credits:</b> <ul style="list-style-type: none"> <li>○ A carbon credit is a <b>tradable permit or certificate that provides the holder of the credit the right to emit one ton of carbon dioxide or an equivalent of another greenhouse gas</b> – it's essentially an offset for producers of such gases.</li> <li>○ <b>The main goal for the creation of carbon credits is the reduction of emissions of carbon dioxide</b> and other greenhouse gases from industrial activities to reduce the effects of global warming.</li> <li>○ Carbon credits are market mechanisms for the minimization of greenhouse gases emission.</li> <li>○ Governments or regulatory authorities set the caps on greenhouse gas emissions.</li> <li>○ For some companies, the immediate reduction of the emission is not economically viable. Therefore, they can purchase carbon credits to comply with the emission cap. Companies that achieve the carbon offsets (reducing the emissions of greenhouse gases) are usually rewarded with additional carbon credits.</li> <li>○ The sale of credit surpluses may be used to subsidize future projects for the reduction of emissions.</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>○ The introduction of such credits was <b>ratified in the Kyoto Protocol.</b></li> <li>○ The Paris Agreement validates the application of carbon credits and sets the provisions for the further facilitation of the carbon credits markets.</li> </ul>
125.	b	
126.	d	
127.	a	
128.	b	
129.	c	
130.	d	
131.	d	
132.	a	
133.	a	
134.	a	
135.	a	
136.	d	
137.	d	
138.	a	
139.	d	
140.	d	

141.	a	
142.	c	
143.	d	
144.	c	
145.	b	
146.	c	<a href="https://www.thehindu.com/news/national/reroute-railway-track-running-through-assam-gibbon-sanctuary-suggest-scientists/article67247555.ece">https://www.thehindu.com/news/national/reroute-railway-track-running-through-assam-gibbon-sanctuary-suggest-scientists/article67247555.ece</a>
147.	c	
148.	c	
149.	b	
150.	b	