

UPSC PRELIMS 2024

ANSWER KEY with **EXPLANATIONS**

GS PAPER-1 SET -

TOP RANKINGS IN BANGALORE UNIVERSITY EXAMS 2022

















SANTHOSHA H M















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UPSC PRELIMS 2024 ANSWER KEY SET A/B/C/D

		PAPE	R SET		Q. No.		PAPE	R SET	
Q. No.	Α	В	С	D	Q. NO.	Α	В	С	D
1	D	D	А	D	26	А	В	D	D
2	А	D	D	A	27	D	D	D	В
3	D	D	А	В	28	А	В	С	A
4	А	D	В	D	29	С	С	А	С
5	С	В	С	С	30	А	С	С	D
6	В	С	С	D	31	В	D	D	D
7	А	В	D	D	32	D	А	А	С
8	В	С	В	С	33	А	D	С	D
9	А	В	В	A	34	В	A	С	В
10	В	А	В	С	35	D	С	В	В
11	А	В	С	D	36	D	В	D	A
12	А	D	D	A	37	D	A	А	В
13	D	А	С	С	38	С	В	С	В
14	С	В	В	С	39	D	A	D	A
15	D	D	В	В	40	С	В	D	С
16	В	D	D	D	41	D	С	D	A
17	D	D	В	A	42	D	A	С	D
18	В	С	Α	С	43	D	D	D	A
19	С	D	С	D	44	D	А	В	В
20	С	С	D	D	45	В	A	В	С
21	С	A	D	С	46	С	A	А	С
22	А	A	А	D	47	В	D	В	D
23	D	D	В	С	48	С	А	В	В
24	А	С	D	D	49	В	С	Α	В
25	А	D	С	В	50	А	А	С	В

		PAPE	R SET	
Q. No.	Α	В	С	D
51	D	А	D	D
52	С	D	D	А
53	D	А	D	D
54	В	В	D	А
55	В	С	В	С
56	А	С	С	В
57	В	D	В	В
58	В	В	С	В
59	А	В	В	А
60	С	В	А	В
61	D	С	В	С
62	А	D	D	А
63	С	С	А	D
64	С	В	В	А
65	В	В	D	А
66	D	D	D	А
67	А	В	D	D
68	С	A	С	А
69	D	С	D	С
70	D	D	С	А
71	D	D	С	А
72	А	Α	А	А
73	В	С	D	D
74	D	С	А	С
75	С	В	А	D

		PAPE	R SET	
Q. No.	Α	В	С	D
76	D	D	А	В
77	D	A	D	D
78	С	С	А	В
79	А	D	С	С
80	С	D	А	С
81	С	D	А	D
82	D	С	А	D
83	С	D	D	D
84	В	В	С	D
85	В	В	D	В
86	D	А	В	С
87	В	В	D	В
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92	D	А	А	D
93	А	В	D	А
94	В	D	А	В
95	С	С	С	D
96	С	D	В	D
97	D	D	А	D
98	В	С	В	С
99	В	Α	А	D
100	В	С	В	С

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Answer Key with Explanation

1. Consider the following statements:

Statement-I:

The atmosphere is heated more by incoming solar radiation than by terrestrial radiation.

Statement-II:

Carbon dioxide and other greenhouse gases in the atmosphere are good absorbers of long wave radiation.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (d)

Explanation:

- **Statement 1 is incorrect:** The atmosphere is heated more by terrestrial radiation than by incoming solar radiation.
- Statement 2 is correct: Carbon dioxide and other greenhouse gases in the atmosphere are good absorbers of long wave radiation.

2. Consider the following statements:

Statement-I:

Thickness of the troposphere at the equator is much greater as compared to poles.

Statement-II:

At the equator, heat is transported to great heights by strong convectional currents.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (a) Statement-I is incorrect, but Statement-II is correct

Correct Option: (a)

Explanation:

- **Statement 1 is correct:** Thickness of troposphere at the equator is much greater as compared to poles.
- **Statement 2 is correct:** At the equator, heat is transported to great heights by strong convectional currents.

3. Consider the following:

- 1. Pyroclastic debris
- 2. Ash and dust
- 3. Nitrogen compounds
- 4. Sulphur compounds

How many of the above are products of volcanic eruptions?

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

Correct Option: (d)

Explanation:

- **Statement 1. is correct:** Pyroclastic debris: Pyroclastic flows are the most dangerous and destructive aspect of explosive volcanism.
- Statement 2. is correct: Ash and dust: Variously called nuées ardentes ("glowing clouds"), glowing avalanches, or ash flows, they occur in many sizes and types, but their common characteristic is a fluidized emulsion of volcanic particles, eruption gases, and entrapped air, resulting in a flow of sufficiently low viscosity to be very mobile and of sufficiently high density to hug the ground surface.
- Statement 3. is correct: Nitrogen compounds: Small quantities of other volatile elements and compounds also are present, such as hydrogen, helium, nitrogen, hydrogen chloride, hydrogen fluoride, and mercury.
- Statement 4. is correct: Sulphur compounds: The most common volcanic gases are water vapour, carbon dioxide, sulfur dioxide, and hydrogen sulfide.

4. Which of the following is/are correct inference/inferences from isothermal maps in the month of January?

- 1. The isotherms deviate to the north over the ocean and to the south over the continent.
- 2. The presence of cold ocean currents, Gulf Stream and North Atlantic Drift make the North Atlantic Ocean colder and the isotherms bend towards the north.

Select the answer using the code given below:

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

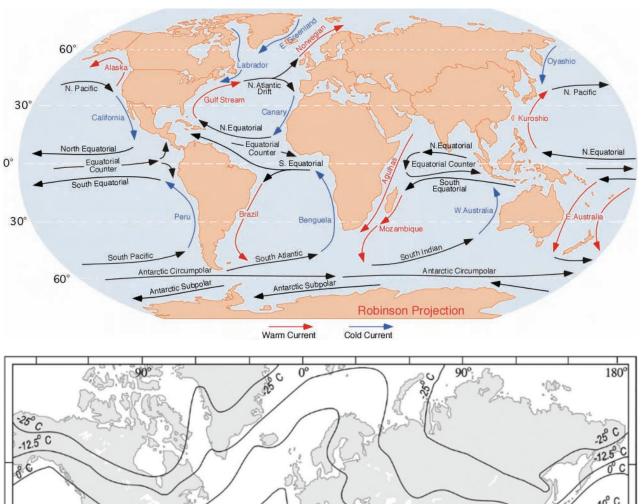
Correct Option: (a)

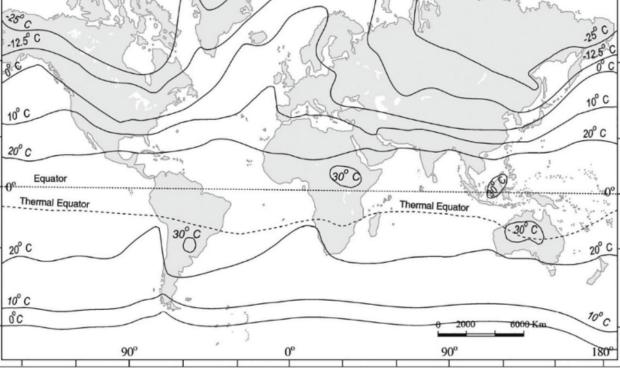
Explanation:

• Statement 1 is correct: The isotherms deviate to the north over the ocean and to the south over the continent.



• Statement 2 is incorrect: The presence of cold currents, Gulf Stream (warm current) and North Atlantic Drift (warm current) makes the North Atlantic Ocean warmer and the isotherms though it bends towards north.





5. Which of the following countries are well known as the two largest cocoa producers in the world?

- (a) Algeria and Morocco
- (b) Botswana and Namibia
- (c) Cote d'Ivoire and Ghana
- (d) Madagascar and Mozambique



Correct Option: (c)

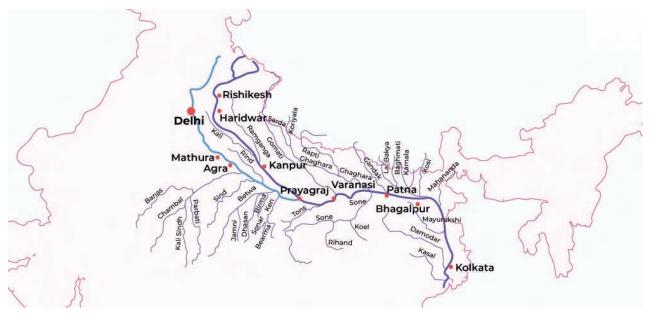
Explanation:

- About 70 percent of the world's cocoa beans come from four West African countries: Ivory Coast, Ghana, Nigeria and Cameroon.
- The Ivory Coast and Ghana are by far the two largest producers of cocoa, accounting for more than 50 percent of the world's cocoa.
- 6. With reference to the Himalayan rivers joining the Ganga downstream of Prayagraj from West to East, which one of the following sequences is correct?
 - (a) Ghaghara Gomati Gandak Kosi
 - (b) Gomati Ghaghara Gandak Kosi
 - (c) Ghaghara Gomati Kosi Gandak
 - (d) Gomati-Ghaghara-Kosi-Gandak

Correct Option: (b)

Explanation:

• A large number of tributaries like Alaknanda, Ramganga, Kali, Yamuna, Gomti, Ghagra, Gandak, Kosi and Sone, draining 11 states of the country join River Ganga at different confluence points during its journey.



7. Consider the following statements:

Statement-I:

Rainfall is one of the reasons for weathering of rocks.

Statement-II:

Rain water contains carbon dioxide in solution.

Statement-III:

Rain water contains atmospheric oxygen.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-II and Statement-III are correct and both of them explain Statement-I
- (b) Both Statement-II and Statement-III are correct, but only one of them explains Statement-I

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- (c) Only one of the Statements II and III is correct and that explains Statement-I
- (d) Neither Statement-II nor Statement-III is correct

Correct Option: (a)

Explanation:

- Rainwater is typically devoid of all dissolved solids but contains dissolved gases (oxides of carbon, nitrogen and sulphur) which result in pH values of about 5.5 or lower.
- The rainwater is oxidizing and acidic.
- It generally contains oxygen, nitrogen, and carbon dioxide in solution, together with ammonium nitrate after thunderstorms.

8. Consider the following countries:

- 1. Finland
- 2. Germany
- 3. Norway
- 4. Russia

How many of the above countries have a border with the North Sea?

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

Correct Option: (b)

Explanation:

• The sea is bordered by the island of Great Britain to the southwest and west, the Orkney and Shetland islands to the northwest, **Norway to the northeast**, Denmark to the east, **Germany** and the Netherlands to the southeast, and Belgium and France to the south.







9. Consider the following information:

constact	Sonstaet the following information.					
	Waterfall	Region	River			
1.	Dhuandhar	Malwa	Narmada			
2.	Hundru	Chota Nagpur	Subarnarekha			
3.	Gersoppa	Western Ghats	Netravati			

In how many of the above rows is the given information correctly matched?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) None

Correct Option: (a)

Explanation:

	Waterfall	Region	River
Pair 1 is incorrect:	Dhuandhar	Kaimur	Narmada
Pair 2 is correct:	Hundru	Chota Nagpur	Subarnarekha
Pair 3 is Incorrect:	Gersoppa	Western Ghats	Sharavati

10. Consider the following information:

	Region	Name of the mountain range	Type of mountain
1.	Central Asia	Vosges	Fold mountain
2.	Europe	Alps	Block mountain
3.	North America	Appalachians	Fold mountain
4.	South America	Andes	Fold mountain

In how many of the above rows is the given information correctly matched?

(a) Only one

- (b) Only two
- (c) Only three
- (d) All four

Correct Option: (b)

	Region	Name of the Mountain Range	Type of Mountain
Pair 1 is incorrect:	France	Vosges	Block Mountain
Pair 2 is incorrect:	Europe	Alps	Fold Mountain
Pair 3 is correct:	North America	Appalachians	Fold Mountain
Pair 4 is correct:	South America	Andes	Fold Mountain

- Vosges are examples of block mountains located in Eastern France.
- The Alps Mountains are 'Young Fold Mountains'. The Alps Mountains are the highest and most extensive mountain range in Europe which were formed millions of years ago.
- The crust that is now the Appalachians began folding over 300 million years ago, when the North American and African continental plates collided.
- The Andes are mostly being folded and uplifted from the thicker, less-dense rocks of the South American plate.

11. Consider the following airports:

- 1. Donyi Polo Airport
- 2. Kushinagar International Airport
- 3. Vijayawada International Airport

In the recent past, which of the above have been constructed as Greenfield projects?

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

Correct Option: (a)

Explanation:

- Under the GFA policy, Government of India has accorded 'In-Principle' approval for setting up of 21 Greenfield Airports namely, Mopa in Goa, Navi Mumbai, Shirdi and Sindhudurg in Maharashtra, Kalaburagi, Vijayapura, Hassan and Shivamogga in Karnataka, Dabra (Gwalior) in Madhya Pradesh, Kushinagar and Noida (Jewar) in Uttar Pradesh, Dholera and Hirasar in Gujarat, Karaikal in Puducherry, Dagadarthi, Bhogapuram and Orvakal (Kurnool) in Andhra Pradesh, Durgapur in West Bengal, Pakyong in Sikkim, Kannur in Kerala and Itanagar in Arunachal Pradesh across the country.
- Out of these, 11 Greenfield airports viz. Durgapur, Shirdi, Kannur, Pakyong, Kalaburagi, Orvakal (Kurnool), Sindhudurg, **Kushinagar**, **Itanagar** (**Donyi Polo Airport**), Mopa and Shivamogga have been operationalised.
- Government of India has also granted the first stage clearance i.e. site clearance for construction of three Greenfield airports namely Alwar in Rajasthan, Singrauli in Madhya Pradesh and Mandi in Himachal Pradesh.

12. With reference to "water vapour", which of the following statements is/are correct?

- 1. It is a gas, the amount of which decreases with altitude.
- 2. Its percentage is maximum at the poles.

Select the answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2 $\mathbf{1}$
- (d) Neither 1 nor 2

Correct Option: (a)

Explanation:

- Statement 1 is correct: Water vapour is a gas, the amount of which decreases with altitude.
- Statement 2 is incorrect: Its percentage is maximum at tropics.

13. Consider the following description:

- 1. Annual and daily range of temperatures is low.
- 2. Precipitation occurs throughout the year.
- 3. Precipitation varies between 50 cm 250 cm.



What is this type of climate?

- (a) Equatorial climate
- (b) China type climate
- (c) Humid subtropical climate
- (d) Marine West coast climate

Correct Option: (d)

Explanation:

Marine West coast climate:

- Annual temperature ranges are rather small (10–15 °C or [50–59 °F]), about half those encountered farther to the east in the continental interior at the same latitude. Mean annual temperatures are usually 7–13 °C (45–55 °F) in lowland areas, the winters are mild, and the summers are relatively moderate, rarely having monthly temperatures above 20 °C (68 °F).
- Precipitation totals vary somewhat throughout the year in response to the changing location and intensity of these storm systems, but annual accumulations generally range from 50 to 250 cm (20 to 98 inches), with local totals exceeding 500 cm (197 inches) where onshore winds encounter mountain ranges.

14. With reference to "Coriolis force", which of the following statements is/are correct?

- 1. It increases with increase in wind velocity.
- 2. It is maximum at the poles and is absent at the equator.

Select the answer using the code given below:

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

Correct Option: (c)

Explanation:

- Statement 1 is correct: It increases with increase in wind velocity
- Statement 2 is correct: It is maximum at poles and is absent at the equator.

15. On June 21 every year, which of the following latitude(s) experience(s) a sunlight of more than 12 hours?

- 1. Equator
- 2. Tropic of Cancer
- 3. Tropic of Capricorn
- 4. Arctic Circle

Select the correct answer using the code given below:

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

Correct Option: (d)

Explanation:

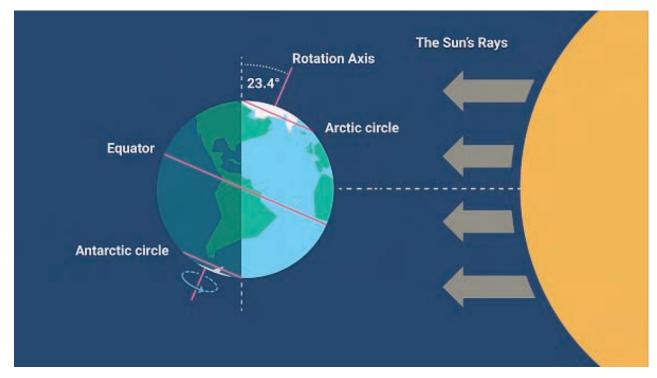
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- Statement 1 is incorrect: Equator
- Statement 2 is correct: Tropic of Cancer

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- Statement 3 is incorrect: Tropic of Capricorn
- Statement 4 is correct: Arctic Circle



- 16. One of the following regions has the world's largest tropical peatland, which holds about three years worth of global carbon emissions from fossil fuels; and the possible destruction of which can exert detrimental effect on the global climate. Which one of the following denotes that region?
 - (a) Amazon Basin
 - (b) Congo Basin
 - (c) Kikori Basin
 - (d) Rio de la Plata Basin

Correct Option: (b)

Explanation:

- The Congo Basin is one of the world's last regions that absorbs more carbon than it emits, the United Nations Environment Programme's (UNEP) Head of Biodiversity and Land.
- The peat swamp forest of the Congo Basin stores around 29 billion tons of carbon approximately equivalent to three years' worth of global greenhouse gas emissions while the Basin as a whole absorbs nearly 1.5 billion tons of carbon dioxide a year .

17. With reference to perfluoroalkyl and polyfluoroalkyl substances (PFAS) that are used in making many consumer products, consider the following statements:

- 1. PFAS are found to be widespread in drinking water, food and food packaging materials.
- 2. PFAS are not easily degraded in the environment.
- 3. Persistent exposure to PFAS can lead to bioaccumulation in animal bodies.

Which of the statements given above are correct?

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



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

Correct Option: (d)

Explanation:

- Statement 1 is correct: PFAS are found to be widespread in drinking water, food and packaging materials.
- Statement 2 is correct: PFAS are not easily degraded in the environment.
- Statement 3 is correct: Persistent exposure to PFAS can lead to bioaccumulation in animal bodies.

18. Consider the following:

- 1. Carabid beetles
- 2. Centipedes
- 3. Flies
- 4. Termites
- 5. Wasps

Parasitoid species are found in how many of the above kind of organisms?

- (a) Only two
- (b) Only three
- (c) Only four
- (d) All five

Correct Option: (b)

Explanation:

- Option 1 is correct: Carabid beetles : Coleoptera (Parasitoid)
- **Option 2 is incorrect:** Centipedes : Arthropodes
- **Option 3 is correct:** Flies : Parasitoid
- **Option 4 is incorrect:** Termites: Detritophagous
- Option 5 is correct: Wasps: Parasitoid
- Parasitoid species: In evolutionary ecology, a parasitoid is an organism that lives in close association with its host at the host's expense, eventually resulting in the death of the host. Parasitoidism is one of six major evolutionary strategies within parasitism, distinguished by the fatal prognosis for the host, which makes the strategy close to predation.
- Parasitoids are found in a variety of taxa across the insect superorder Endopterygota, whose complete metamorphosis may have pre-adapted them for a split lifestyle, with parasitoid larvae and free-living adults.
- There are parasitoids, too, in the Diptera, Coleoptera and other orders of endopterygote insects. Some of these, usually but not only wasps, are used in biological pest control.

19. Consider the following plants:

- 1. Groundnut
- 2. Horse-gram
- 3. Soybean

How many of the above belong to the pea family?

- (a) Only one
- (b) Only two



- (c) All three
- (d) None

Correct Option: (c)

Explanation:

- Statement 1 is correct: Groundnut (Arachis hypogaea) belongs to the Fabaceae family.
- Statement 2 is correct: Horse-gram (Macrotyloma uniflorum) belongs to the Fabaceae family.
- Statement 3 is correct: Soybean (Glycine max) also belongs to the Fabaceae family.
- The Fabaceae family, commonly known as the legume, pea, or bean family, is crucial for agriculture and ecology. It includes many important crops like beans, peas, lentils, peanuts, and soybeans, which are vital sources of protein and nitrogen fixation in soil.

20. Consider the following statements:

Statement-I:

The Indian Flying Fox is placed under the "vermin" category in the Wild Live (Protection) Act, 1972.

Statement-II:

The Indian Flying Fox feeds on the blood of other animals.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (c)

Explanation:

- Statement I is correct: The Indian Flying Fox (Pteropus giganteus) was listed under the vermin category in the Wildlife Protection Act, 1972.
- **Statement II is incorrect:** The Indian Flying Fox is a frugivore, meaning it primarily feeds on fruits, nectar, and flowers, not on the blood of other animals.
- The Indian Flying Fox is one of the largest bat species in the world. It plays a crucial role in the ecosystem by pollinating plants and dispersing seeds. Misconceptions about its diet can lead to unnecessary fear and persecution.

21. The organisms "Cicada, Froghopper and Pond skater" are:

- (a) Birds
- (b) Fish
- (c) Insects
- (d) Reptiles

Correct Option: (c)

- **Option (a) is incorrect:** Cicada, Froghopper, and Pond skater are not birds.
- **Option (b) is incorrect**: They are not fish.
- **Option (c) is correct:** All three are insects.
- **Option (d) is incorrect**: They are not reptiles.

• Cicadas are known for their distinctive sound produced by males. Froghoppers, also called spittlebugs, are noted for their ability to jump large distances. Pond skaters, or water striders, are insects that can walk on water due to surface tension and their specialized legs.

22. Consider the following statements:

Statement-I:

Many chewing gums found in the market are considered a source of environmental pollution.

Statement-II:

Many chewing gums contain plastic as gum base.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (a)

Explanation:

- **Statement I is correct**: Many chewing gums are considered a source of environmental pollution because they are not biodegradable.
- **Statement II is correct**: Many chewing gums contain plastic as a gum base, which is non-biodegradable and contributes to pollution.
- Chewing gum pollution is a significant environmental issue as it contributes to litter. The synthetic rubber or plastic used in many gums can persist in the environment for a long time, posing challenges for cleanup and waste management.

23. Consider the following pairs:

	Country	Animal found in its natural habitat
1.	Brazil	Indri
2.	Indonesia	Elk
3.	Madagascar	Bonobo

How many of the pairs given above are correctly matched?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Correct Option: (d)

Explanation:

- Pair 1 is incorrectly matched: Indri (Indri indri) is found in Madagascar, not Brazil.
- **Pair 2 is incorrectly matched**: Elk (Cervus canadensis) is found in North America and parts of Asia, not Indonesia.
- **Pair 3 is incorrectly matched**: Bonobo (Pan paniscus) is found in the Congo Basin, not Madagascar.

Supplementary Notes:

• Understanding the natural habitats of different species is crucial for effective conservation efforts. Incorrect information about species distribution can lead to ineffective or misguided conservation strategies.

24. Consider the following statements regarding World Toilet Organization:

- 1. It is one of the agencies of the United Nations.
- 2. World Toilet Summit, World Toilet Day and World Toilet College are the initiatives of this organization, to inspire action to tackle the global sanitation crisis.
- 3. The main focus of its function is to grant funds to the least developed countries and developing countries to achieve the end of open defecation.

Which of the statements given above is/are correct?

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

Correct Option: (a)

Explanation:

- **Statement 1 is incorrect:** The World Toilet Organization is not an agency of the United Nations.
- **Statement 2 is correct:** The World Toilet Organization hosts initiatives like the World Toilet Summit, World Toilet Day, and World Toilet College to address global sanitation issues.
- **Statement 3 is incorrect**: The organization primarily focuses on advocacy and education rather than directly granting funds to countries.
- The World Toilet Organization is a global non-profit committed to improving toilet and sanitation conditions worldwide. Its efforts include raising awareness, creating educational programs, and advocating for sanitation as a basic human right.

25. Consider the following statements:

- 1. Lions do not have a particular breeding season.
- 2. Unlike most other big cats, cheetahs do not roar.
- 3. Unlike male lions, male leopards do not proclaim their territory by scent marking.

Which of the statements given above are correct?

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

Correct Option: (a)

Explanation:

- Statement 1 is correct: Lions do not have a specific breeding season and can breed throughout the year.
- Statement 2 is correct: Unlike most other big cats, cheetahs cannot roar but can purr, chirp, and make other sounds.
- Statement 3 is incorrect: Male leopards mark their territory by scent marking.
- Lions, cheetahs, and leopards exhibit unique behaviors and adaptations. Understanding these differences is essential for wildlife conservation and management. Each species' reproductive and territorial behaviors are critical for their survival and social structure.

26. Which one of the following is the correct description of "100 Million Farmers"?

(a) It is a platform for accelerating the transition towards food and water systems that are net-zero (carbon), nature-positive and that aims to increase farmer resilience.



- (b) It is an international alliance and a network of individuals and farming organisations interested in supporting and strengthening the development of the organic animal husbandry.
- (c) It is a digital platform fully integrated with service providers and built on blockchain that lets buyers, sellers and third parties trade fertilizers quickly and securely.
- (d) It is a platform with the mission of encouraging the farmers to form Farmer Product Organisations or Agribusiness Consortiums, thus facilitating the access to global open markets to sell their products.

Correct Option: (a)

Explanation:

- **Option (a) is correct:** "100 Million Farmers" is a platform aimed at transitioning towards sustainable food and water systems, increasing farmer resilience, and promoting practices that are net-zero in carbon and nature-positive.
- **Source:** [World Economic Forum 100 Million Farmers](https://www.weforum.org/agenda/2020/09/100-million-farmers-transitioning-towards-net-zero-nature-positive-food-systems/)

27. Consider the following

- 1. Battery storage
- 2. Biomass generators
- 3. Fuel cells
- 4. Rooftop solar photovoltaic units

How many of the the above are considered "Distributed Energy Resources" ?

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

Correct Option: (d)

Explanation:

- Statement 1 is correct: Battery storage is considered a distributed energy resource.
- Statement 2 is correct: Biomass generators are considered distributed energy resources.
- Statement 3 is correct: Fuel cells are considered distributed energy resources.
- Statement 4 is correct: Rooftop solar photovoltaic units are considered distributed energy resources.
- Distributed energy resources (DERs) are decentralized, modular, and flexible technologies that are located close to the point of use. They provide an alternative to or an enhancement of the traditional electric power system by generating electricity from renewable sources and storing energy.

28. Which one of the following shows a unique relationship with an insect that has coevolved with it and that is the only insect that can pollinate this tree?

- (a) Fig
- (b) Mahua
- (c) Sandalwood
- (d) Silk cotton

Correct Option: (a)

Explanation:

• **Option (a) is correct:** The fig tree has a unique relationship with the fig wasp, an insect that has coevolved with it and is the only insect that can pollinate it.



- **Option (b) is incorrect**: Mahua does not have such a unique pollination relationship.
- Option (c) is incorrect: Sandalwood does not have such a unique pollination relationship.
- **Option (d) is incorrect**: Silk cotton does not have such a unique pollination relationship.
- The fig tree and fig wasp have a mutualistic relationship where the wasp pollinates the fig, and in return, the fig provides a place for the wasp to lay its eggs. This specialized pollination mechanism is vital for the reproduction of both species.

29. Consider the following:

- 1. Butterflies
- 2. Fish
- 3. Frogs

How many of the the above are have poisonous species among them?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Correct Option: (c)

Explanation:

- **Statement 1 is correct:** Some species of butterflies are poisonous, often due to the plants they consume as caterpillars.
- Statement 2 is correct: Some fish species are poisonous, such as pufferfish, which contain tetrodotoxin.
- Statement 3 is correct: Some frog species are poisonous, such as poison dart frogs, which secrete toxins through their skin.
- Various species across different animal groups have developed poisonous or venomous traits as a defense mechanism or to subdue prey. These adaptations can be crucial for survival in their respective ecosystems.

30. Consider the following:

- 1. Cashew
- 2. Papaya
- 3. Red sanders

How many of the the above trees are actually native to India?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Correct Option: (a)

- Statement 1 is incorrect: Cashew (Anacardium occidentale) is not native to India; it originates from Brazil.
- **Statement 2 is incorrect**: Papaya (Carica papaya) is not native to India; it originates from Central America.

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- Statement 3 is correct: Red sanders (Pterocarpus santalinus) is native to India.
- Red sanders is a tree species endemic to the Eastern Ghats of India. It is known for its valuable heartwood, which is used for various purposes, including traditional medicine and woodworking.

31. With reference to radioisotope thermoelectric generators (RTGs), consider the following statements:

- 1. RTGs are miniature fission reactors.
- 2. RTGs are used for powering the onboard systems of spacecrafts.
- 3. RTGs can use Plutonium-238, which is a by-product of weapons development.

Which of the statements given above are correct?

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

Correct Option: (b)

Explanation:

- **Statement 1 is incorrect**: RTGs are not miniature fission reactors; they use the decay of radioactive isotopes to generate electricity.
- Statement 2 is correct: RTGs are used for powering the onboard systems of spacecraft.
- Statement 3 is correct: RTGs can use Plutonium-238, which is a by-product of weapons development.
- Radioisotope thermoelectric generators (RTGs) are devices that convert the heat released by the decay of radioactive materials into electricity. They are commonly used in space missions where solar power is not feasible.

32. Consider the following statements:

Statement- I:

Giant stars live much longer than dwarf stars.

Statement-II:

Compared to dwarf stars, giant stars have a greater rate nuclear reactions:

Which one of the following is correct in respect of the above statements?

- (a) Both Statement- I and Statement- II are correct and Statement- II explains Statement- I
- (b) Both Statement- I and Statement- II are correct, but Statement- II does not explains Statement- I
- (c) Statement- I is correct, but Statement- II is incorrect
- (d) Statement- I is incorrect, but Statement- II is correct

Correct Option: (d)

- **Statement I is incorrect:** Giant stars live shorter lives than dwarf stars due to their higher rates of nuclear fusion.
- **Statement II is correct:** Giant stars have a greater rate of nuclear reactions compared to dwarf stars.
- Giant stars burn through their nuclear fuel much faster than dwarf stars, leading to shorter lifespans. The rate of nuclear fusion in a star is directly related to its mass and size.





33. Which one of the following is synthesised in human body that dilates blood vessels and increases blood flow?

- (a) Nitric oxide
- (b) Nitrous oxide
- (c) Nitrogen dioxide
- (d) Nitrogen pentoxide

Correct Option: (a)

Explanation:

- **Option (a) is correct:** Nitric oxide is synthesized in the human body and acts as a vasodilator, increasing blood flow.
- **Option (b) is incorrect**: Nitrous oxide is a gas used for anesthesia and pain relief, not involved in vasodilation.
- **Option (c) is incorrect**: Nitrogen dioxide is a toxic gas, not involved in vasodilation.
- **Option (d) is incorrect**: Nitrogen pentoxide is a chemical compound, not involved in vasodilation.
- Nitric oxide plays a crucial role in the cardiovascular system by relaxing the smooth muscles of blood vessels, thereby increasing blood flow and reducing blood pressure.

34. Consider the following statements:

- 1. Indentification of narcotics on passengers at airports or in aircraft
- 2. Monitoring of precipitation
- 3. Tracking the migration of animals

In how many of the above activities can the radars be used?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Correct Option: (b)

Explanation:

- Statement 1 is incorrect: Radars are not used for identifying narcotics on passengers at airports or in aircraft.
- Statement 2 is correct: Radars can be used for monitoring precipitation.
- Statement 3 is correct: Radars can be used for tracking the migration of animals.
- Radars are versatile tools used in various applications, including weather monitoring, air traffic control, and wildlife tracking. They operate by emitting radio waves and detecting their reflections from objects.

35. Consider the following aircraft:

- 1. Rafael
- 2. MiG-29
- 3. Tejas MK-1

How many of the above are considered fifth generation fighter aircraft?

- (a) Only one
- (b) Only two



- (c) All three
- (d) None

Correct Option: (d)

Explanation:

- **Option (a) is incorrect:** Rafael is a fourth-generation fighter aircraft.
- **Option (b) is incorrect:** MiG-29 is a fourth-generation fighter aircraft.
- **Option (c) is incorrect:** Tejas MK-1 is a fourth-generation fighter aircraft.
- **Option (d) is correct:** None of the listed aircraft are fifth-generation fighter aircraft.
- Fifth-generation fighter aircraft are characterized by advanced stealth, supercruise capabilities, highly integrated avionics, and enhanced maneuverability. Examples include the F-22 Raptor and the F-35 Lightning II.

36. In which of the following are hydrogels used?

- 1. Controlled drug delivery in patients
- 2. Mobile air-conditioning systems
- 3. Preparation of industrial lubricants

Select the correct answer using the code give below:

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

Correct Option: (d)

Explanation:

- **Option (a) is correct:** Hydrogels are used for controlled drug delivery in patients.
- **Option (b) is correct**: Hydrogels are used in mobile air-conditioning systems for cooling purposes.
- **Option (c) is correct:** Hydrogels are used in the preparation of industrial lubricants.
- Hydrogels are polymer networks that can absorb and retain large amounts of water. They have diverse applications in medicine, engineering, and industry due to their biocompatibility, flexibility, and moisture retention properties.

37. Which one of the following is the exhaust pipe emission from Fuel Cell Electric Vehicles, powered by hydrogen?

- (a) Hydrogen peroxide
- (b) Hydronium
- (c) Oxygen
- (d) Water vapour

Correct Option: (d)

- Fuel cell electric vehicles (FCEVs) are powered by hydrogen. They are more efficient than conventional internal combustion engine vehicles and produce no harmful tailpipe emissions—they only emit water vapor and warm air.
- FCEVs use a propulsion system similar to that of electric vehicles, where energy stored as hydrogen is converted to electricity by the fuel cell. Unlike conventional internal combustion engine vehicles, these vehicles produce no harmful tailpipe emissions.



• FCEVs are fueled with pure hydrogen gas stored in a tank on the vehicle. Similar to conventional internal combustion engine vehicles, they can fuel in about 5 minutes and have a driving range of more than 300 miles. FCEVs are equipped with other advanced technologies to increase efficiency, such as regenerative braking systems that capture the energy lost during braking and store it in a battery.

38. Recently, the term "pumped-storage hydropower" is actually and appropriately discussed in the context of which one of the following?

- (a) Irrigation of terraced crop fields
- (b) Lift irrigation of cereal crop
- (c) Long duration energy storage
- (d) Rainwater harvesting system

Correct Option: (c)

Explanation:

• Pumped storage hydropower is a form of clean energy storage that is ideal for electricity grids reliant on solar and wind power. The technology absorbs surplus energy at times of low demand and releases it when demand is high. Thus, facilitates long duration energy storage.

Supplementary Notes:

- There are two main types of pumped hydro:
- **Open-loop:** with either an upper or lower reservoir that is continuously connected to a naturally flowing water source such as a river.
- **Closed-loop:** an 'off-river' site that produces power from water pumped to an upper reservoir without a significant natural inflow.
- Figure: A closed loop or 'off-river' pumped storage hydropower project

39. "Membrane Bioreactors" are often discussed in the context of:

- (a) Assisted reproductive technologies
- (b) Drug delivery nanotechnologies
- (c) Vaccine production technologies
- (d) Wastewater treatment technologies

Correct Option: (d)

Explanation:

• Membrane bioreactor (MBR) technology has emerged as a wastewater treatment technology of choice over the activated sludge process (ASP), which has been the conventional municipal wastewater technology over the last century.

40. With reference to the Indian economy, "Collateral Borrowing and Lending Obligations" are the instruments of:

- (a) Bond market
- (b) Forex market
- (c) Money market
- (d) Stock market

Correct Option: (c)

Explanation:

• CBLO is a money market instrument that represents an obligation between a borrower and a lender. The instrument works like a bond where the lender buys the CBLO and a borrower sells the money market instrument with interest.



41. The total fertility rate in an economy is defined as:

- (a) the number of children born per 1000 people in the population in a year.
- (b) the number of children born to a couple in their lifetime in a given population.
- (c) the birth rate minus death rate.
- (d) the average number of live births a woman would have by the end of her child-bearing age.

Correct Option: (d)

Explanation:

• The average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. It is expressed as children per woman. Total fertility rate is directly calculated as the sum of age-specific fertility rates (usually referring to women aged 15 to 49 years), or five times the sum if data are given in five-year age groups.

42. Consider the following statements:

- 1. In India, Non-Banking Financial Companies can access the Liquidity Adjustment Facility window of the Reserve Bank of India.
- 2. In India, Foreign Institutional Investors can hold the Government Securities (G-Sec)
- 3. In India, Stock Exchanges can offer separate trading platforms for debts.

Which of the statements given above is/are correct?

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

Correct Option: (d)

Explanation:

- Statement 1 is incorrect. LAF is a facility extended by RBI to the scheduled commercial banks (excluding RRBs) and PDs to avail of liquidity in case of requirement or park excess funds with RBI in case of excess liquidity on an overnight basis against the collateral of G-Secs including SDLs.
- Statement 2 is correct. FIIs are those institutional investors which invest in the assets belonging to a different country other than that where these organizations are based. Recently, the Reserve Bank of India (RBI) has allowed investments in India's Sovereign Green Bonds (SGrBs) by Foreign Institutional Investors (FIIs).
- **Statement 3 is correct.** In India, Stock exchanges can offer separate trading platforms for debts. Example - NSE's Electronic Debt Bidding platform (NSE-EBP).

43. In India, which of the following can trade in Corporate Bonds and Government Securities?

- 1. Insurance Companies
- 2. Pension Funds
- 3. Retail Investors

Select the correct answer using the code given below:

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



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

Correct Option: (d)

Explanation:

- **Option 1 is correct.** Insurance companies have the flexibility to invest in both corporate bonds and government securities, depending on their risk appetite and investment strategy.
- **Option 2 is correct.** Insurance companies and pension funds invest in both corporate bonds and government securities. Corporate bonds offer diversification and steady income, while government securities are safer due to government backing. Returns depend on market conditions and credit risk. NPS in India allows asset allocation across these classes.
- **Option 3 is correct.** Retail investors can trade in both corporate bonds and government securities.
- Source: rbi.org.in, investopedia.com, indiabonds.com, tatapensionfund.com, economictimes. com, indiatimes.com

44. Consider the following:

- 1. Exchange-Trade Funds (ETF)
- 2. Motor vehicles
- 3. Currency swap

Which of the above is/are considered financial instruments?

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

Correct Option: (d)

Explanation:

• **Option 1 and 3 are correct.** A financial instrument is a real or virtual document representing a legal agreement involving any kind of monetary value. Examples of financial instruments include stocks, exchange-traded funds (ETFs), bonds, certificates of deposit (CDs), mutual funds, loans, and derivatives contracts, among others.

45. With reference to the sectors of the Indian economy, consider the following pairs:

	Economic activity	Sector
1.	Storage of agricultural produce	Secondary
2.	Dairy farm	Primary
3.	Mineral exploration	Tertiary
4.	Weaving cloth	Secondary

How many of the pairs given above are correctly matched?

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

Correct Option: (b)



	Economic Activity	Sector	
1.	Storage of Agricultural Produce	Tertiary	Agricultural storage, which involves proper warehousing and cold storage facilities for agricultural produce, falls under the tertiary sector.
2.	Dairy Farm	Primary	Dairy farming falls under the primary sector of economic activity.
3.	Mineral Exploration	Tertiary	Mineral exploration is part of the tertiary sector. Companies like Tertiary Minerals plc focus on discovering and developing mineral resources in geologically prospective regions, such as Nevada and Zambia
4.	Weaving Cloth	Secondary	The weaving sector is the backbone of the textile industry, contributing significantly to fabric production.

• Source: Indiafarms.com, Minerals.org.au, Indianmirror.com

46. Consider the following materials:

- 1. Agricultural residues
- 2. Corn grain
- 3. Wastewater treatment sludge
- 4. Wood mill waste

Which of the above can be used as feedstock for producing Sustainable Aviation Fuel?

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

Correct Option: (c)

Explanation:

- **Option 1, 2, 3 and 4 are correct.** SAF is a biofuel used to power aircraft that has similar properties to conventional jet fuel but with a smaller carbon footprint. Depending on the feedstock and technologies used to produce it, SAF can reduce life cycle GHG emissions dramatically compared to conventional jet fuel. Some emerging SAF pathways even have a net-negative GHG footprint. These resources are -
 - Corn grain
 - Oil seeds
 - Algae
 - Other fats, oils, and greases
 - Agricultural residues
 - Forestry residues
 - Wood mill waste
 - Municipal solid waste streams
 - Wet wastes (manures, wastewater treatment sludge)
 - Dedicated energy crops.

47. With reference to physical capital in Indian economy, consider the following pairs:

	Items	Category
1.	Farmer's Plough	Working Capital
2.	Computer	Fixed Capital



3.	Yarn used by the weaver	Fixed Capital
4.	Petrol	Working Capital

How many of the above pairs are correctly matched?

- (a) Only one
- (b) Only Two
- (c) Only three
- (d) All four

Correct Option: (b)

Explanation:

• Option 2 and 4 are correct.

- Fixed Capital:
 - Invested in long-term assets (e.g., land, machinery, buildings).
 - Not for immediate resale.
 - Example: A textile factory's weaving machines and factory building.
- Working Capital:
 - Used for day-to-day operations (e.g., cash, inventory, receivables).
 - Easily converted into cash.
 - Example: Cash reserves for paying wages and purchasing raw materials

48. Which one of the following words/phrases is most appropriately used to denote denote "an interoperable network of 3D virtual worlds that can be accessed simultaneously by millions of users, who can exert property rights over virtual items"?

- (a) Big data analytics
- (b) Cryptography
- (c) Metawise
- (d) Virtual matrix

Correct Option: (c)

Explanation:

• The metaverse refers to virtual worlds where users, represented by avatars, interact—usually in 3D—and focus on social and economic connections1. It's like an immersive online universe experienced through virtual reality or augmented reality. Think of it as the next iteration of the internet, where physical and digital realities converge.

49. With reference to the rule/rules imposed by the Reserve Bank of India while treating foreign banks, consider the following statements:

- 1. There is no minimum capital requirement for wholly owned banking subsidiaries in India.
- 2. For wholly owend banking subsidiaries in India, at least 50% of the board members should be Indian nationals.

Which of the statement given above is/are correct?

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



Correct Option: (b)

Explanation:

- Statement 1 is incorrect. The initial minimum paid-up voting equity capital for a WOS shall be `5 billion for new entrants. Existing branches of foreign banks desiring to convert into WOS shall have a minimum net worth of `5 billion.
- Statement 2 is correct. Not less than fifty per cent of the directors should be Indian nationals /NRIs/ PIOs subject to the condition that not less than 1/3rd of the directors are Indian nationals resident in India.

50. With reference to Coporate Social Responsibility (CSR) rules in India, consider the following statements:

- 1. CSR rules specify that expenditures that benefit the company directly or its employees will not be considered as CSR
- 2. CSR rules do not specify minimum spending on CSR activities.

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

Correct Option: (a)

Explanation:

- Statement 1 is correct. Section 198 provides that while computing the net profits of a company a credit should be given for the subsidies and bounties received from any government, or public authority constituted or authorised on this behalf.
- For computing net profits, credit cannot be given for the following sums:
 - Profits, by way of premium on shares, unless the company is an investment company.
 - Profits on sales of forfeited shares.
 - Profits of a capital nature, including profits from the sale of the undertaking or any part thereof.
 - Profits from the sale of any fixed assets or immovable property of a capital nature comprised in the undertaking, unless the company business consists of buying and selling any assets or property.
 - Any change in the carrying amount of an asset or of a liability recognised in equity reserves, including surplus in profit and loss accounts for the measurement of the asset or the liability at fair value.
 - Any amount representing notional gains, unrealised gains or revaluation of assets.
- **Statement 2 is incorrect.** The provisions of CSR applies to every company fulfiing any of the following conditions in the preceding financial year:
 - Net worth of more than Rs.500 crore
 - Turnover of more than Rs.1000 crore
 - Net profit of more than Rs.5 crore
- The Board of Directors of every company for which the CSR provisions apply must ensure that the company spends in every financial year at least 2% of its average net profits made during the immediately preceding three financial years as per its CSR policy. If the company has not completed three financial years since its incorporation, it must spend 2% of its average net profits made during the immediately preceding financial years as per its CSR policy.

51. Consider the following statements:

Statement-I:

If the United States of America (USA) were to default on its debt, holders of US Treasury Bonds will not be able to exercise their claims to receive payment.



Statement-II:

The USA Government debt is not backed by any hard assets, but only by the faith of the Government.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (d)

Explanation:

- Statement 1 is incorrect. If the United States defaults on its debt, the repercussions would be severe. Investors holding U.S. debt, including pension funds and banks, could face failure. Investors can exercise their claim but not be able to receive the payment.
- Statement 2 is correct. U.S. government debt, often referred to as Treasury bonds or Treasuries, is not backed by specific hard assets. Unlike corporate bonds, which may be secured by collateral such as real estate or equipment, U.S. Treasuries rely on the government's ability to generate revenue through taxation and other means.

52. Consider the following statements:

Statement-I:

Syndicated lending spreads the risk of borrower default across multiple lenders.

Statement-II:

The syndicated loan can be a fixed amount/lump sum of funds, but cannot be a credit line.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (c)

Explanation:

- Statement 1 is correct. A syndicated loan is a form of financing that is offered by a group of lenders. Syndicated loans arise when a project requires too large a loan for a single lender or when a project needs a specialized lender with expertise in a specific asset class.
- Statement 2 is incorrect. Syndicating allows lenders to spread risk and take part in financial opportunities that may be too large for their individual capital base. Lenders are referred to as a syndicate, which works together to provide funds for a single borrower. The borrower can be a corporation, a large project, or a sovereign government. The loan can involve a fixed amount of funds, a credit line, or a combination of the two.

53. Consider the following statements in respect of the digital rupee:

- 1. It is a sovereign currency issued by the Reserve Bank of India (RBI) in alignment with its monetary policy.
- 2. It appears as a liability on the RBI's balance sheet.



- 3. It is insured against inflation by its very design.
- 4. It is freely convertible against commercial bank money and cash.

Which of the statements given above are correct?

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

Correct Option: (d)

Explanation:

- Statement 1,2 and 4 are correct. CBDC is a sovereign currency issued by central banks in alignment with their monetary policy. It appears as a liability on the central bank's balance sheet. It must be accepted as a medium of payment, legal tender, and a safe store of value by all citizens, enterprises, and government agencies. It is freely convertible against commercial bank money and cash.CBDC is a fungible legal tender for which holders need not have a bank account.
- Statement 3 is incorrect. The design doesn't hold any protection or insured against inflation

54. With reference to ancient India, Gautama Buddha was generally known by which of the following epithets?

- 1. Nayaputta
- 2. Shakyamuni
- 3. Tathagata

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) None of the above are epithets of Gautama Buddha

Correct Option: (b)

Explanation:

- **Option 1 is incorrect.** Surviving early Jain and Buddhist literature uses several names (or epithets) for Mahavira, including Nayaputta, Muni, Samana, Nigantha, Brahman, and Bhagavan.
- **Option 2 and 3 are correct.** Lama Zopa Rinpoche explains the profound meaning behind two of our most common mantras, the Shakyamuni Buddha name mantra and the mantra of Shakyamuni Buddha.
- Buddha. Tathagata ("the perfect one"), lit. the one who has "thus gone", or "thus come", is an epithet of the Buddha used by him when speaking of himself.

	Archaelological Site	State	Description
1.	Chandraketurgarh	Odisha	Trading Port town
2.	Inamgaon	Maharashtra	Chalcolithic site
3.	Mangadu	Kerala	Megalithic site
4.	Salihundam	Andhra Pradesh	Rock-cut cave Shrines

55. Consider the following information:



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In which of thw above rows is the given information correctly matched?

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

Correct Option: (b)

Explanation:

- **Pair 1 is incorrect** as it is in West Bengal
- **Pair 4 is incorrect** as though the site is in Andhra but the description for which it is famous is Buddhist stupa shrine.
- The otherwise inconspicuous village of Salihundam, located on the banks of the Vamsadhara River, shot into fame when archaeological excavations here revealed an ancient Buddhist settlement. This site is now protected by the ASI, contains several votive stupas, a mahastupa, chaityas and viharas.

56. Who of the following rulers of medieval India gave permission to the Portuguese to build a fort at Bhatkal?

- (a) Krishnadevaraya
- (b) Narasimha Saluva
- (c) Muhammad Shah III
- (d) Yusuf Adil Shah

Correct Option: (a)

Explanation:

- Krishna Deva Raya was from the Tuluva dynasty of the Vijaynagar Empire and became ruler from 1509-1530. He is considered to be the greatest ruler of the Vijaynagar Empire. He gave permission to the Portuguese to erect a fort at Bhatkal.
- Source: Medieval History

57. With reference to revenue collection by Cornwallis, consider the following statements:

- 1. Under the Ryotwari Settlement of revenue collection, the peasants were exempted from revenue payment in case of bad harvests or natural calamities.
- 2. Under the permanent Settlement in Bengal, if the Zamindar filed to pay his revenues to the sate, on or before the fixed date, he would be removed from his Zamindar.

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

Correct Option: (b)

- **St-1 is incorrect** as there was no such provision, as even the farmers WERE FORCED TO PAY THE REVNEUE even during famines.
- St-2 is correct as under the permanent settlement the zamindari possession of land was dependent on Zamindars paying revenue on time otherwise their land would auctioned off and Striped from Zamindari.



58. Consider the following statements:

- 1. There are no parables in Upanishads.
- 2. Upnishads were composed earlier than the Puranas.

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

Correct Option: (b)

Explanation:

- **St-1 is incorrect** as in the upnishad, In the Upanishad it is said in a parable that there are two birds sitting on the same bough, one of which feeds and the other looks on. This is an image of mutual relationship of the infinite being and the finite self.
- **St-2 is correct** only. As the composition of upnishad is said to be in 800 BCE till AD, even Allah Upnishad in 16th Century but the composition of purana started 350-750 AD.

59. Consider the following statements:

- 1. India is member of the International Grains Council.
- 2. A country needs to be member of the International Grains council for exporting or importing rice and wheat.

Which of the statement given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both1 and 2
- (d) Neither 1 nor 2

Correct Option: (a)

Explanation

- St-2 is incorrect As the member countries are designated as exporter or importer. The statement is highly illogical as a country can't be stopped from exporting or importing if it's not a member of the council.
- Membership of IGC consists of all parties to the Grain Trade Convention, 1995 with 30 countries as members. Each member is designated as an importer or exporter based on its average trade in grains, rice and oilseeds. India is a member of this organization.

60. Which one of the following was the latest inclusion in the Intangible Cultural Heritage List of UNESCO?

- (a) Chhau dance
- (b) Durga Puja
- (c) Garba dance
- (d) Kumbh Mela

Correct Option: (c)

Explanation:

• Garba is the latest one which was included on 8th December 2023.





61. Who was the Provisional President of the Constituent Assembly before Dr. Rajendra Prasad took over?

- (a) C. Rajagopalachari
- (b) Dr. B.R. Ambedkar
- (c) T.T. Krishnamachari
- (d) Dr. Sachchidananda Sinha

Correct Option: (d)

Explanation:

- Option (d) is correct
- Dr Sachchidananda Sinha was the first provincial president of the Constituent Assembly. On December 11 in 1946 itself, Dr Rajendra Prasad was elected as the permanent chairman of the country's Constituent Assembly, with Harendra Coomar Mookerjee as the assistant chairman.

62. With reference to the Government of India Act, 1935, consider the following statements:

- 1. It provided for the establishment of an All India Federation based on the union of the British Indian Provinces and Princely States.
- 2. Defence and Foreign Affairs were kept under the of the federal control of the legislature.

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

Correct Option: (a)

Explanation:

• **St-2 is incorrect** as the power was with Federal executive to be exercised by Governor General.

63. Which one of the following is a work attributed to playwright Bhasa?

- (a) Kavyalankara
- (b) Natyashastra
- (c) Madhyama-vyayoga
- (d) Mahabhashya

Correct Option: (c)

Explanation:

• Madhyamavyayoga or Madhyama Vyāyoga (Devanagari: मध्यमव्यायोग), (English: The Middle One) is a Sanskrit play attributed to Bhāsa. Madhyama refers to the middle one: In this case, the middle sibling. Vyayoga is a type of Sanskrit plays of only one act, containing heroic overtones and lacking significant feminine roles or romantic themes.

64. Sanghabhuti, an Indian Buddhist monk, who travelled to China at the end of the fourth century AD, was the author of a commentary on:

- (a) Prajnaparamita Sutra
- (b) Visuddhimagga



- (c) Sarvastivada Vinaya
- (d) Lalitavistara

Correct Option: (c)

Explanation:

• Sanghabhuti, author of a commentary on the Sarvastivada Vinaya

65. Consider the following properties included in the world heritage List released by UNESCO:

- 1. Shantiniketan
- 2. Rani-ki-Vav
- 3. Sacred Ensembles of the Hoysalas
- 4. Mahabodhi Temple Complex at Bhodhgaya

How many of the above properties were included in 2023?

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

Correct Option: (b)

Explanation:

• Option 1 and 3 are correct

66. As per Article 368 of the Constitution of India, the Parliament may amend any provision of the constitution by way of:

- 1. Addition
- 2. Variation
- 3. Repeal

Select the correct answer using the code given below:

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

Correct Option: (d)

Explanation:

• 368. 2[(1) Notwithstanding anything in this Constitution, Parliament may in exercise of its constituent power amend by way of addition, variation or repeal any provision of this Constitution in accordance with the procedure laid down in this article.] Parliament to amend the Constitution and procedure therefor.]

67. Consider the following countries:

- 1. Italy
- 2. Japan
- 3. Nigeria



- 4. South Korea
- 5. South Africa

Which of the above countries are frequently mentioned in the media for their low birth rates, or ageing population or declining population?

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

Correct Option: (a)

Explanation:

- Option 1, 2 and 4 are correct.
- According to data from Eurostat, Italy is the oldest country in the European Union, with an average median age of above 48.
- Declining birth rates and better survival odds for older people have significantly aged Italy's population.
- In fact, two thirds of the world's countries now have childbirth rates below the replacement rate,". "Japan is low, China is low, South Korea is the lowest in the world.

68. Which of the following statements are correct in respect of a Money Bill in the Parliament?

- 1. Article 109 mentions special procedure in respect of Money Bills.
- 2. A Money Bill shall not be introduced in the Council of States.
- 3. The Rajya Sabha can either approve the Bill or suggest changes but cannot reject it.
- 4. Amendments to a Money Bill suggested by the Rajya Sabha have to be accepted by Lok Sabha.

Select the answer using the code given below:

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

Correct Option: (c)

Explanation:

- St-1 is correct as the money bill is mentioned under article 110 of the Indian Constitution.
- St-2 is correct as A Money Bill may only be introduced in Lok Sabha
- St-4 is incorrect as it is not mandatory for lower house to accept the changes.

69. Which of the following is/are correctly matched in terms of equivalent rank in the three services of India Defence forces?

	Army	Airforce	Nave
1.	Brigadier	Air Commodore	Commander
2.	Major General	Air Vice Marshal	Vice Admiral
3.	Major	Squadron Leader	Lieutenant Commander
4.	Lieutenant Colonel	Group Captain	Captain



Select the correct answer using the code given below:

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

Correct Option: (d)

Explanation:

- Statement 1 is incorrect: Brigadier (Army) is equivalent to Air Commodore (Airforce) but not to Commander (Navy). The correct Navy equivalent is Commodore.
- Statement 3 is correct: Major (Army) is equivalent to Squadron Leader (Airforce) and Lieutenant Commander (Navy).
- In the Indian Defence forces, ranks across the Army, Air Force, and Navy are often compared for equivalence. For instance, Major in the Army is equivalent to Squadron Leader in the Air Force and Lieutenant Commander in the Navy.

70. The North Eastern Council (NFC) was established by the North Eastern Council Act, 1971. Subsequent to the amendment of NEC Act in 2002, the Council comprised which of the following members?

- 1. Governor of the Constituent State
- 2. Chief Minister of the Constituent State
- 3. Three Members to be nominated by the President of India.
- 4. The Home Minister of India

Select the correct answer using the code given below:

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

Correct Option: (d)

Explanation:

- **Statement 1 is correct:** The Governor of the constituent state is a member of the NEC.
- **Statement 2 is correct:** The Chief Minister of the constituent state is a member of the NEC.
- **Statement 3 is correct:** Three members are nominated by the President of India.
- Statement 4 is correct: The Home Minister of India is a member of the NEC.
- The North Eastern Council (NEC) was established to promote the economic and social development of the Northeastern states. The composition of the NEC includes Governors and Chief Ministers of the states, three members nominated by the President, and the Home Minister.

71. How many Delimitation Commissions have been constituted by the Government of India till December 2023?

- (a) One
- (b) Two
- (c) Three
- (d) Four



Correct Option: (d)

Explanation:

- In India, such Delimitation Commissions have been constituted 4 times in 1952 under the Delimitation Commission Act, 1952, in 1963 under Delimitation Commission Act, 1962, in 1973 under Delimitation Act, 1972 and in 2002 under Delimitation Act, 2002.
- Delimitation **means the act or process of fixing limits or boundaries** of territorial constituencies in a country or a province having a legislative body.
- 72. The Constitution (71st Amendment) Act, 1992 amends the Eighth Schedule to the Consitution to include which of the following languages?
 - 1. Konkoni
 - 2. Manipuri
 - 3. Nepali
 - 4. Maithili

Select the correct answer using the code given below:

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

Correct Option: (a)

Explanation:

- Statements 1, 2 and 3 correct: The 71st Amendment Act, 1992, added Konkani, Manipuri, and Nepali to the Eighth Schedule.
- Statement 3 is incorrect: Maithili was added later by the 92nd Amendment Act, 2003.
- The Eighth Schedule to the Indian Constitution lists the official languages recognized by the Constitution. The 71st Amendment Act, 1992, included Konkani, Manipuri, and Nepali.

73. Consider the following pairs:

	Party	Its Leader
1.	Bharatiya Jana Sangh	Dr. Shyama Prasad Mukherjee
2.	Socialist Party	C. Rajagopalachari
3.	Congress for Democracy	Jagjivan Ram
4.	Swatantra Party	Acharya Narendra Dev

How many of the above are correctly matche?

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

Correct Option: (b)

- Pair 1 is correct: Dr. Shyama Prasad Mukherjee was the leader of Bharatiya Jana Sangh.
- **Pair 2 is incorrect:** C. Rajagopalachari was not the leader of the Socialist Party; he led the Swatantra Party.
- **Pair 3 is correct:** Jagjivan Ram was associated with the Congress for Democracy.

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- **Pair 4 is incorrect:** Acharya Narendra Dev was not the leader of the Swatantra Party; he was associated with the Socialist Party.
- Political parties in India have had various leaders who played significant roles in shaping the political landscape. Dr. Shyama Prasad Mukherjee founded the Bharatiya Jana Sangh, and C. Rajagopalachari led the Swatantra Party.

74. Which of the following statements are correct about the Constitution of India?

- 1. Powers of the Municipalities are given in Part IX A of the Constitution.
- 2. Emergency provisions are given in Part XVIII of the Constitution
- 3. Provisions related to the amendment of the Constitution are given in Part XX of the Constitution.

Select the answer using the code given below:

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

Correct Option: (d)

Explanation:

- Statement 1 is correct: Part IXA of the Constitution of India deals with municipalities.
- Statement 2 is correct: Part XVIII deals with emergency provisions.
- Statement 3 is correct: Part XX deals with the amendment of the Constitution.
- The Constitution of India has distinct parts that address various aspects of governance and administration. Part IXA deals with municipalities, Part XVIII covers emergency provisions, and Part XX addresses constitutional amendments.

75. Which one of the following statements is correct as per the Constitution of India?

- (a) Inter-Sate trade and commerce is a State subject under the State List.
- (b) Inter-Sate migrantion is a State subject under the State List.
- (c) Inter-State quarantine is a Union subject under the Union List
- (d) Corporation tax is a state subject under the Sate List.

Correct Option: (c)

Explanation:

- Option (a) is incorrect: Inter-State trade and commerce is a Union subject under the Union List.
- **Option (b) is incorrect:** Inter-State migration is a Union subject under the Union List.
- **Option (c) is correct:** Inter-State quarantine is a Union subject under the Union List.
- **Option (d) is incorrect:** Corporation tax is a Union subject under the Union List.
- The Union List in the Seventh Schedule of the Indian Constitution enumerates subjects on which the central government can legislate. These include inter-state trade, quarantine, and corporation tax.

76. Under which of the following Articles of the Constitution of India, has the Supreme Court of India placed the Right to Privacy?

- (a) Article 15
- (b) Article 16
- (c) Article 19
- (d) Article 21



Correct Option: (d)

Explanation:

- **Option (a) is incorrect:** Article 15 prohibits discrimination on grounds of religion, race, caste, sex, or place of birth.
- **Option (b) is incorrect:** Article 16 deals with equality of opportunity in matters of public employment.
- **Option (c) is incorrect:** Article 19 guarantees the six freedoms.
- **Option (d) is correct:** The Supreme Court has placed the Right to Privacy under Article 21, which deals with the protection of life and personal liberty.
- In the landmark case of Justice K.S. Puttaswamy (Retd.) vs. Union of India, the Supreme Court of India recognized the Right to Privacy as a fundamental right under Article 21 of the Constitution.

77. What are the duties of the Chief of Defence Staff (CDS) as Head of the Department of Military Affairs?

- 1. Permanent Chairman of Chiefs of Staff Committee
- 2. Exercise military command over the three Service Chiefs
- 3. Principal Military advisor to Defence Minister on all tri-service matters

Select the correct answer using the code given below:

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

Correct Option: (d)

Explanation:

- **Statement 1 is correct:** The Chief of Defence Staff (CDS) is the Permanent Chairman of the Chiefs of Staff Committee.
- Statement 2 is incorrect: The CDS does not exercise military command over the three Service Chiefs.
- **Statement 3 is correct:** The CDS is the principal military advisor to the Defence Minister on all triservice matters.
- The Chief of Defence Staff (CDS) is a newly created position in the Indian military hierarchy aimed at improving coordination and integration among the three armed forces. The CDS oversees the Department of Military Affairs and advises on tri-service issues.

78. Operations undertaken by the Army towards upliftment of the local population in remote areas to include addressing of their basic needs is called:

- (a) Operation Sankalp
- (b) Operation Maitri
- (c) Operation Sadbhavana
- (d) Operation Madad

Correct Option: (c)

Explanation:

• **Option (a) is incorrect:** Operation Sankalp is an Indian Navy mission for maritime security in the Gulf region.



- **Option (b) is incorrect:** Operation Maitri was the relief operation by India for the earthquake in Nepal.
- **Option (c) is correct:** Operation Sadbhavana is an initiative by the Indian Army for the upliftment of the local population in remote areas.
- **Option (d) is incorrect:** Operation Madad was a rescue operation during the Kerala floods.
- Operation Sadbhavana focuses on winning the hearts and minds of the local population in conflict-prone areas through welfare activities such as education, health care, and infrastructure development.

79. The longest border between any two countries in the world is between:

- (a) Canada and the United States of America
- (b) Chile and Argentina
- (c) China and India
- (d) Kazakhstan and Russian Federation

Correct Option: (a)

Explanation:

- **Option (a) is correct:** The longest border between any two countries in the world is between Canada and the United States of America.
- **Option (b) is incorrect:** The border between Chile and Argentina is long but not the longest.
- **Option (c) is incorrect:** The border between China and India is not the longest.
- **Option (d) is incorrect:** The border between Kazakhstan and Russia is long but not the longest.
- The Canada-United States border is the world's longest international border, stretching approximately 8,891 kilometers (5,525 miles). It includes both land and maritime boundaries.

80. Which of the following statements about the Ethics Committee in the Lok Sabha are correct?

- 1. Initially it was an ad-hoc Committee.
- 2. Only a Member of the Lok Sabha can make a complaint relating to unethical conduct of a member of the Lok Sabha.
- 3. This Committee cannot take up any matter which is sub-judice.

Select the answer using the code given below:

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

Correct Option: (c)

- Statement 1 is correct: The Ethics Committee in the Lok Sabha was initially an ad-hoc Committee.
- **Statement 2 is incorrect:** Complaints regarding unethical conduct of a member can be made by any member of the public or other members.
- Statement 3 is correct: The Committee cannot take up any matter which is sub-judice.
- The Ethics Committee in the Lok Sabha oversees the conduct of its members. It was formed to maintain high standards of ethical behavior and ensure transparency and accountability within the parliamentary framework.



81. Consider the following statements regarding 'Nari Sakti Vandan Adhiniyam':

- 1. Provisions will come into effect from the 18th Lok Sabha.
- 2. This will be in force for 15 years after becoming an Act.
- 3. There are provisions for the reservation of seats for Scheduled Castes Women within the quota reserved for the Scheduled Castes.

Which of the statements given above are correct?

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

Correct Option: (c)

Explanation:

- Statement 1 is incorrect: The provisions of Nari Sakti Vandan Adhiniyam will come into effect from the time of official notification after delimitation.
- Statement 2 is correct: The duration of the Act is mentions reservation to be for 15 years.
- **Statement 3 is correct:** There are provisions for the reservation of seats for Scheduled Castes Women within the quota reserved for the Scheduled Castes.
- The Nari Sakti Vandan Adhiniyam is a legislative initiative aimed at enhancing women's representation in legislative bodies. It includes provisions for reservations within existing quotas to ensure inclusive participation.

82. Which of the following statements about 'Exercise Mitra Shakti-2023' are correct?

- 1. This was a joint military exercise between India and Bangladesh.
- 2. It commenced in Aundh (Pune).
- 3. Joint response during counter-terrorism operations was a goal of this operation.
- 4. Indian Air Force was a part of this exercise.

Select the answer using the code given below:

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

Correct Option: (d)

- Statement 1 is incorrect: Exercise Mitra Shakti-2023 is a joint military exercise between India and Sri Lanka, not Bangladesh.
- Statement 2 is correct: The exercise commenced in Aundh, Pune.
- Statement 3 is correct: Joint response during counter-terrorism operations was a goal of this exercise.
- Statement 4 is correct: The Indian Air Force was a part of this exercise.
- Exercise Mitra Shakti is an annual joint military exercise aimed at enhancing interoperability and cooperation between the armies of India and Sri Lanka, focusing on counter-terrorism and disaster relief operations.



83. A Writ of Prohibition is an order issued by the Supreme Court or High Courts to:

- (a) a government officer prohibiting him from taking a particular action.
- (b) the Parliament/Legislative Assembly to pass a law on Prohibition.
- (c) the lower court prohibiting continuation of proceedings in a case.
- (d) the Government prohibiting it from following an unconstitutional policy.

Correct Option: (c)

Explanation:

- **Option (a) is incorrect:** A writ of prohibition is not issued to a government officer.
- **Option (b) is incorrect:** A writ of prohibition is not issued to the Parliament or Legislative Assembly.
- **Option (c) is correct:** A writ of prohibition is an order issued by the Supreme Court or High Courts to a lower court prohibiting the continuation of proceedings in a case that is beyond its jurisdiction.
- **Option (d) is incorrect:** A writ of prohibition is not issued to the government.
- A writ of prohibition is a judicial order restraining a lower court from exceeding its jurisdiction or from acting contrary to the rules of natural justice. It is a preventive measure to ensure legal proceedings remain within the bounds of the law.

84. Consider the following statements:

- 1. It is the Governor of the State who recognizes and declares any community of that State as a Scheduled Tribe.
- 2. A community declared as a Scheduled Tribe in a State need not be so in another State.

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

Correct Option: (b)

Explanation:

- **Statement 1 is incorrect:** It is the President of India who recognizes and declares any community as a Scheduled Tribe, based on the recommendations of the respective state governments.
- Statement 2 is correct: A community declared as a Scheduled Tribe in one state need not be so in another state.
- The recognition of Scheduled Tribes is a process involving both state and central government recommendations. A community recognized as a Scheduled Tribe in one state may not be recognized as such in another state.

85. With reference to Union Budget, consider the following statements:

- 1. The Union Finance Minister on behalf of the Prime Minister lays the Annual Financial Statement before both the Houses of Parliament.
- 2. At the Union level, no demand for a grant can be made except on the recommendation of the President 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

Correct Option: (b)

Explanation:

- **Statement 1 is incorrect:** The Union Finance Minister presents the Annual Financial Statement, not on behalf of the Prime Minister but on their own behalf.
- Statement 2 is correct: At the Union level, no demand for a grant can be made except on the recommendation of the President of India.
- The Union Budget process in India involves the presentation of the Annual Financial Statement by the Finance Minister. The President's recommendation is necessary for the introduction of money bills and demands for grants in Parliament.

86. Who of the following is the author of the books "The India Way" and "Why Bharat Matters"?

- (a) Bhupender Yadav
- (b) Nalin Mehta
- (c) Shashi Tharoor
- (d) Subrahmanyam Jaishankar

Correct Option: (d)

Explanation:

• The India Way and Why Bharat Matters? are the books written by S. Jaishankar

Supplementary Notes:

• Subrahmanyam Jaishankar is an Indian diplomat and politician serving as the Minister of External Affairs of the Government of India since 30 May 2019. He is a member of the Bharatiya Janata Party and a Member of Parliament in the Rajya Sabha since 5 July 2019. The India Way and Why Bharat Matters are books written by him.

87. Consider the following pairs:

	Country	Reason for being in the news
1.	Argentina	Worst economic crisis
2.	Sudan	War between the country's regular army and paramilitary forces
3.	Turkey	Rescinded its membership of NATO

How many of the pairs given above are correctly matched?

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

Correct Option: (b)

- **Pair 1 is correct.** Argentina is facing its worst economic crises.
- **Pair 2 is correct.** Sudan is in the midst of a Civil War due to battles between country's army and paramilitary forces.
- **Pair 3 is incorrect.** No country has been rescinded from NATO's membership.
- Argentina is facing its worst economic crisis, Sudan is in a civil war between the army and paramilitary forces, and no country has been rescinded from NATO membership.



88. Consider the following statements:

Statement-I:

Summed pipeline is a strategic route for Persian Gulf oil and natural gas shipments to Europe.

Statement-II:

Summed pipeline connects the Red Sea with the Mediterranean Sea.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (a)

Explanation:

- Statement 1 is correct: The Suez Canal and the SUMED Pipeline are strategic routes for Persian Gulf crude oil, petroleum products, and liquefied natural gas (LNG) shipments to Europe and North America.
- Statement 2 is correct: Located in Egypt, the Suez Canal connects the Red Sea with the Mediterranean Sea, and it is a critical chokepoint because of the large volumes of energy commodities that flow through it.
- The Sumed Pipeline is an oil pipeline in Egypt, running from the Ain Sokhna terminal in the Gulf of Suez, the northernmost terminus of the Red Sea, to offshore Sidi Kerir port, Alexandria in the Mediterranean Sea.

89. Consider the following statements:

- 1. The Red Sea receives very little precipitation in any form.
- 2. No water enters the Red Sea from rivers.

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

Correct Option: (c)

Explanation:

- Statement 1 is correct. Red Sea receives very little precipitation in any form.
- Statement 2 is correct. No significant river or stream enters red sea.
- The Red Sea is a sea inlet of the Indian Ocean, lying between Africa and Asia. Its connection to the ocean is in the south, through the Bab-el-Mandeb strait and the Gulf of Aden. To its north lie the Sinai Peninsula, the Gulf of Aqaba, and the Gulf of Suez.

90. According to the Environmental Protection Agency (EPA), which one of the following is the largest source of sulphur dioxide emissions?

- (a) Locomotives using fossil fuels
- (b) Ships using fossil fuels
- (c) Extraction of metals from ores
- (d) Power plants using fossil fuels



Correct Option: (d)

Explanation:

- Power plants using fossile fuels relase most Sulphur Dioxide.
- The largest sources of SO2 emissions are from fossil fuel combustion at power plants and other industrial facilities.

91. Consider the following statements:

Statement-I:

There is instability and worsening security situation in the Sahel region.

Statement-II:

There have been military takeovers/coups d'etat in several countries of the Sahel region in the recent past.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (a)

Explanation:

- Statement I is correct: There is instability and worsening security situation in the Sahel region.
- **Statement II is correct:** While there have been military takeovers/coups in some countries in the Sahel region
- The Sahel region, spanning across Africa from Senegal to Sudan, faces numerous challenges, including terrorism, ethnic conflicts, and political instability. Recent years have seen an increase in military coups and armed conflicts, significantly impacting regional stability.

92. Consider the following statements:

Statement-I:

India does not import apples from the United States of America.

Statement-II:

In India, the law prohibits the import of Genetically Modified food without the approval of the competent authority.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (d)

- Statement I is incorrect: India does import apples from the United States, particularly from states like Washington.
- **Statement II is correct**: In India, the import of Genetically Modified (GM) food is regulated, and such imports require approval from the competent authority.

• India has stringent regulations on the import of GM foods to ensure safety and compliance with health standards. While India imports apples from the USA, the country maintains strict controls on genetically modified imports to protect consumer health.

93. With reference to the Speaker of the Lok Sabha, consider the following statements: While any resolution for the removal of the Speaker of the Lok Sabha is under consideration

- 1. He/She shall not preside.
- 2. He/She shall not have the right to speak.
- 3. He/She shall not be entitled to vote on the resolution in the first instance.

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

Correct Option: (a)

Explanation:

- Statement 1 is correct: If a resolution for the removal of the Speaker is under consideration, the Speaker shall not preside.
- Statement 2 is incorrect: The Speaker retains the right to speak.
- Statement 3 is incorrect: The Speaker can vote in the first instance if they are a member of the House.
- The Speaker of the Lok Sabha holds a crucial role in maintaining order and decorum during the proceedings. However, if a motion for their removal is under consideration, they cannot preside over the sessions to ensure impartiality in the process.

94. With reference to the Indian Parliament, consider the following statements:

- 1. A bill pending in the Lok Sabha lapses on its dissolution.
- 2. A bill passed by the Lok Sabha and pending in the Rajya Sabha lapses on the dissolution of the Lok Sabha.
- 3. A bill in regard to which the President of India notified his/her intention to summon the Houses to a joint sitting lapses on the dissolution of the Lok Sabha.

Which of the statements given above is/are correct?

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

Correct Option: (b)

- Statement 1 is correct: A bill pending in the Lok Sabha lapses upon its dissolution.
- Statement 2 is correct: A bill passed by the Lok Sabha and pending in the Rajya Sabha lapses on the dissolution of the Lok Sabha.
- **Statement 3 is incorrect:** A bill for which the President has notified a joint sitting does not lapse on the dissolution of the Lok Sabha.



• The rules regarding the lapse of bills ensure legislative efficiency and accountability. Bills pending in the Lok Sabha or awaiting passage in the Rajya Sabha lapse upon dissolution of the Lok Sabha, except in specific circumstances involving joint sittings.

95. With reference to the Parliament of India, consider the following statements:

- 1. Prorogation of a House by the advice of the Council of Ministers.
- 2. Prorogation of a House is generally done after the House is adjourned sine die but there is no bar to the President of India prorogating the House which is in session.
- 3. Dissolution of the Lok Sabha is done by the President of India who, save in exceptional circumstances, does so on the advice of the Council of Ministers.

Which of the statements given above is/are correct?

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

Correct Option: (c)

Explanation:

- **Statement 1 is incorrect:** Prorogation is done by the President and not by the advice of the Council of Ministers.
- Statement 2 is correct: Prorogation can occur even if the House is not adjourned sine die.
- Statement 3 is correct: Dissolution of the Lok Sabha is done by the President, usually on the advice of the Council of Ministers.

96. Consider the following statements:

Statement-I:

The European Parliament approved The Net-Zero Industry Act recently.

Statement-II:

The European Union intends to achieve carbon neutrality by 2040 and therefore aims to develop all of its own clean technology by that time.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (c)

- **Statement I is correct:** The European Parliament approved The Net-Zero Industry Act recently.
- Statement II is incorrect: The European Union aims to achieve carbon neutrality by 2050, not 2040, and is working towards developing its own clean technology.
- The European Union has set ambitious targets to combat climate change, including the European Green Deal, which aims for carbon neutrality by 2050. These initiatives involve significant investments in renewable energy and sustainable technologies.



97. Consider the following statements:

Statement-I:

Recently, Venezuela has achieved a rapid recovery from its economic crisis and succeeded in preventing its people from fleeing/emigrating to other countries.

Statement-II:

Venezuela has the world's largest oil reserves.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct, but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

Correct Option: (d)

Explanation:

- **Statement I is incorrect**: Venezuela continues to face significant economic challenges and has not fully recovered from its crisis. Many people are still emigrating to other countries.
- Statement II is correct: Venezuela has the world's largest proven oil reserves.
- Despite having vast oil reserves, Venezuela's economy has struggled due to political instability, economic mismanagement, and international sanctions. The country's recovery has been slow, with ongoing challenges in economic stability and public welfare.

98. With reference to the Digital India Land Records Modernisation Programme, consider the following statements:

- 1. To implement the scheme, the Central Government provides 100% funding.
- 2. Under the Scheme, Cadastral Maps are digitised.
- 3. An initiative has been undertaken to transliterate the Records of Rights from local language to any of the languages recognized by the Constitution of India.

Which of the statements given above are correct?

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

Correct Option: (b)

Explanation:

- **Statement 1 is incorrect:** The Central Government does not provide 100% funding for the Digital India Land Records Modernisation Programme; funding is shared with the states.
- Statement 2 is correct: The scheme includes digitization of cadastral maps.
- **Statement 3 is correct:** The initiative includes transliteration of Records of Rights into recognized Indian languages.
- The Digital India Land Records Modernisation Programme aims to modernize land records management, improve transparency, and reduce disputes. Key components include computerization of land records, digitization of maps, and integration of property registration.

99. With reference to the 'Pradhan Mantri Surekshit Matritva Abhiyan', consider the following statements:

- 1. This scheme guarantees a minimum package of antenatal care services to women in their second and third trimesters of pregnancy and six months post-delivery health care service in any government health facility.
- 2. Under this scheme, private sector health care providers of certain specialities can volunteer to provide services at nearby government health facilities.

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

Correct Option: (b)

Explanation:

- Statement 1 is incorrect: The Pradhan Mantri Surakshit Matritva Abhiyan does not provide six months of post-delivery healthcare services.
- **Statement 2 is correct:** The scheme involves the participation of private sector healthcare providers based on volunteerism.
- The Pradhan Mantri Surakshit Matritva Abhiyan focuses on providing assured, comprehensive, and quality antenatal care to pregnant women, especially in their second and third trimesters. The scheme aims to reduce maternal and infant mortality rates by ensuring timely medical check-ups and necessary interventions.

100. With reference to the Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) Yojana, consider the following statements:

- 1. The entry age group for enrolment in the scheme is 21 to 40 years.
- 2. Age specific contribution shall be made by the beneficiary.
- 3. Each subscriber under the scheme shall receive a minimum pension of Rs. 3,000 per month after attaining the age of 60 years.
- 4. Family pension is applicable to the spouse and unmarried daughters.

Which of the statements give above is/are correct?

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

Correct Option: (b)

- Statement 1 is incorrect: The entry age group for enrolment in the scheme is 18 to 40 years.
- Statement 2 is correct: Beneficiaries make age-specific contributions to the scheme.
- Statement 3 is correct: Each subscriber receives a minimum pension of Rs. 3,000 per month after attaining the age of 60 years.
- Statement 4 is incorrect: Family pension is not applicable to the spouse and unmarried daughters.
- The Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) Yojana is a pension scheme for unorganized workers, ensuring a minimum pension upon retirement. The scheme is contributory, with both the beneficiary and the government making contributions.

