

UPSC Prelims 2024 — GS Paper 1

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UPSC 2024

Geography › Atmosphere & Climatology

moderate

Q1. 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**

Answer: (d)

Earth's lower atmosphere gains far more heat from long-wave (terrestrial) radiation emitted by the warmed surface than from the direct absorption of incoming solar short-wave radiation; therefore Statement-I is incorrect. Carbon dioxide and other greenhouse gases are efficient absorbers of long-wave infrared radiation, making Statement-II correct. Thus, Statement-I is incorrect while Statement-II is correct. ([britannica.com](https://www.britannica.com/science/climate-meteorology/Effects-of-the-atmosphere?utm_source=openai))

UPSC 2024

Geography › Atmosphere & Climatology

easy

Q2. 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 convective 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
- (d) Statement-I is incorrect, but Statement-II is correct

Answer: (a)

The troposphere reaches about 17 km over the equator but only ~8 km near the poles, so Statement-I is correct. This greater thickness results from intense surface heating at the equator that drives strong convection, transporting warm air to higher altitudes—exactly what Statement-II describes; hence II explains I. ([science.nasa.gov](https://science.nasa.gov/mission/aos/aos-glossary/?utm_source=openai))

Q3. 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**

Answer: (d)

Explosive eruptions eject solid pyroclastic debris and fine ash/dust, while volcanic gases include sulphur species (SO₂, H₂S) and also nitrogen and nitrogen oxides generated directly or via volcanic activity. all four listed items are recognised products of volcanic activity.

([pubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/38315852/?utm_source=openai))

Q4. 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

Answer: (a)

In January the Northern-Hemisphere continents cool rapidly, so isotherms bend southward over land, whereas the relatively warmer oceans (aided by warm currents) pull isotherms northward; Statement-1 is therefore correct. The Gulf Stream and North Atlantic Drift are warm—not cold—currents; they warm the North Atlantic, so Statement-2 is incorrect. Hence only Statement-1 is correct. ([iasexpress.net](https://www.iasexpress.net/ie-pedia/which-of-the-following-is-are-correct-inference-inferences-from-isothermal-maps-in-the-month-of-january/?utm_source=openai))

Q5. 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) Côte d'Ivoire and Ghana**
- (d) Madagascar and Mozambique

Answer: (c)

Côte d'Ivoire is the world's leading cocoa bean producer and Ghana consistently ranks second. Together, they account for roughly half of global output, whereas the North and South-African pair produce a negligible amount. ([statista.com](https://www.statista.com/chart/amp/34325/main-cocoa-bean-producing-and-importing-countries/?utm_source=openai))

Q6. Which of the following rivers does not originate in the Western Ghats?

- (a) Narmada
- (b) Tapi**
- (c) Gomti
- (d) Kosi

Answer: (b)

Moving west-to-east across the Indo-Gangetic plain, the Gomti joins the Ganga near Ghazipur, the Ghaghara meets it farther east below Chhapra, the Gandak joins opposite Patna, and the Kosi merges near Kursela; hence the correct sequence is Gomti! Ghaghara! Gandak! Kosi. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Gomti_River?utm_source=openai))

Q7. Which of the following statements is/are correct?

- (a) Statement I only
- (b) Statement II and III only**
- (c) Statement I and III only
- (d) Statement I, II and III

Answer: (a)

Rainfall drives both physical and chemical weathering of rocks (Statement I). Rainwater naturally absorbs CO₂, forming weak carbonic acid and it also dissolves atmospheric O₂; both gases participate in chemical reactions (carbonation and oxidation) that enhance weathering, so Statements II and III are correct and together explain Statement I. ([vajiramandravi.com](https://vajiramandravi.com/upsc-exam/consider-the-following-statements-140/?utm_source=openai))

Q8. (? . M (2 ? ? \$ & G 6 K * 0 5 ? > 0 @ ? :

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2. 0 M . (@
3. (1 0 M 5 G
4. 0 B 8

* 0 M / A M \$. G 8 G ? \$ (G & G 6 K @ 8 @ . > \$ M \$ 0 @ 8 > 0 G 8 > % 2 \$ @ 9 H ?

- (a) G 5 2
(b) G 5 2 & K
 (c) G 5 2 \$ @ (
 (d) 8 - @ > 0

Answer: (b)

The North Sea is bordered by Norway and Germany, but not by the Philippines (Pacific Ocean) or Russia (Arctic/Baltic seas); therefore exactly two of the listed countries touch the North Sea. ([britannica.com](https://www.britannica.com/place/North-Sea?utm_source=openai))

Q9. (? . M (2 ? ? \$ 8 B (> * 0 5 ? > 0 @ ? :

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* 0 M / A M \$ 8 B @ . G 8 G ? \$ (@ * M 0 5 ? 7 M ? / > 8 9 @ 8 A 8 \$ 9 H ?

- (a) G 5 2**
 (b) G 5 2 & K
 (c) 8 - @ \$ @ (
 (d) K (9 @

Answer: (a)

Hundru Falls is correctly matched with the Subarnarekha River in the Chota Nagpur Plateau. Dhuandhar Falls is on the Narmada but lies in the Jabalpur (Mahakaushal) region, not Malwa ([en.wikipedia.org](https://en.wikipedia.org/wiki/Dhuandhar_Falls)), while Gersoppa (Jog) Falls is in the Western Ghats but is formed by the Sharavati River, not the Netravati ([en.wikipedia.org](https://en.wikipedia.org/wiki/Jog_Falls?utm_source=openai)). Hence only one row is fully correct.

Q10. (? . M (2 ? ? \$ 8 B @ * 0 5 ? > 0 @ ? :

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* 0 M / A M \$ 8 B @ . G 8 G ? \$ (@ * M 0 5 ? 7 M ? / > 8 9 @ 8 A 8 \$ 9 H ?

- (a) G 5 2
- (b) G 5 2 & K
- (c) G 5 2 \$ @ (**
- (d) 8 - @ > 0

Answer: (c)

Pamir (Middle Asia), the Appalachian range and the Andes are all products of compressional orogeny and are therefore classified as fold mountains, old in the case of the Appalachians and young in the Pamirs-Andes belt. The Alps, however, are also young fold mountains, not an ancient block mountain; hence only 1, 3 and 4 are correctly matched, making three correct entries. ([britannica.com](https://www.britannica.com/place/France/The-younger-mountains-and-adjacent-plains?utm_source=openai))

Q11. 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

Answer: (a)

Donyi Polo Airport at Hollongi, Arunachal Pradesh was inaugurated in 2022 as the State's first greenfield airport. ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/india/pm-modi-arunachal-donyi-polo-airport-inauguration-greenfield/articleshow/95616867.cms?utm_source=openai)) Kushinagar International Airport in Uttar Pradesh was conceived and built on 590 acres as a greenfield project, opened in 2021. ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/india/up-pm-modi-inaugurates-kushinagar-international-airport/articleshow/87151111.cms)) Vijayawada (Gannavaram) airport, by contrast, is an older airstrip that has been expanded—i.e., a brownfield upgrade—and is therefore not a greenfield project. Hence only 1 and 2 satisfy the condition.

Q12. 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
- (d) Neither 1 nor 2

Answer: (a)

Water-vapour content is greatest near the Earth's surface and decreases sharply with height, so Statement 1 is correct. Latitudinally, maximum atmospheric moisture occurs in the warm tropics and falls toward the cold polar regions, making Statement 2 incorrect. ([britannica.com](https://www.britannica.com/science/hydrosphere/Processes-involved-in-the-cycle?utm_source=openai))

Q13. 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

Answer: (d)

The marine west-coast (oceanic) climate is characterised by small annual and diurnal temperature ranges due to maritime influence, year-round precipitation, and average annual totals of roughly 50 – 250 cm. These features match all three descriptors in the question, identifying option (d). ([britannica.com](https://www.britannica.com/science/marine-west-coast-climate?utm_source=openai))

Q14. 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

Answer: (c)

The magnitude of the Coriolis force is given by $2 \vec{v} \sin \phi$; it therefore grows with the moving air, satisfying Statement 1. Because the term $\sin \phi$ equals 0 at 0° latitude and is zero at the equator and reaches its maximum at the poles, so Statement 2 is also correct. ([britannica.com](https://www.britannica.com/science/Coriolis-force?utm_source=openai))

Q15. 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**

Answer: (d)

On 21 June (northern summer solstice) every latitude north of the Equator enjoys > 12 h daylight. The Equator has roughly 12 h (not more), the Tropic of Cancer (>23.5° N) has its longest day, while the Arctic Circle (66.5° N) experiences 24 h daylight; the Tropic of Capricorn (<23.5° S) is tilted away and has < 12 h. Hence only latitudes 2 and 4 satisfy the condition. ([testbook.com](https://testbook.com/question-answer/on-june-21-every-year-which-of-the-following-lati-666e954dd7657ec8fb42ac9a?utm_source=openai))

Q16. 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) Río de la Plata Basin

Answer: (b)

The Cuvette Centrale in the central Congo Basin constitutes the world's largest tropical peatland, storing an estimated 26–32 billion t of carbon—about three years of current global fossil-fuel CO₂ loss would severely affect climate. ([york.ac.uk](https://www.york.ac.uk/news-and-events/news/2022/research/worlds-largest-peatland/?utm_source=openai))

UPSC 2024

Environment & Ecology › Pollution & Waste Management

easy

Q 17.

-K M\$> \$M>&K G (?0M.># G 2? *M0.A 9K(G 5>2G *0+M2A 0K
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3. PFAS G 2 >\$>0 8 *0M G *0?#>.8M50B* (M\$A G 60@0 .G H5 8 / 9K
*0K M\$ %(K .G 8G L(-8G 89@ 9H ?

- (a) G 5 2 1 0 2
- (b) G 5 2 2 0 3
- (c) G 5 2 1 0 3
- (d) 1, 2 0 3**

Answer: (d)

PFAS are ubiquitous: they have been detected in drinking-water, foods and many food-packaging materials; their strong C–F bonds make them extremely resistant to environmental degradation; and because they persist, continual exposure leads to bioaccumulation in animals and humans. Therefore all three statements are correct. ([scientificamerican.com](https://www.scientificamerican.com/article/61-unexpected-pfas-forever-chemicals-found-in-food-packaging/?utm_source=openai))

UPSC 2024

Environment & Ecology › Biodiversity & Conservation

difficult

Q 18. (? .M(2? ?\$ *0 5? >0 @ ? :

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- (a) G 5 2 & K
- (b) G 5 2 \$ @ (**
- (c) G 5 2 > 0
- (d) 8 - @ * >

Answer: (b)

Parasitic (parasitoid) species occur in: 1) certain beetles such as some Carabid species whose larvae parasitize other insects; 3) many flies (e.g., Tachinidae); and 5) numerous wasps (Ichneumonidae, Braconidae). Centipedes are free-living predators and termites are detritivorous; neither group contains parasitoid species. Thus parasitic species are present in three of the five groups. ([iasexpress.net](https://www.iasexpress.net/ie-pedia/consider-the-following-5/?utm_source=openai))

Q19. (? .M(2? ?\$ *L'K *0 5? >0 @ ? :

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(a) G 5 2

(b) G 5 2 & K

(c) 8- @ \$ @ (

(d) K (9 @

Answer: (c)

Groundnut (*Arachis hypogaea*), horse-gram (*Macrotyloma uniflorum*) and soybean (*Glycine max*) are all legumes belonging to the family Fabaceae; hence all three listed plants are members of the pea family. ([blogs.cornell.edu](https://blogs.cornell.edu/worldcrops/crops/crops-alphabetical/peanut-groundnut/?utm_source=openai))

Q20. (? .M(2? ?\$ %(K *0 5? >0 @ ? :

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(b) %(-I 0 %(-II & K(K 89@ 9H , ? \$A %(-II, %(-I @ 5M/> M/> (9@ 0\$> 9

(c) %(-I 89@ 9H, ? \$A %(-II 89@ (9@ 9H

(d) %(-I 89@ (9@ 9H, ? \$A %(-II 89@ 9H

Answer: (c)

The Indian Flying Fox (*Pteropus medius/giganteus*) was historically listed in the vermin category (Schedule V, now eligible for declaration under Sec-62) of the Wild Life (Protection) Act 1972, so Statement I is correct. It is a large fruit-bat that feeds on fruits/nectar and aids pollination; it does NOT suck blood, so Statement II is wrong. Hence only I is correct (option c). ([vajiramandravi.com](https://vajiramandravi.com/upsc-exam/consider-the-following-statements-141/?utm_source=openai))

Q21. The organisms "Cicada, Froghopper and Pond skater" are:

(a) Birds

(b) Fish

(c) Insects

(d) Reptiles

Answer: (c)

Cicadas (super-family Cicadoidea), froghoppers (family Cercopidae, spittlebugs) and pond skaters or water striders (family Gerridae) all belong to class Insecta (order Hemiptera). Therefore the group comprises insects (option c). ([britannica.com](https://www.britannica.com/animal/froghopper?utm_source=openai))

Q22. 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

Answer: (a)

Modern chewing-gum bases are often synthetic rubbers such as polyethylene and polyisobutylene—i.e. plastics. Studies show gums release micro-plastics and, when littered, persist on pavements, making them a recognised source of environmental pollution. Thus both statements are correct and Statement II (plastic content) directly explains Statement I (pollution), so option a is right. ([acs.org](https://www.acs.org/pressroom/presspacs/2025/march/chewing-gum-can-shed-microplastics-into-saliva-pilot-study-finds.html?utm_source=openai))

Q23. 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**

Answer: (d)

Indri (Indri indri) is a lemur found only in Madagascar, not Brazil. Elk (Cervus canadensis) occur in North America and parts of temperate Asia, not Indonesia. Bonobos (Pan paniscus) are endemic to the Democratic Republic of Congo, not Madagascar. Hence none of the three pairs is correctly matched (option d). ([britannica.com](https://www.britannica.com/animal/indri-lemur-species?utm_source=openai))

Q24. 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

Answer: (a)

The World Toilet Organization, founded in 2001 and headquartered in Singapore, is an independent non-profit—not a UN agency—so Statement 1 is incorrect. It indeed runs initiatives such as World Toilet Summit, World Toilet Day and World Toilet College, so Statement 2 is correct. The body focuses on advocacy, awareness and capacity-building rather than grant-making; funding toilets in LDCs is not its primary function, so Statement 3 is incorrect. Therefore only statement 2 is correct (option a).
([en.wikipedia.org](https://en.wikipedia.org/wiki/World_Toilet_Organization?utm_source=openai))

Q25. 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

Answer: (a)

Lions are polygamous breeders that mate throughout the year, so they lack a specific breeding season.
([britannica.com](https://www.britannica.com/animal/lion/Reproduction-and-life-cycle?utm_source=openai))
Cheetahs cannot roar because their hyoid apparatus is fixed; instead they purr, chirp and growl. ([britannica.com](https://www.britannica.com/one-good-fact/which-big-cat-purrs-instead-of-roaring?utm_source=openai))
Male leopards, like other big cats, stake out territory by urine-spraying, rubbing and scratching vegetation, i.e., scent-marking. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Scent_rubbing?utm_source=openai))
Hence only statements 1 and 2 are correct.

Q26. Which of the following correctly describes "100 Million Farmers"?

- (a) It is a bankable, nature-positive driver and a platform to accelerate the transition of food systems that aims to increase farmers' resilience.
- (b) It is a network and an international organization of individuals and agricultural organizations to assist and cooperate in the development of global animal husbandry.
- (c) It is a digital platform built entirely on agri-food and agri-blockchain with service providers worldwide, which enables buyers, sellers and packagers to trade fertilizers efficiently and securely.
- (d) It is a platform that aims to facilitate farmers to access open global markets to sell their agricultural products.

(a) As given in option (a)

- (b) As given in option (b)
- (c) As given in option (c)
- (d) As given in option (d)

Answer: (a)

"100 Million Farmers" is a World Economic Forum-led, bankable, nature-positive platform that convenes stakeholders to accelerate the transition to net-zero, nature-positive food systems and strengthen farmer resilience. ([weforum.org](https://www.weforum.org/videos/100-million-farmers/?utm_source=openai)) The descriptions in options (b)–(d) do not match this initiative.

Q27. Consider the following:

1. Battery storage
2. Biomass generator
3. Fuel cell
4. Rooftop solar photovoltaic unit

How many of the above are considered "distributed energy resources"?

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

Answer: (d)

Distributed energy resources are small-scale generation or storage units connected at the distribution level. Recognised DER technologies include behind-the-meter battery storage, biomass/biogas generators, fuel-cell cogeneration units and rooftop solar PV. ([aemc.gov.au](https://www.aemc.gov.au/energy-system/electricity/electricity-system/distributed-energy-resources?utm_source=openai)) Therefore all four items listed are classed as DERs.

Q28. Which one of the following trees exhibits an obligate relationship with an insect that has co-evolved with it and is the only insect that can pollinate this tree?

- (a) Aonla
- (b) Mahua
- (c) Sandal
- (d) Semal (Silk Cotton)

Answer: (a)

Aonla (Indian gooseberry, *Phyllanthus emblica*) belongs to the leafy group in which many tree species are pollinated exclusively by species-specific *Epicephala* moths; this is an obligate mutualism—without the moth the tree cannot set seed, and the moth's larvae develop only in its fruit. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Phyllanthus?utm_source=openai)) Mahua is mainly bat-pollinated, Sandalwood is insect- and wind-pollinated, and Semal is pollinated by bats and birds, none of which involve a single co-evolved insect pollinator.

Q29. Consider the following:

1. Butterfly
2. Fish
3. Frog

How many of the above undergo metamorphosis?

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

Answer: (c)

Metamorphosis is the abrupt post-embryonic restructuring seen in butterflies (holometabolous insect cycle), frogs (tadpole to adult) and in several fish taxa such as lampreys, eels and flatfish that remodel body shape and physiology under thyroid control. ([britannica.com](https://www.britannica.com/science/metamorphosis?utm_source=openai)) Hence all three groups contain species that undergo metamorphosis.

Q30. Consider the following trees:

1. Cashew
2. Papaya
3. Red Sandalwood

How many of the above trees are native to India?

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

Answer: (a)

Red Sandalwood (*Pterocarpus santalinus*) is endemic to the southern Eastern Ghats of India, whereas Cashew (*Anacardium occidentale*) and Papaya (*Carica papaya*) are New-World species introduced from South America/Meso-america. Hence only one of the three listed trees is native to India. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Pterocarpus_santalinus?utm_source=openai))

Q31. 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

Answer: (b)

RTGs generate electricity from the heat of radio-isotope DECAY; they are not self-sustaining fission reactors, so Statement 1 is wrong. They have powered many spacecraft such as Transit-4A, Cassini and Voyager, so Statement 2 is correct. Their fuel is usually Pu-238, historically produced in weapons-production reactors and thus available as a by-product of defence programmes, so Statement 3 is also correct. Therefore only 2 and 3 are correct.

([energy.gov](https://www.energy.gov/articles/history-nuclear-power-space))

Q32. 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 of 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 explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct**

Answer: (d)

Low-mass dwarf stars burn nuclear fuel slowly and can live for tens to hundreds of billions of years, whereas massive giant stars exhaust fuel rapidly and survive only a few million years. Thus Statement I (giants live longer) is incorrect, while Statement II (giants have a higher nuclear-reaction rate) is correct.

([britannica.com](https://www.britannica.com/science/red-dwarf-star?utm_source=openai))

Q33. 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

Answer: (a)

Nitric oxide (NO) is synthesized in the body by nitric-oxide-synthase enzymes and acts on vascular smooth muscle via the cGMP pathway to cause vasodilation and increased blood flow; the other listed nitrogen oxides are not produced endogenously for this purpose.

([pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov/articles/PMC11058123/?utm_source=openai))

Q34. Consider the following activities:

1. Identification 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

Answer: (b)

Radar is routinely used to monitor precipitation (weather radar) and to track migrating birds and other animals (radar ornithology). Airport body-scanning systems employ millimetre-wave imaging to reveal concealed objects but cannot identify the chemical nature of substances such as narcotics; specific drug detection relies on spectroscopic or chemical analysers, not radar. Hence radar is useful for two of the three listed activities. ([psl.noaa.gov](https://psl.noaa.gov/aqpi/?utm_source=openai))

Q35. 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**

Answer: (d)

A fifth-generation fighter is characterized by stealth shaping/materials, sensor fusion and sustained supersonic 'super-cruise'. Rafale (France), MiG-29 (Russia) and Tejas Mk-1 (India) are all 4th/4.5-generation platforms; none meet full 5th-gen criteria. Hence, zero of the three are 5th-generation fighters. ([drishtiias.com](https://www.drishtiias.com/prelims-analysis/2024-prelims-analysis?utm_source=openai))

Q36. (? .M(2? ?\$.G 8G ?(.G 9> !MOK (> *MOK 9K\$> 9H ?

1. OK ?/K .G .?6M0?\$ M8@ (!?2?50@

2. 2 5>\$>/A M\$ *M0#>2?/ >

3. &M/K ? 0>8>/(? *M0 M0?/ >

(@ G &? B > *M0/K 0 89@ \$M\$0 A(? :

(a) G 5 2 1

(b) G 5 2 1 0 2

(c) G 5 2 2 0 3

(d) 1, 2 0 3

Answer: (a)

Hydrogels are routinely used for controlled drug-delivery/wound-dressing systems in patients (statement 1 correct). Their practical use in mobile air-conditioning or in the formulation of industrial lubricants is still at an R&D/concept stage, not an established application, so statements 2 and 3 are incorrect. Therefore only one statement is correct.

([upscfactory.in](https://upscfactory.in/q-in-which-of-the-following-are-hydrogels-used/?utm_source=openai))

Q37. (? .M(2? ?\$.G 8G L(-8> 9> !MOK (&M5>0> >2?\$ +M/B2 8G2 2G M M (? >8- H8 \$M80M ((9@ 9H ?

(a) 9> !MOK (*G0I M8> !

(b) 9> !MOK G(?/.

(c) >0M,(.K(I M8> !

(d) 2-5>7M*

Answer: (d)

In a proton-exchange-membrane fuel-cell, hydrogen combines with oxygen to produce electricity; the only tail-pipe product is water vapour (H₂O). Hydrogen peroxide, hydronium ions or carbon-mono-oxide is not emitted. Hence 'water vapour' is the sole exhaust. ([energy.gov](https://www.energy.gov/cmei/articles/energy-numbers-fuel-cell-electric-vehicles?utm_source=openai))

Q38. 9>2 .G , “* !A-8M KOG 9> *K%@8?8” 6,M& @ 5>8M\$5 .G 0 8M*7M 8 &0M- .G 0M > @ 9H ?

(a) 8L0- 0M > - !>0#

(b) '>(((>) +82K @ (M(\$ * &M'\$?

(c) &@0M >2? 0M > - !>0#

(d) 2-8 /(*M0#>2@

Answer: (c)

The term 'pumped-storage' hypothesis refers to using two reservoirs at different elevations to store surplus electricity as gravitational potential energy for later release—an archetype of long-duration energy storage technology. It is not about solar-specific storage, rice agronomy or water-harvesting.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Pumped-storage_hydroelectricity?utm_source=openai))

UPSC 2024

Science & Technology › Biotechnology & Genetics

difficult

- Q 39. "Parthenocarpy" describes the development of seedless fruits without fertilisation—a specialised research area used to study or engineer seedless cultivars (e.g., cucumbers, tomatoes). It is unrelated to broadcasting, nano drug-delivery or vaccine manufacturing; it fits best under 'unconventional (advanced) research technologies'.
- (a) 89% of the world's population lives in developing countries.
 (b) 70% of the world's population lives in developing countries.
 (c) 50% of the world's population lives in developing countries.
 (d) 30% of the world's population lives in developing countries.

Answer: (d)

'Parthenocarpy' describes the development of seedless fruits without fertilisation—a specialised research area used to study or engineer seedless cultivars (e.g., cucumbers, tomatoes). It is unrelated to broadcasting, nano drug-delivery or vaccine manufacturing; it fits best under 'unconventional (advanced) research technologies'.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Parthenocarpy?utm_source=openai))

UPSC 2024

Indian Economy › Financial Markets & Capital Markets

moderate

- Q 40. Negotiable or fungible tradeable instruments are long-term securities such as shares and bonds that are issued and exchanged in the capital market; the bond and stock segments listed in other options are merely sub-markets, while the foreign-exchange market deals in currencies, not negotiable securities. Hence the term best denotes the capital market.
- (a) Money market
 (b) Bond market
 (c) Capital market
 (d) Foreign exchange market

Answer: (c)

Negotiable or fungible tradeable instruments are long-term securities such as shares and bonds that are issued and exchanged in the capital market; the bond and stock segments listed in other options are merely sub-markets, while the foreign-exchange market deals in currencies, not negotiable securities. Hence the term best denotes the capital market. ([investopedia.com](https://www.investopedia.com/articles/investing/052313/financial-markets-capital-vs-money-markets.asp?utm_source=openai))

UPSC 2024

Indian Economy › Human Development, Poverty & Employment Schemes

easy

- Q 41. Total Fertility Rate (TFR) is defined as the average number of live births a woman would have by the end of her reproductive years (15-49) if she experienced current age-specific fertility rates throughout her life.
- (a) Crude birth rate
 (b) Births per couple
 (c) Natural growth rate
 (d) Total fertility rate

Answer: (d)

Total Fertility Rate (TFR) is defined as the average number of live births a woman would have by the end of her reproductive years (15-49) if she experienced current age-specific fertility rates throughout her life. Options (a) and (b) describe the crude birth rate and births per couple, while (c) is the natural growth rate. ([gateway.euro.who.int](https://gateway.euro.who.int/en/indicators/hfa_25-0080-total-fertility-rate/?utm_source=openai))

Q42. (1) Asset-reconstruction companies sponsored by NBFCs are commercial entities set up under SARFAESI and operate for profit.

(2) RBI's debt-investment framework allows Foreign Portfolio/Institutional Investors to hold Government Securities within notified limits.

(3) SEBI has authorised stock exchanges to create distinct electronic platforms/segments for trading debt instruments (corporate bonds, G-Secs, etc.), providing an integrated venue for loan/debt transactions.

Hence all three statements are correct.

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

Answer: (c)

1. Asset-reconstruction companies sponsored by NBFCs are commercial entities set up under SARFAESI and operate for profit.

2. RBI's debt-investment framework allows Foreign Portfolio/Institutional Investors to hold Government Securities within notified limits.

([rbi.org.in](https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=12765&Mode=0&utm_source=openai))

3. SEBI has authorised stock exchanges to create distinct electronic platforms/segments for trading debt instruments (corporate bonds, G-Secs, etc.), providing an integrated venue for loan/debt transactions.

([forumias.com](https://forumias.com/blog/upsc-prelims-answer-key-2024/))

Hence all three statements are correct.

Q43. 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

Answer: (d)

Insurance companies and pension funds are large institutional investors in both corporate bonds and government securities; recent reforms (e-Kuber, NSE goBID, RBI Retail Direct) now enable retail investors to buy and trade these securities as well. Therefore all three categories can trade in corporate bonds and G-Secs. ([forumias.com](https://forumias.com/blog/upsc-prelims-answer-key-2024/))

Q44. Consider the following:

1. Exchange-Traded 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

Answer: (d)

Exchange-Traded Funds (ETFs) are market-listed collective investment securities, and currency swaps are derivative contracts—both are recognised financial instruments. A motor vehicle is a tangible good, not a financial security or contract. Hence only 1 and 3 qualify. ([investopedia.com](https://www.investopedia.com/ask/answers/102815/are-etfs-considered-derivatives.asp?utm_source=openai))

Q45. 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

Answer: (b)

Dairy farming is a primary sector activity (extraction of biological resources). Weaving into fabric and therefore belongs to the secondary (manufacturing) sector. Storage/warehousing of agricultural produce is a service and falls in the tertiary sector, not the secondary sector; the National Industrial Classification lists "Storage and Warehousing services" under service code 74. Mineral exploration/mining is included in the primary sector. Hence only pairs 2 and 4 are correctly matched – two pairs in all. ([mospi.gov.in](https://www.mospi.gov.in/description-2-digit-codes-national-industrial-classification-nic-1987-under-coverage-asi?utm_source=openai))

Q46. 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

Answer: (c)

Commercial SAF pathways can use a wide range of biomass and waste feedstocks: lignocellulosic agricultural residues (e.g., straw), starch/sugar crops such as corn grain, wet wastes like sewage-sludge from wastewater-treatment plants (processed via hydrothermal liquefaction), and woody/wood-mill residues. Therefore all four materials listed are valid SAF feedstocks.
 ([mdpi.com](https://www.mdpi.com/1494108?utm_source=openai))

Q47. ->0\$@/ 0M%5M/58M%> .G -L\$? *B @ G 8 &0M- .G , (? .M(2? ?\$ /A 58M\$A — 6M0G#@

1. ?8>(> 92 — >0M/6@2 *B @
2. *M/B 0 — 8M%?0 *B @
3. A 50M7K *M0/K ?/> >(G 5>2> 8B — 8M%?0 *B @
4. *G M0K2 — >0M/6@2 *B @
 *0K M\$ /A M.K .G 8G ?\$(G 89@ 8A.G2?\$ 9H ?

- (a) G 5 2
 (b) G 5 2 & K
 (c) G 5 2 \$@ (
 (d) 8 - @ > 0

Answer: (b)

Fixed capital is durable capital goods used repeatedly in production (machines, tools, equipment); working capital consists of inputs that get completely used up in a single production cycle. A plough is a fixed asset, not working capital, so pair 1 is incorrect. A computer used in business is fixed capital (pair 2 correct). A suit, though durable, is typically a consumption good rather than a productive asset and therefore not counted as fixed capital for economic production (pair 3 incorrect). Petrol is consumed in one production cycle and is working capital (pair 4 correct). Hence exactly two pairs are correctly matched.

UPSC 2024

Science & Technology › Computer & Information Technology

easy

Q48. (? .M(2? ?\$.G 8G L(-8> 6,M&/5> M/> 6 > */K “3D ->8@ (50M A 2) (G 50M , ?8G 8G 2> K *M0/K 0M\$> &M5>0> 8>% M8G8 ?/> > 8 \$> 58M\$A %5> 8 *\$M\$? G '? >0K > *M0/K 0 8 \$G 9H ” K 80M5>'? */A 2? ?/> >\$> 9H?

- (a) ,? !G > (>2? ? M8
- (b) M0?* M K M0>+ @
- (c) .G >50M8
- (d) 50M A 2 .H M0? M8

Answer: (c)

The phrase describing an interoperable 3-D virtual world simultaneously accessed by millions of users who own virtual assets refers to the 'Metaverse'; the other options denote unrelated technologies (big-data analytics, cryptography) or a distractor phrase.

UPSC 2024

Indian Economy › Banking & Financial Sector

difficult

Q49. 5?&G6@ ,H K G 8>% 5M/59>0 0\$G 8./ ->0\$@/ 0? <0M5 ,H &M5>0> .G , (? .M(2? ?\$ %(K *0 5? >0 @ ? :
1. ->0\$.G *B0M# 8M5>.\$M5 5>2G 89>/ ,H G (,H ? 89,&M'?'/>) G 2? 56M/ \$> (9@ 9Hd
2. ->0\$.G *B0M# 8M5>.\$M5 5>2G 89>/ ,H K (,H ? 89,&M'?'/>) G 2? 50% ->0\$@/ (> 0? 9K(G >9? d *0K M\$ %(K .G 8G L(-8>/ L(-8G 89@ 9H/9H ?

- (a) G 52 1
- (b) G 52 2
- (c) 1 0 2 &K(K
- (d) (\$K 1, (9@ 2

Answer: (b)

RBI's 2013 'Scheme for setting up of Wholly-Owned Subsidiaries by Foreign Banks' mandates a minimum paid-up voting equity capital of 15 billion (1500 crore) for a new WOS, so statement 1 is incorrect. The scheme requires that not less than 50 % of the directors of the WOS be Indian nationals resident in India, making statement 2 correct. Therefore only statement 2 is correct.
([rbi.org.in](https://www.rbi.org.in/scripts/PublicationsView.aspx?id=15541&utm_source=openai))

Q50. ->0\$.G (? .?\$ 8>.> ? \$M\$0&>/?\$M5 (CSR) (?/.K G 8 &0M- .G , (? . @ ? :

1. CSR (?/. 5?(?0M&?7M 0\$G 9H ? /&? *(@ %5> 8 G 0M. >0?/K K 2 CSR \$?5?'?/K G 0B* .G (9@ .>(> > >d

2. CSR (?/. CSR >0M/ M0.K *0 9K(G 5>2G (M/B(\$. 5M// K 5?(?0M&?7M (*0K M\$ %(K .G 8G L(-8>/ L(-8G 89@ 9H/9H ?

(a) G 5 2 1

(b) G 5 2 2

(c) 1 0 2 &K(K

(d) (\$K 1, (9@ 2

Answer: (a)

Rule 2(1)(d)(iv) of the Companies (CSR Policy) Rules, 2014 clearly states that any activity 'benefiting employees of the company... or their families' is NOT eligible CSR expenditure, hence Statement 1 is correct. Section 135(5) of the Companies Act, 2013 mandates that every qualifying company must spend at least 2 % of the average net profits of the preceding three financial years on CSR, so a minimum spend is indeed specified—making Statement 2 incorrect. Therefore only Statement 1 is right. ([studycake.in](https://studycake.in/corporate-social-responsibility-csr-a-complete-analysis-98334.html?utm_source=openai))

Q51. 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**

Answer: (d)

US Treasury obligations are backed by the 'full faith and credit' of the US Government, not by any pledged hard assets; this makes Statement II correct. Even if a technical default occurred, bond-holders would still retain their legal claim and could ultimately demand payment through the courts or future appropriations, so Statement I is incorrect. Hence, Statement I is wrong while Statement II is right. ([vajiramandravi.com](https://vajiramandravi.com/upsc-exam/consider-the-following-statements-146/?utm_source=openai))

Q52. 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

Answer: (c)

In a syndicated loan several lenders share a single credit, so the exposure to default is distributed among them—Statement I is correct. Such facilities can be structured either as a term loan (fixed lump sum) OR as a revolving credit line; the absolute assertion that they ‘cannot be a credit line’ is wrong, so Statement II is incorrect. Therefore Statement I is correct and Statement II is not. ([superkalam.com](https://superkalam.com/upsc-prelims/previous-year-question-paper/2024/consider-the-following-statements-statementi-syndicated-lending-spreads-the-risk-of-borrower-default-across-multiple-len-eb62542b-7602-413f-b0cf-03b88315ca07?utm_source=openai))

Q53. 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**

Answer: (d)

The RBI's concept note describes the digital rupee as ‘sovereign currency issued by the RBI in alignment with its monetary policy’ and says it ‘shall appear as a liability on the central bank's balance sheet’ (Statements 1 & 2 correct). It will be ‘freely convertible against commercial-bank money and cash’ (Statement 4 correct). A CBDC is no more immune to inflation than paper currency, so Statement 3 is incorrect. Thus only 1, 2 and 4 are correct. ([economictimes.indiatimes.com](https://economictimes.indiatimes.com/wealth/save/how-rbis-central-bank-digital-currency-digital-rupee-will-work-how-e-rupee-is-different-from-digital-money/articleshow/94705498.cms?from=mdr&utm_source=openai))

Q54. 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

Answer: (b)

Gautama Buddha is widely referred to as Shakyamuni ('Sage of the Shakyas') and frequently calls himself Tathagata ('Thus-Come/Thus-Gone One') in the Pali Canon. 'Nayaputta' (or Nigantha Nataputta) is an epithet of Mahavira, the 24th Jain Tirthankara, not of the Buddha. Hence only 2 and 3 are epithets of Gautama Buddha. ([asia.si.edu](https://asia.si.edu/glossary/shakyamuni/?utm_source=openai))

Q 55. (? . M (2 ? ? \$ 8 B @ * 0 5 ? > 0 @ ? :

* M 0 > H \$? 9 > 8 ? 8 M % 2 0 > M / 5 ? 5 0 #

1. & M 0 G \$ A " < ! < ? 6 > 5 M / > * > 0 , & 0 > 9 6 9 0

2. (> . > 5 . 9 > 0 > 7 M M 0 \$ > \$ M * > 7 > # 8 M % 2

3. . A ! A G 0 2 . 9 > * > 7 > # 8 M % 2

4. 8 > 2 @ 9 A # M ! ' M 0 * M 0 & G 6 6 H 2 ? \$ M 0 A + > . & ? 0

* 0 M / A M \$. G 8 G L (- 8 @ / A M . K . G & @ 8 B (> 8 9 @ 8 A . G 2 ? \$ 9 H ?

- (a) 1 0 2
(b) 2 0 3
 (c) 3 0 4
 (d) 1 0 4

Answer: (b)

Inamgaon is a well-studied Chalcolithic (Copper–Stone–Age) village-site in Maharashtra, so pair 2 is correct ([en.wikipedia.org](https://en.wikipedia.org/wiki/Inamgaon?utm_source=openai)). Mundu (in Kerala) is recorded in the state archaeology list as a megalithic burial-site, so pair 3 is also correct, whereas Chandraketugarh lies in West Bengal (not Odisha) though it was an early historic port, and Salihundam in Andhra Pradesh is a Buddhist stupa complex, not a rock-painting cave-temple ([en.wikipedia.org](https://en.wikipedia.org/wiki/Chandraketugarh?utm_source=openai)). Hence only pairs 2 and 3 are rightly matched.

Q 56. Portuguese governor Afonso de Albuquerque sought—and obtained—permission from Vijayanagara emperor Krishnadevaraya in 1510 CE to erect a fort at the west-coast port of Bhatkal. Contemporary and modern historical references attribute the grant explicitly to Krishnadevaraya, not to the other rulers listed ([iasexpress.net](https://www.iasexpress.net/ie-pedia/who-of-the-following-rulers-of-medieval-india-gave-permission-to-the-portuguese-to-build-a-fort-at-bhatkal/?utm_source=openai)).

- (a) Krishnadevaraya
 (b) Achyuta Dev Raya
 (c) Sadasiva Dev Raya
 (d) Rama Raya

Answer: (a)

Portuguese governor Afonso de Albuquerque sought—and obtained—permission from Vijayanagara emperor Krishnadevaraya in 1510 CE to erect a fort at the west-coast port of Bhatkal. Contemporary and modern historical references attribute the grant explicitly to Krishnadevaraya, not to the other rulers listed ([iasexpress.net](https://www.iasexpress.net/ie-pedia/who-of-the-following-rulers-of-medieval-india-gave-permission-to-the-portuguese-to-build-a-fort-at-bhatkal/?utm_source=openai)).

Q 57. Under Cornwallis's Permanent/decennial settlements the state demand on the zamindars was fixed; remission was generally not allowed even when crops failed, and default led to sale of the estate ([historydiscussion.net](https://www.historydiscussion.net/british-india/settlement-of-land-during-the-british-rule-indian-history/6328?utm_source=openai)). In Bengal's Permanent Settlement (1793) retained his zamindari so long as he paid the assessed revenue on the due date; failure alone triggered forfeiture ([drishtias.com](https://www.drishtias.com/to-the-points/paper1/land-revenue-systems-in-british-india?utm_source=openai)). Hence only statement 2 is correct.

1. Under Cornwallis's Permanent/decennial settlements the state demand on the zamindars was fixed; remission was generally not allowed even when crops failed, and default led to sale of the estate ([historydiscussion.net](https://www.historydiscussion.net/british-india/settlement-of-land-during-the-british-rule-indian-history/6328?utm_source=openai)).
 2. In Bengal's Permanent Settlement (1793) zamindars retained their zamindari so long as they paid the assessed revenue on the due date; failure alone triggered forfeiture ([drishtias.com](https://www.drishtias.com/to-the-points/paper1/land-revenue-systems-in-british-india?utm_source=openai)). Hence only statement 2 is correct.
- (a) Statement 1 only
 (b) Statement 2 only
 (c) Both 1 and 2
 (d) Neither 1 nor 2

Answer: (b)

Under Cornwallis's Permanent/decennial settlements the state demand on the zamindars was fixed; remission was generally not allowed even when crops failed, and default led to sale of the estate ([historydiscussion.net](https://www.historydiscussion.net/british-india/settlement-of-land-during-the-british-rule-indian-history/6328?utm_source=openai)). In Bengal's Permanent Settlement (1793) zamindars retained their zamindari so long as they paid the assessed revenue on the due date; failure alone triggered forfeiture ([drishtias.com](https://www.drishtias.com/to-the-points/paper1/land-revenue-systems-in-british-india?utm_source=openai)). Hence only statement 2 is correct.

Q 58. (? .M(2? ?\$ %(K *0 5? >0 @ ? :

1. *(?7&K .G K (@\$?- %> (&(M\$ %>) (9@ 9 Hd

2. *(?7&K @ 0 (> *A0>#K 8G -@ *92G 9A d

*0 M/A M\$ %(K .G 8G L(-8>/ L(-8G 89@ 9H/9H ?

(a) G 5 2 1

(b) G 5 2 2

(c) 1 0 2 &K(K

(d) (\$K 1, (9@ 2

Answer: (b)

1. Several Upanishads employ illustrative stories or parables—e.g., the chariot allegor Upanishad and the Satyakama J b la narrative in Chandogya—so it is wrong to say there tales ([en.wikipedia.org](https://en.wikipedia.org/wiki/Katha_Upanishad?utm_source=ope oldest (major) Upanishads date to c. 800-300 BCE, whereas the bulk of the Puranas were composed much later, roughly 400-1500 CE ([britannica.com](https://www.britannica.com/topic/Upanishad?utm_source=openai)). Therefore only statement 2 is correct.

Q59. Consider the following statements:

1. India is a member of the International Grains Council.

2. A country needs to be a member of the International Grains Council for exporting or importing rice and wheat.

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

Answer: (a)

India is listed among the parties to the Grains Trade Convention (1995) and hence is a full member of the International Grains Council (IGC) ([igc.int](https://www.igc.int/en/about/aboutus.aspx?utm_source=openai)). However, IGC membership is voluntary; many large grain exporters such as Thailand are not members, yet freely export rice. Therefore membership is *not* a legal requirement for importing or exporting wheat or rice, making statement 2 incorrect.

Q60. 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

Answer: (c)

Garba of Gujarat was inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity on 6 December 2023, making it the most recent Indian inclusion before the 2024 exam. Earlier inscriptions were Chhau dance (2010), Kumbh Mela (2017) and Durga Puja (2021); hence Garba is the latest. ([unesco.org](https://www.unesco.org/en/articles/garba-gujarat-inscribed-unesco-representative-list-in-tangible-cultural-heritage-humanity?utm_source=openai))

Q61. 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**

Answer: (d)

At the first meeting of the Constituent Assembly on 9 December 1946, the eldest member Dr. Sachchidananda Sinha was chosen as the Provisional (Temporary) President until Dr. Rajendra Prasad was elected permanent President on 11 December 1946. The other personalities listed never held this provisional post. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Sachchidananda_Sinha?utm_source=openai))

Q62. 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 control of the federal 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

Answer: (a)

Statement 1 is correct: the Act proposed an 'All-India Federation' comprising British-Indian provinces and Princely States (though it never came into force). Statement 2 is incorrect: Defence and Foreign Affairs were 'reserved' subjects under the direct control of the Governor-General, not of the federal legislature. Hence only statement 1 is correct. ([britannica.com](https://www.britannica.com/place/India/Constitutional-reforms?utm_source=openai))

Q63. Which one of the following is a work attributed to playwright Bhasa?

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

Answer: (c)

Madhyama-vyayoga is one of the thirteen extant Sanskrit plays attributed to the classical Indian playwright Bhasa. The other options are not his works: Kavyalankara is a poetics treatise by Bhama, Narmad, Bharata Muni, and Mahabhashya is Patañjali's commentary on Panini. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Madhyamavyayoga?utm_source=openai))

Q64. 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

Answer: (c)

Sources on early Sino-Indian Buddhist exchanges record that the 4th-century monk Saegya, who travelled to China, was the author of a commentary on the Sarvastivada Vinaya, parts of which he helped transmit to China. He also wrote with commentaries on the Prajnaparamita Sutra, Visuddhimagga, or Lalitavistara. ([iasexpress.com](https://www.iasexpress.net/ie-pedia/sanghabhuti-an-indian-buddhist-monk-who-travelled-to-china-at-the-end-of-the-fourth-century-ad-was-the-author-of-a-commentary-on/?utm_source=openai))

Q65. Which one of the following is a work attributed to the architect of the Hoysaleswara Temple?

1. Gangaikondra
2. Gangaikondra
3. Gangaikondra
4. Gangaikondra

- (a) Gangaikondra
- (b) Gangaikondra & K**
- (c) Gangaikondra
- (d) Gangaikondra

Answer: (b)

In 2023 UNESCO inscribed only two Indian properties: Santiniketan (West Bengal) and the 'Sacred Ensembles of the Hoysalas' in Karnataka. Rani-ki-Vav was added earlier in 2014 ([whc.unesco.org](https://whc.unesco.org/en/list/922?utm_source=openai)) and the Mahabodhi Temple Complex at Bodh Gaya in 2002 ([whc.unesco.org](https://whc.unesco.org/en/list/1056?utm_source=openai)), so exactly two of the four listed sites were included in 2023.

Q 66. ->0\$ G 8 5?'>(G (A M G& 368 G (A8>0, 8 8& (? .M(2? ?\$.G 8G ?
 *, ' .G 8 6K'(0 8 \$@ 9H ?
 1. * 0?50M\$(
 2. * M0\$?8M%>*(
 3. 5?2K*(

(@ G &? B > * M0/K 0 89@ \$M\$0 A(? :

- (a) G 52 1 0 2
- (b) G 52 2 0 3
- (c) G 52 1 0 3
- (d) 1, 2 0 3

Answer: (d)

Article 368(1) empowers Parliament to amend the Constitution "by way of addition, variation or repeal" of any provision ([indiankanon.org](https://indiankanon.org/doc/177704052/?utm_source=openai)). These terms correspond to change (*0?50M\$()), substitution/replacement (*M0\$?8M%>*) and deletion. All three modes listed are permissible.

Q 67. (? .M(2? ?\$ &G6K *0 5? >0 @ ? :
 1. 2@
 2. >*>(
 3. (> @0?/>
 4. & M7?# K0?/>
 5. & M7?# +M0@ >

*/A M\$.G 8G ?(&G6K > 2M2G *M0>/ .@!/?/> .G (@ (? .M((&0, %5
 .>((8 M/> G 2? ?/> >\$> 9H ?

- (a) 1, 2 0 4
- (b) 1, 3 0 5
- (c) G 52 2 0 4
- (d) G 52 3 0 5

Answer: (a)

Italy, Japan and South Korea are routinely cited for very low fertility rates (around or below 1.3 births per woman) and declining or ageing populations. Nigeria and South Africa still have comparatively high fertility and growing populations, so only countries 1, 2 and 4 fit the description.

- Q68. Which of the following is/are correct in terms of the special procedure laid down in Article 109 of the Constitution of India?
1. Money Bills cannot be introduced in the Council of States (Rajya Sabha); (2) after passage in Lok Sabha, the Bill goes to Rajya Sabha, which may only recommend amendments within 14 days and cannot reject the Bill; (3) Lok Sabha is free to accept or reject those recommendations.
 2. Money Bills cannot be introduced in the Council of States (Rajya Sabha); (2) after passage in Lok Sabha, the Bill goes to Rajya Sabha, which may only recommend amendments within 14 days and cannot reject the Bill; (3) Lok Sabha is free to accept or reject those recommendations.
 3. Money Bills cannot be introduced in the Council of States (Rajya Sabha); (2) after passage in Lok Sabha, the Bill goes to Rajya Sabha, which may only recommend amendments within 14 days and cannot reject the Bill; (3) Lok Sabha is free to accept or reject those recommendations.
 4. Money Bills cannot be introduced in the Council of States (Rajya Sabha); (2) after passage in Lok Sabha, the Bill goes to Rajya Sabha, which may only recommend amendments within 14 days and cannot reject the Bill; (3) Lok Sabha is free to accept or reject those recommendations.

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

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

Answer: (c)

Article 109 lays down a special procedure: (1) Money Bills cannot be introduced in the Council of States (Rajya Sabha); (2) after passage in Lok Sabha, the Bill goes to Rajya Sabha, which may only recommend amendments within 14 days and cannot reject the Bill; (3) Lok Sabha is free to accept or reject those recommendations ([indiankanon.org](https://indiankanon.org/doc/729393/?utm_source=openai)). Thus statements 1, 2 and 3 are correct, while statement 4 is wrong because Lok Sabha is not bound to accept Rajya Sabha's suggestions.

Q69. Which of the following is/are correctly matched in terms of equivalent rank in the three services of Indian Defence forces?

- | Army | Airforce | Navy |
|-----------------------|------------------|----------------------|
| 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

Answer: (d)

Major (Army) "a Squadron Leader (IAF) "a Lieutenant Commander (Navy) – correct. Brigadier Commodore but matches Commodore, not Commander, in the Navy ([en.wikipedia.org](https://en.wikipedia.org/wiki/Commodore_%28India%29?utm_source=openai)). Major General aligns with Air Vice Marshal but with Rear Admiral, not Vice Admiral ([en.wikipedia.org](https://en.wikipedia.org/wiki/Major_general_%28India%29?utm_source=openai)). Lieutenant Colonel corresponds to Wing Commander (IAF) and Commander (Navy), not Captain/Group Captain ([en.wikipedia.org](https://en.wikipedia.org/wiki/Group_captain_%28India%29?utm_source=openai)). Hence only pair 3 is correctly matched.

Q70. The North Eastern Council (NEC) was established by the North Eastern Council Act, 1971. Subsequent to the amendment of NEC Act in 2002, the Council comprises 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

Answer: (a)

After the North-Eastern Council (Amendment) Act, 2002, the Council consists of (i) the Governors of the eight constituent States, (ii) the Chief Ministers of those States and (iii) three members nominated by the President. The Act only says the President *may* nominate a Union Minister; the Home Minister is not an ex-officio member. Hence statements 1, 2 and 3 are correct, statement 4 is not.

([necouncil.gov.in](https://necouncil.gov.in/about-us/nec-amendment-act-2002-0?utm_source=openai))

Q71. How many Delimitation Commissions have been constituted by the Government of India till December 2023?

(a) One

(b) Two

(c) Three

(d) Four

Answer: (d)

Four Delimitation Commissions have been set up so far—1952 (under the 1952 Act), 1963, 1973 and 2002—making the total four up to December 2023.

([eci.gov.in](https://www.eci.gov.in/EBooks/atlas-2024/files/basic-html/page31.html?utm_source=openai))

Q72. The Constitution (71st Amendment) Act, 1992 amends the Eighth Schedule to the Constitution to include which of the following languages?

1. Konkani
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

Answer: (a)

The 71st Constitutional Amendment Act, 1992 inserted Konkani, Manipuri (Meitei) and Nepali into the Eighth Schedule. Maithili was added later by the 92nd Amendment in 2003, so only statements 1, 2 and 3 are correct. ([indiankanoon.org](https://indiankanoon.org/doc/162993821/?utm_source=openai))

Q73. 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 matched?

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

Answer: (b)

Correct matches are: 1) Bharatiya Jana Sangh – founded and led by Dr. Syama Prasad Mookerjee; 3) Congress for Democracy – formed and led by Jagjivan Ram. The Socialist Party was led by Acharya Narendra Dev, not C. Rajagopalachari, while the Swatantra Party was founded by C. Rajagopalachari, not Acharya Narendra Dev. Thus exactly two pairs are correct. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Congress_for_Democracy?utm_source=openai))

UPSC 2024

Indian Polity > Constitutional Framework & Development

easy

Q74. ->0\$ G 8 5?'>(G 8 , ' .G (? .M(2? ?\$ %(K .G 8G L(-8G 89@ 9H ?
 1. (0*>2? > @ 6 M\$?/> 8 5?'>(G -> 9- .G &@ 9H d
 2. *>\$ * , ' 8 5?'>(G -> 18 .G &? 9H d
 3. 8 5?'>(G 8 6K'(K 8G 8 , '?\$ * , ' 8 5?'>(G -> 20 .G &? 9H d

(@ G &? B > * M 0 / K 0 \$ M \$ 0 A (? :

- (a) G 5 2 1 0 2
- (b) G 5 2 2 0 3
- (c) G 5 2 1 0 3
- (d) 1, 2 0 3**

Answer: (d)

Part IX-A deals with Municipalities (powers, composition, etc.); Part XVIII contains the Emergency Provisions (Arts. 352-360); Part XX (Art. 368) lays down the procedure for amending the Constitution. Therefore all three statements are correct.
 ([indiankanoon.org](https://indiankanoon.org/doc/115651420/?utm_source=openai))

UPSC 2024

Indian Polity > Federalism & Centre–State Relations

moderate

Q75. ->0\$ G 8 5?'>(G (A 8 > 0 (? .M(2? ?\$.G 8G L(-8> %(89@ 9H ?
 (a) \$ 0 M 0 > 7 M M 0 @ / 5 M / > * > 0 0 5 > # ? M / 0 > M / 8 B @ G '@ (0 > M / 5 ? 7 / 9 H d
 (b) \$ 0 M 0 > M / @ / * M 0 5 > 8 0 > M / 8 B @ G '@ (0 > M / 5 ? 7 / 9 H d
(c) \$ 0 M 0 > 7 M M 0 @ / 8 (8 8 B @ G '@ (8 5 ? 7 / 9 H d
 (d) (? . 0 0 > M / 8 B @ G '@ (0 > M / 5 ? 7 / 9 H d

Answer: (c)

Union List Entry 13 covers “participation in international organisations”, so international organisations are a Union subject, making statement (c) correct. International trade and commerce (Entry 41), inter-State migration (Entry 81) and corporation tax (Entry 85) are also in the Union List, therefore options (a), (b) and (d) are incorrect.
 ([constitutionofindia.net](https://www.constitutionofindia.net/schedules/list-i-union-list/?utm_source=openai))

UPSC 2024

Indian Polity > Fundamental Rights

easy

Q76. ->0\$ G M \$. (M / > / > 2 / (G (? \$ > G '? > 0 K -> 0\$ G 8 5?'>(G (? .M (G \$ 0 M \$ 0 > 9 H ?

- (a) (A M G & 15
- (b) (A M G & 16
- (c) (A M G & 19
- (d) (A M G & 21**

Answer: (d)

In the landmark K.S. Puttaswamy (2017) judgment, a nine-judge bench of the Supreme Court unanimously held that the right to privacy is an intrinsic part of the right to life and personal liberty under Article 21 (and reinforced by Articles 14 & 19). Hence option (d) is correct, while Articles 15, 16 and 19 alone do not exclusively anchor the right.
 ([en.wikipedia.org](https://en.wikipedia.org/wiki/Puttaswamy_v._Union_of_India?utm_source=openai))

UPSC 2024

Science & Technology › Defence Technology

moderate

Q77. The Chief of Defence Staff (CDS) is the permanent chairman of the Chiefs of Staff Committee and is the principal military adviser to the Defence Minister on tri-service matters; however, operational command over the three Service Chiefs remains with the respective chiefs, so statement 2 is wrong. Therefore only statements 1 and 3 are correct. ([adda247.com](https://www.adda247.com/question-answer/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-commit/q.v1.52ff0152-1a14-42d4-845c-070f3d8483bb-en?utm_source=openai))

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

Answer: (d)

The CDS is the Permanent Chairman of the Chiefs of Staff Committee and is the principal military adviser to the Defence Minister on tri-service matters; however, operational command over the three Service Chiefs remains with the respective chiefs, so statement 2 is wrong. Therefore only statements 1 and 3 are correct. ([adda247.com](https://www.adda247.com/question-answer/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-commit/q.v1.52ff0152-1a14-42d4-845c-070f3d8483bb-en?utm_source=openai))

UPSC 2024

Current Affairs › Defence & Internal Security

easy

Q78. 'Operation Sadbhavana' (Goodwill) is the Indian Army's long-running humanitarian initiative in remote areas of Jammu & Kashmir that provides medical camps, schools and other basic-needs support to local communities, making option (c) correct. The other operations listed relate to separate disaster-relief missions such as Nepal earthquake (Operation Maitri) or flood relief (Operation Madad/Sankalp). ([tmv.in](https://www.tmv.in/article/indian-army-organises-free-medical-camp-in-rajouri-under-operation-sadbhavana-date%3D2026-01-05?utm_source=openai))

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

Answer: (c)

'Operation Sadbhavana' (Goodwill) is the Indian Army's long-running humanitarian initiative in remote areas of Jammu & Kashmir that provides medical camps, schools and other basic-needs support to local communities, making option (c) correct. The other operations listed relate to separate disaster-relief missions such as Nepal earthquake (Operation Maitri) or flood relief (Operation Madad/Sankalp). ([tmv.in](https://www.tmv.in/article/indian-army-organises-free-medical-camp-in-rajouri-under-operation-sadbhavana-date%3D2026-01-05?utm_source=openai))

UPSC 2024

Geography › World Political Geography & Borders

easy

Q79. 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

Answer: (a)

The Canada–United States border, at about 8,891 km, is the world's longest boundary between two countries. All other pairs listed—Chile–Argentina (~5,300 km), China–India (~3,400 km) and Kazakhstan–Russia (~7,644 km)—are shorter, so option (a) is correct. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Canada%E2%80%93United_States_border?utm_source=openai))

Q80. 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

Answer: (c)

The Ethics Committee of the Lok Sabha was first created in 2000 as an ad-hoc committee and made permanent only in 2015, so statement 1 is correct. Complaints may be routed through any citizen via an MP or be taken up suo-motu; they are not restricted to Lok Sabha Members alone, so statement 2 is incorrect. The Committee's rules bar it from examining matters that are sub-judice, making statement 3 correct. Hence only 1 and 3 are correct (option c). ([indianexpress.com](https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/upsc-essentials-daily-subject-wise-quiz-polity-and-governance-mcqs-on-ethics-committee-north-eastern-council-and-more-week-64-9404290/lite/?utm_source=openai))

Q81. Consider the following statements regarding 'Nari Shakti 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

Answer: (c)

The Nari Shakti Vandan Adhiniyam (128th Constitution Amendment, 2023) will become operative only after the post-2026 Census-based delimitation; therefore it will not apply from the 18th Lok Sabha, so statement 1 is wrong. The Act provides that the reservation shall cease 15 years after its commencement, so statement 2 is correct. It also mandates that within the SC/ST reserved quota, one-third of those seats will be reserved for women, so statement 3 is correct. Thus only 2 and 3 are correct (option c). ([economictimes.indiatimes.com](https://economictimes.indiatimes.com/news/how-to/nari-shakti-vandan-adhiniyam-here-are-the-key-points-of-the-womens-reservation-bill/articleshow/103787214.cms?from=mdr&utm_source=openai))

Q82. 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

Answer: (d)

Exercise 'Mitra Shakti-2023' was the 9th India–Sri Lanka (not Bangladesh) joint military drill that began on 16 November 2023 at Aundh Military Station, Pune; hence statement 2 is correct and statement 1 incorrect. Its stated aim was to rehearse joint responses in counter-terrorism/sub-conventional operations, so statement 3 is correct. For the first time, personnel of the Indian Air Force (and Sri Lankan Air Force) also took part, making statement 4 correct. Therefore statements 2, 3 and 4 only are correct (option d).
 ([defence.lk](https://www.defence.lk/Article/view_article/27670?utm_source=openai))

Q83. Which of the following writs is issued by the Supreme Court or a High Court to an inferior court or tribunal, directing it to stop proceedings that exceed its jurisdiction; it is not issued to administrators or legislatures.

- (a) Habeas Corpus
 (b) Writ of Mandamus
 (c) Writ of Prohibition
 (d) Writ of Certiorari

Answer: (c)

The writ of Prohibition is issued by the Supreme Court or a High Court to an inferior court or tribunal, directing it to stop proceedings that exceed its jurisdiction; it is not issued to administrators or legislatures. Option (c) correctly captures this purpose.
 ([juriscentre.com](https://juriscentre.com/2021/06/09/explained-writ-of-prohibition/?utm_source=openai))

Q 84. (? .M(2? ?\$ %(K *0 5? >0 @ ? :

1. 59 0> M/ > 0> M/*>2 9H K 8 0> M/ G ?8@ 8.A&>/ K (A8B ?\$ (>\$? K7?\$ 0\$> 9Hd
 2. ?8@ 0> M/ .G (A8B ?\$ (>\$? G 0B* .G K7?\$?8@ 8.A&>/ G 2? /9 0> M/ .G -@ 8> 9Kd
- *0M/A M\$ %(K .G 8G L(-8>/ L(-8G 89@ 9H/9H ?

- (a) G 5 2 1
(b) G 5 2 2
 (c) 1 0 2 &K(K
 (d) (\$K 1, (9@ 2

Answer: (b)

Under Article 342(1), the President—not the Governor—specifies the tribes or tribal communities that shall be deemed Scheduled Tribes for a particular State after consulting that State's Governor; hence statement 1 is incorrect. Because the list is state-wise, a community recognised as an ST in one State need not enjoy the same status in another, so statement 2 is correct. Therefore only statement 2 is correct (option b). ([constitutionofindia.net](https://www.constitutionofindia.net/articles/article-342-scheduled-tribes-2/?utm_source=openai))

Q 85. G &M0?/ , (/B(?/(,) G 8 &0M- .G , (? .M(2? ?\$ %(K *0 5? >0 @

1. *M0'>(. \$M0@ @ 0 8G G &M0?/ 5?\$M\$. \$M0@ 8 8& G &K(K 8&(K C 0 \$G 9H d
2. G &M0?/ (/B(?/() 8M\$0 *0, ->0\$ G 0>7M M0*\$? @ (A.\$? G ,?(> (A&> *0M/A M\$ %(K .G 8G L(-8> 89@ 9H/9H ?

- (a) G 5 2 1
(b) G 5 2 2
 (c) 1 0 2 &K(K
 (d) (\$K 1, (2

Answer: (b)

Under Article 112, the President—not the Prime Minister—causes the Annual Financial Statement (Union Budget) to be laid before both Houses; the Finance Minister presents it on the President's behalf, so Statement 1 is incorrect. Article 113(3) expressly says that no demand for a grant can be made except on the recommendation of the President, making Statement 2 correct. Hence, only statement 2 is correct. ([constitutionofindia.net](https://www.constitutionofindia.net/articles/article-112-annual-financial-statement/?utm_source=openai))

Q 86. (? .M(2? ?\$.G 8G L("The India Way" 0 "Why Bharat Matters" *A8M

- (a) -B7# />&5
 (b) (2?(.G9\$>
 (c) 0>6@ 60M0
(d) 8A,M09M.#M/. /6 0

Answer: (d)

Both 'The India Way: Strategies for an Uncertain World' (2020) and its 2024 sequel 'Why Bharat Matters' are written by India's External Affairs Minister Dr. S. (Suba-rahm-anyam) Jaishankar. ([en.wikipedia.org](https://en.wikipedia.org/wiki/The_India_Way%3A_Strategies_for_an_Uncertain_World?utm_source=openai))

Q 87. (? .M(2? ?\$ /A M.K *0 5? >0 @ ? :

& G 6 — 8.> >0 .G 09(G > >0#

1. 0M G @(> — 8,8G 0>, 0M%? 8

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(d) K /A M. (9@

Answer: (b)

1) Argentina has been undergoing its worst economic crisis in decades, with triple-digit inflation crossing 100% in 2023, so the match is correct. 2) Since April 2023 Sudan has been in a full-scale civil war between the Sudanese Armed Forces and the Rapid Support Forces, reflecting conflict across ethnic and social lines, so this pair is also correct. 3) Turkey remains a NATO member; its government has stated it is not considering withdrawal, so the third pair is wrong. Therefore, exactly two pairs are correctly matched. ([theguardian.com] (https://www.theguardian.com/world/2023/mar/15/argentina-inflation-rate-100-percent?utm_source=openai))

Q88. Consider the following statements:

Statement-I:

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

Statement-II:

Sumed 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

Answer: (d)

The Sumed (Suez-Mediterranean) pipeline links Egypt's Ain Sukhna on the Red Sea to Sidi Kerir on the Mediterranean, so Statement II is correct. It is an oil-only pipeline; it does not carry natural gas, making Statement I inaccurate. Hence Statement I is incorrect while Statement II is correct. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Sumed_pipeline?utm_source=openai))

Q89. 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

Answer: (c)

The Red Sea lies in an arid belt and receives negligible rainfall, and its shores are desert with no perennial rivers emptying into it; hydrological studies note that its water balance is maintained mainly by high evaporation and inflow from the Gulf of Aden, not by river discharge. Therefore, both statements are correct. ([britannica.com](https://www.britannica.com/place/Red-Sea?utm_source=openai))

Q90. 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**

Answer: (d)

According to the U.S. Environmental Protection Agency, the largest source of SO₂ released into the atmosphere is the burning of fossil fuels at power plants; other sources such as metal smelting, ships or locomotives are far smaller contributors.

([epa.gov](https://www.epa.gov/so2-pollution/sulfur-dioxide-basics?utm_source=openai))

Q91. 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'état 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

Answer: (a)

Several Sahel states—including Mali (2020, 2021), Burkina Faso (2022) and Niger (2023)—have recently experienced military coups, and these seizures of power have directly aggravated an already fragile security situation marked by jihadist violence and humanitarian crises. Hence both statements are correct, and the spate of coups (Statement II) is the proximate cause explaining the region's instability (Statement I). ([blog.lukmaanias.com](https://blog.lukmaanias.com/2024/07/27/upsc-pre-2024-analysis-answer-key-and-explanation-set-a/?utm_source=openai))

Q92. 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**

Answer: (d)

India resumed—and is again receiving—imports of U.S. apples after retaliatory duties were lifted in September 2023, so Statement-I is incorrect. Under draft GM-food regulations, no person may import any food produced from genetically-modified organisms without prior approval of the Food Authority/GEAC, making Statement-II correct. Therefore, Statement-I is false and Statement-II true. ([fas.usda.gov](https://www.fas.usda.gov/data/india-success-story-india-cuts-retaliatory-tariffs-us-almonds-apples-walnuts-chickpeas-lentils?utm_source=openai))

Q93. With reference to the Speaker of the Lok Sabha, consider the following statements:

When a resolution for the removal of the Speaker of the Lok Sabha is under consideration,

- 1. He/she shall not preside.**
- 2. He/she shall have no right to speak.**
- 3. He/she shall have no right to vote on the resolution.**

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

Answer: (a)

Article 96(1) provides that while a resolution to remove the Speaker is under consideration, the Speaker 'shall not...preside.' However, clause (2) explicitly grants the Speaker the right to speak and to vote in the first instance (though not a casting vote). Thus only Statement 1 is correct; Statements 2 and 3 are wrong. ([indiankanoon.org](https://indiankanoon.org/doc/1018551/?utm_source=openai))

Q94. With reference to the Parliament of India, consider the following statements:

- 1. A Bill pending in the Lok Sabha lapses upon the dissolution of the Lok Sabha.**
- 2. A Bill passed by the Lok Sabha but pending in the Rajya Sabha lapses upon the dissolution of the Lok Sabha.**
- 3. A Bill for which the President has convened a joint sitting of both Houses lapses upon the dissolution of the Lok Sabha.**

Which of the statements given above is/are correct?

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

Answer: (b)

Article 107(5) states that a Bill pending in the Lok Sabha, or one passed by Lok Sabha but still pending in Rajya Sabha, lapses upon the dissolution of Lok Sabha—so Statements 1 and 2 are correct. A Bill for which the President has already notified a joint sitting under Article 108 does not lapse, so Statement 3 is incorrect. Hence only Statements 1 and 2 are correct.

([clearias.com](https://www.clearias.com/bills-procedures-parliament/?utm_source=openai))

Q95. With reference to the Parliament of India, consider the following statements:

- 1. The President of India does not require the advice of the Council of Ministers to send a message to either House.**
- 2. Prorogation of a House is normally done after it is adjourned sine die, but there is no bar on the President proroguing the House while it is in session.**
- 3. Dissolution of the Lok Sabha is done by the President of India, except in extraordinary circumstances, on the advice of the Council of Ministers.**

Which of the statements given above is/are correct?

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

Answer: (c)

Under Article 74 the President must act on the aid and advice of the Council of Ministers in the exercise of all functions—including sending messages to Parliament—so Statement 1 is incorrect. Article 85(2)(a) empowers the President to prorogue either House at any time, and parliamentary practice recognises that this may be done even while the House is sitting, although it is usually after adjournment sine-die, making Statement 2 correct ([en.wikipedia.org](https://en.wikipedia.org/wiki/Article_74_of_the_Constitution_of_India?utm_source=openai)). Article 85(2)(b) authorises the President to dissolve the Lok Sabha, a power conventionally exercised on the advice of the Council of Ministers except in exceptional constitutional situations, so Statement 3 is correct ([rulesera.com](https://rulesera.com/constitution/part-v/parliament/general/article85.php?utm_source=openai)). Hence only Statements 2 and 3 are correct.

Q96. Consider the following statements:

Statement-I:

Recently, the European Parliament approved the Net-Zero Industry Act.

Statement-II:

The European Union aims to achieve carbon neutrality by the year 2040 and therefore intends to develop its clean technologies 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

Answer: (c)

The European Parliament approved the Net-Zero Industry Act in its plenary vote of 25 April 2024, so Statement-I is correct ([europarl.europa.eu](https://www.europarl.europa.eu/news/en/press-room/20240419I PR20568/meps-adopt-plans-to-boost-europe-s-net-zero-technology-production?utm_source=openai)). The European Climate Law sets a legally binding objective for the EU to achieve climate-neutrality by 2050 (with a proposed 90 %-reduction target for 2040), not by 2040; therefore Statement-II is incorrect ([climate.ec.europa.eu](https://climate.ec.europa.eu/eu-action/european-climate-law_lt?utm_source=openai)). Because only Statement-I is correct, option (c) is the right choice.

Q97. 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**

Answer: (d)

Venezuela has not yet recovered from its prolonged economic crisis; UNHCR notes that the outflow of Venezuelan refugees and migrants continued in 2024-25, reaching almost 7.9 million people, so Statement-I is false ([unhcr.org](https://www.unhcr.org/emergencies/venezuela-situation?utm_source=openai)). Venezuela does possess the world's largest proven crude-oil reserves—about 303 billion barrels in 2023—making Statement-II correct ([eia.gov](https://www.eia.gov/international/content/analysis/countries_lo ng/Venezuela/?utm_source=openai)). Hence only Statement-II is correct (option d).

Q98. 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**

Answer: (d)

Since 1 April 2016 DILRMP has been operated as a Central Sector Scheme with 100 % funding from the Union Government, so Statement 1 is correct ([dolr.gov.in](https://dolr.gov.in/programmes-schemes/dilrmp-2/?utm_source=openai)). The scheme explicitly includes digitisation (and geo-referencing) of cadastral maps, confirming Statement 2 ([dolr.gov.in](https://dolr.gov.in/programmes-schemes/dilrmp-2/?utm_source=openai)). Citizen-centric services under DILRMP list 'Transliteration of RoR (Multilingual RoR)', showing that Records of Rights are being transliterated into other constitutionally recognised languages, so Statement 3 is also correct ([dolr.gov.in](https://dolr.gov.in/citizen-centric-services/)). Therefore all three statements are correct (option d).

Q99. With reference to the 'Pradhan Mantri Surakshit 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

Answer: (b)

PMSMA provides assured, free antenatal care on the 9th of every month specifically to women in their 2nd and 3rd trimesters; it does not cover six-month post-delivery services, so Statement 1 is incorrect. The scheme explicitly encourages private obstetricians, radiologists and physicians to volunteer at nearby government facilities, making Statement 2 correct ([pib.gov.in](https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1845078&utm_source=openai)). Hence only Statement 2 is correct (option b).

Q100. 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 13,000 per month after the age of 60 years.

4. Family pension is applicable to the spouse and unmarried daughters.

Which of the statements given above is/are correct?

(a) 1, 3 and 4

(b) 2 and 3 only

(c) 2 only

(d) 1, 2 and 4

Answer: (b)

Entry to PM-SYM is open to unorganised sector workers aged 18–40 years, not 21–40; hence Statement 1 is incorrect. Contributions are linked to the entrant's age (Statement 2 correct). Every subscriber gets a minimum assured pension of 13,000 per month after 60 years (Statement 3 correct). Family pension is payable only to the spouse, not to unmarried daughters (Statement 4 incorrect). Therefore only Statements 2 and 3 are correct. ([patan.nic.in](https://patan.nic.in/scheme/pradhan-mantri-shram-yogi-maan-dhan-pm-sym/?utm_source=openai))