

UPSC PRELIMS 2025 GS SET A

1. With reference to investments, consider the following :

- | | |
|-------------|---------------------|
| I. Bonds | II. Hedge Funds |
| III. Stocks | IV. Venture Capital |

How many of the above are treated as Alternative Investment Funds?

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

Source:

Alternative investment funds: Designed exclusively for the wealthy

Alternative Investment Funds are in the spotlight more than ever.
Here's how they cater to HNIs

By Venkatasubramanian K & BL Research Bureau

Updated - February 04, 2024 at 10:08 AM.



AIFs pump ₹74,000 crore into real estate, highest among all sectors: Anarock

The number of active AIFs has surged from 42 in 2013 to 1,524 by March 2025, reflecting the growing investor appetite for non-traditional, high-return opportunities.

By Reuters

Updated - April 21, 2025 at 03:26 PM. | New Delhi



Three categories

Here's how each of the three categories stacks up and the different funds under each type.

Category 1: Venture capital, social ventures, SME, start-ups and infrastructure funds fall under this category. Venture capital funds invest in new businesses with high growth potential. They take equity stakes in start-ups in their early or initial stages. HNIs who wish to make substantial profits in such ventures during exit via IPOs or buyouts from other institutional investors, and with a high risk appetite, opt for such venture capital funds.

Category 2: The most popular category houses private equity funds, bond funds, real estate funds and fund of funds. These schemes do not have too many restrictive or narrow investment mandates, giving fund managers considerable flexibility. This category receives the maximum inflows, given its wider ambit.

Category 3: This category includes hedge funds, commodity funds and private investment in public equity (PIPE). Hedge funds use complicated trading strategies, short-selling techniques and dabble with derivatives as well.

Commodity funds invest in gold, silver, oil and their derivatives.

With this news article you can completely solve the question

2. Which of the following are the sources of income for the Reserve Bank of India?

- I. Buying and selling Government bonds
- II. Buying and selling foreign currency
- III. Pension fund management
- IV. Lending to private companies
- V. Printing and distributing currency notes

Select the correct answer using the code given below.

- (a) I and II only
- (b) II, III and IV
- (c) I, III, IV and V
- (d) I, II and V

Sources and uses of RBI surpluses

While surpluses of up to Rs 1 trillion look plausible under normal conditions, the present surplus is big. It would be the govt's prerogative to decide how to use the funds.

Written by [Madan Sabnavis](#)

May 25, 2024 04:15 IST



RBI's Rs 2.11 Lakh Crore Dividend To Govt: How Does Reserve Bank Earn Profit?

Reported By : [Mohammad Haris](#) [News18.com](#)

Last Updated: May 25, 2024, 10:59 IST

The Reserve Bank earns huge income from seigniorage, i.e, printing of currency and putting that currency into circulation

The RBI's dividend amount of Rs 2.11 lakh crore is more than double what was paid in the previous year.

Among other functions, the Reserve Bank of India's main function is to mint money and is the bank of banks. Through its management of financial markets, foreign exchange reserves, and government securities, the RBI earns income. RBI's income comes from interest payments, fees, and potential gains from forex activities.

RBI earns significant money comes from seigniorage or printing money.

V K Vijayakumar, chief investment strategist at Geojit Financial Services, said, "The RBI is not a commercial organisation that earns profits. But, it has a huge income. The Reserve Bank earns huge income from **seigniorage, i.e, printing of currency and putting that currency into circulation**. The cost of printing a Rs 500 note is around Rs 2. So, when the RBI prints it and puts it into circulation, it makes a profit of Rs 498."

The RBI subscribes to the bonds issued by the Government of India by printing currency and earns interest on that. The government pays interest by taxing the people. So, the money should be spent on people's welfare. "That's why part of RBI's surpluses are transferred to the government for meeting public expenditure," he added.

There are **three sources of income which would have yielded this increase**. The first is the income from liquidity operations where the system was in a deficit since October, which meant that the variable repo rate operations would have yielded upwards of 6.5% on the amount borrowed by banks. The **second would be the RBI's forex operations where the central bank was regularly in the market, buying and selling dollars to stabilise the currency**. Both legs of the transaction would have yielded a revenue for the RBI depending on the price at which dollars were bought and sold. This was a large component in FY23, too, and overall operations this year was of the order of \$338 billion in FY24 as against \$399 billion in the previous year. The **third source of income would have been the returns on forex reserves**. Forex reserves increased by around \$60 billion last year. A sum of \$570 billion as forex reserves would have delivered a return of close to 4%. In FY23 the yield had gone up to 3.73% from 2.11% in FY22 as the Fed had raised interest rates sharply right into 2023. Therefore, a combination of these three sources of income would have contributed largely to the surplus that has been generated this time.

4. Consider the following statements :

- I. The Reserve Bank of India mandates all the listed companies in India to submit a Business Responsibility and Sustainability Report (BRSR).
- II. In India, a company submitting a BRSR makes disclosures in the report that are largely non-financial in nature.

Which of the statements given above is/are correct?

- (a) I only (b) II only
(c) Both I and II (d) Neither I nor II

SOURCE:

OPINION

The many challenges of BRSR

PREMIUM

Business Responsibility and Sustainability Reporting will require large amount of data, so firms will have to revamp IT systems

Updated - July 17, 2024 at 09:29 PM.



Governance

SEBI's green reporting mechanism vital but needs to be more consistent, rigorous: CSE suggests steps to enhance system

Companies modify BRSR questionnaire by adding or omitting information according to their discretion, shows CSE review

Published on: 24 May 2024, 12:04 pm

Delhi-based think tank Centre for Science and Environment (CSE) welcomed the **Business Responsibility and Sustainability Reporting (BRSR) initiative by the Securities and Exchange Board of India (SEBI)** to increase corporate transparency but identified significant gaps in the current reporting practices. CSE recommended several improvements to ensure the data provided is of higher quality and more useful for stakeholders.

SEBI introduced the BRSR framework in May 2021, mandating the top 1,000 listed **companies in India to disclose non-financial data**, including their efforts towards environmental stewardship, for the financial years 2021-22 and 2022-23. This initiative was intended to provide policymakers and investors with robust data to make informed decisions.

6. Consider the following statements :

- I. India has joined the Minerals Security Partnership as a member.
- II. India is a resource-rich country in all the 30 critical minerals that it has identified.
- III. The Parliament in 2023 has amended the Mines and Minerals (Development and Regulation) Act, 1957 empowering the Central Government to exclusively auction mining lease and composite license for certain critical minerals.

Which of the statements given above are correct?

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

India and U.S. work out strategies to scale up collaboration on critical minerals under iCET

The partnership will also aim to strengthen ties on research and development with institutions from both countries working together

Published - June 19, 2024 10:21 pm IST - New Delhi

One of the aims will be to promote “India’s vital role in the mineral security partnership, including through co-investing in a lithium resource project in South America and a rare earths deposit in Africa, to responsibly and sustainably diversify critical mineral supply chains”, said a fact sheet issued on June 17 on the India-U.S. Initiative for Critical and Emerging Technology (iCET) dialogue, chaired by the National Security Advisers of the countries.

In July 2023, India released a list of 30 minerals critical for the country and has been looking to acquire mines abroad in addition to expanding exploration within the country. To enable this, the Mines and Minerals (Development and Regulation) Act, 1957 was amended through the MMDR Amendment Act, 2023.

8. Consider the following statements :
- I. India accounts for a very large portion of all equity option contracts traded globally thus exhibiting a great boom.
 - II. India’s stock market has grown rapidly in the recent past even overtaking Hong Kong’s at some point of time.
 - III. There is no regulatory body either to warn the small investors about the risks of options trading or to act on **unregistered financial advisors** in this regard.
- Which of the statements given above are correct?
- (a) I and II only
 - (b) II and III only
 - (c) I and III only
 - (d) I, II and III

Sebi tightens grip on unregistered financial advisors

A fresh directive from Sebi reinforces existing regulations barring registered intermediaries from having direct or indirect ties with unregistered market advisors and influencers.

MARKETS

India becomes fourth-largest equity market globally, overtaking Hong Kong

India has officially surpassed Hong Kong in stock market valuation, with a combined market capitalisation of \$4.33 trillion compared to Hong Kong's \$4.29 trillion.

By Bloomberg

Updated - January 23, 2024 at 08:03 AM.



Equities in India have been booming, thanks to a rapidly growing retail investor base and strong corporate earnings. The world's most populous country has positioned itself as an alternative to China, attracting fresh capital from global investors and companies alike, thanks to its stable political setup and a consumption-driven economy that remains among the fastest-growing of major nations.

22. Consider the following countries :

- | | |
|---------------|---------------|
| I. Bolivia | II. Brazil |
| III. Colombia | IV. Ecuador |
| V. Paraguay | VI. Venezuela |

Andes mountains pass through how many of the above countries?

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

https://eschool.thehindu.com/ccidist-ws/isbs/isbs_chennai/issues/32213/OPS/GN8B3K2P3.1+GHOB3K4S3.1.html

In the Andes, mountain guides bear witness to shrinking glaciers

Now the mountain is crumbling. Rising global temperatures due to climate change have led the glacier to retreat and the permafrost to melt.



Reuters

Santiago, UPDATED: Jul 19, 2024 15:47 IST

In Short

- The last push to the summit required a glacier traverse
- Now, the final ascent is a rocky hillside
- The Andes mountains present different types of frozen formations

On a clear day, Chile's towering 5,400-meter (17,700-foot) El Plomo mountain can be seen from the capital, Santiago. The glacier-capped Andean peak has been climbed and revered for centuries, with the Incas carrying out human sacrifices at the summit.

24. Consider the following statements about turmeric during the year 2022-23 :

- India is the largest producer and exporter of turmeric in the world.
- More than 30 varieties of turmeric are grown in India.
- Maharashtra, Telangana, Karnataka and Tamil Nadu are major turmeric producing States in India.

Which of the statements given above are correct?

- I and II only
- II and III only
- I and III only
- I, II and III

Question can be answered from this article alone all options were mentioned

Source:

Looking to double turmeric production to 2 million in 5 years: Piyush Goyal

The leading export markets for Indian turmeric are Bangladesh, UAE, USA and Malaysia

Press Trust of India New Delhi2 min read: **Jan 14 2025** | 1:33 PM IS

India is the largest producer, consumer and exporter of turmeric in the world.

In the year 2022-23, an area of 3.24 lakh hectares was under turmeric cultivation in India with a production of 11.61 lakh tonnes.

More than 30 varieties of turmeric are grown in India and it is grown in over 20 states in the country.

The largest producing states of turmeric are Maharashtra, Telangana, Karnataka and Tamil Nadu.

India has more than 62 per cent share of world trade in turmeric.

During 2022-23, 1.534 lakh tonnes of turmeric and turmeric products valued at \$ 207.45 million was exported by more than 380 exporters.

The leading export markets for Indian turmeric are Bangladesh, UAE, USA and Malaysia.

34. Consider the following statements :

Statement I :

Article 6 of the Paris Agreement on climate change is frequently discussed in global discussions on sustainable development and climate change.

Statement II :

Article 6 of the Paris Agreement on climate change sets out the principles of carbon markets.

Statement III :

Article 6 of the Paris Agreement on climate change intends to promote inter-country non-market strategies to reach their climate targets.

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
- (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

NEWS

UN COP29 climate summit: What is a carbon credit? What is Article 6 of the Paris Agreement?

Officials are keen to secure an early "win" on Article 6 at this year's climate conference in Azerbaijan

By Reuters

Updated - November 09, 2024 at 03:46 PM. | Baku



What is Article 6?

Article 6 of the Paris Agreement helps countries work together to reduce their carbon emissions. It sets out two options for countries and companies to trade offsets, helping them meet the goals they set to reduce planetary-warming gases in their climate action plans, known as nationally determined contributions (NDCs).

One allows two countries to set their own terms for a bilateral carbon trading agreement, this is known as Article 6.2. The second aims to create a central, UN-managed system for countries and companies to begin offsetting their carbon emissions and trading those offsets, known as Article 6.4.

Article 6 of the Paris Agreement provides a framework for countries to cooperate towards the implementation of their Nationally Determined Contributions (NDCs) through carbon markets (Articles 6.2 and 6.4) and non-market modalities (Article 6.8). This collaboration can help countries to achieve and enhance their NDC targets. The overall objective is to increase climate ambition, promote sustainable development, and safeguard environmental integrity.

UNEP WEBSITE

38. Consider the following statements :

- I. Carbon dioxide (CO₂) emissions in India are less than 0.5 t CO₂/capita.
- II. In terms of CO₂ emissions from fuel combustion, India ranks second in Asia-Pacific region.
- III. Electricity and heat producers are the largest sources of CO₂ emissions in India.

Which of the statements given above is/are correct?

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

Global carbon dioxide emissions set to rise 0.8% over 2023, India's contribution to go up 4.6%

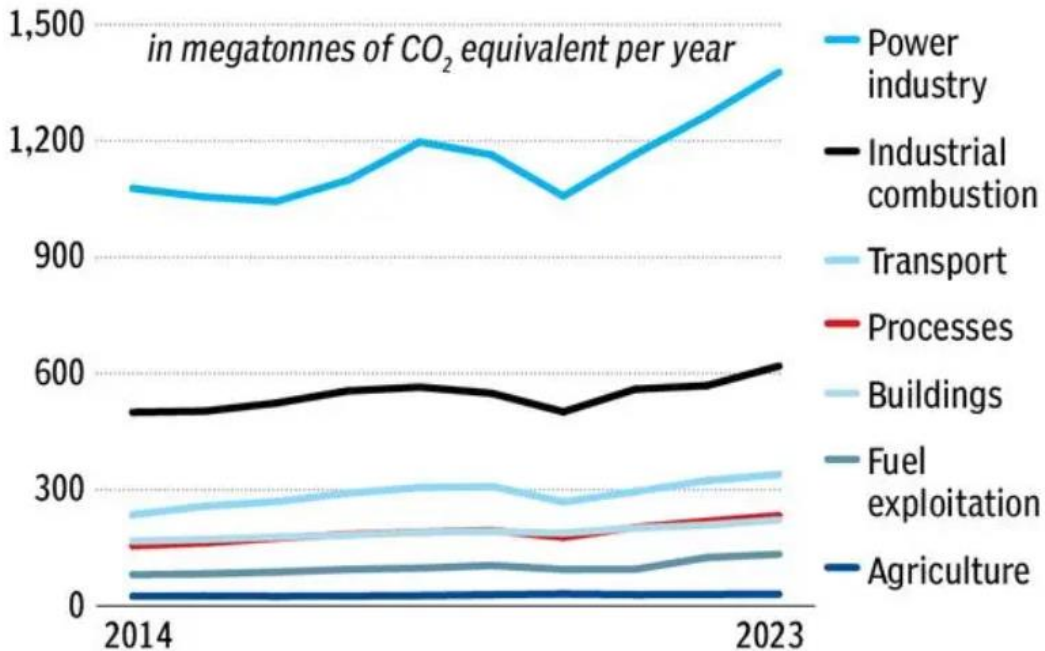
In 2023, the largest absolute contributions to global fossil CO₂ (carbon dioxide) emissions were from China (31%), followed by the United States with 13% and India taking up 8%

Updated - November 13, 2024 08:06 am IST - NEW DELHI

The global per-capita fossil CO₂ emissions in 2023 were 1.3 tonnes of carbon per person per year. They were 3.9 in the U.S., 2.3 for China, 1.5 for the EU-27 and 0.6 for India.

Being largely coal-based, power contributes the most to India's emissions, followed by industry

Sector-wise GHG emissions in the last decade



In 2023, India was the third-highest emitter of CO₂ globally, surpassing the combined CO₂ emissions of the European Union and Japan. China leads the list with emissions totalling 12.6 Gt, registering a 27.2 per cent growth. The US follows with 4.5 Gt despite seeing an 11.7 per cent decrease in emissions.

41. Consider the following types of vehicles :

- I. Full battery electric vehicles
- II. Hydrogen fuel cell vehicles
- III. Fuel cell-electric hybrid vehicles

How many of the above are considered as alternative powertrain vehicles?

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

Work on for CNG, hybrid vehicles for market: Kia India

Kia India unveils compact SUV Syros, to be launched in February 2025

By S Ronendra Singh

Updated - December 19, 2024 at 09:12 PM. | New Delhi



Kia India on Thursday said that it was working on **CNG** and other **alternative powertrains** for the Indian market and will launch at appropriate time, adding that the government should also reduce taxes including **GST** on passenger vehicles because 65 per cent of the cost of vehicles goes into taxes which a customer has to bear.

“We are studying on different powertrain options – hybrid, CNG, flex fuel – in our R&D centre.

43. In the context of electric vehicle batteries, consider the following elements :

- I. Cobalt
- II. Graphite
- III. Lithium
- IV. Nickel

How many of the above usually make up battery cathodes?

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

Electric Vehicle Batteries: under the hood

The projected growth of the Indian Electric Vehicle market is dependent on advances in battery technology translating to better economics and enhanced user experience. However, today's Li-ion batteries still leave a lot to be desired

Published - January 30, 2024 10:30 am IST

easily available. But invariably there are trade-offs involved. For example, Tesla uses cathodes based on Nickel-Manganese-Cobalt (NMC) and Lithium Iron Phosphate (LFP) in their batteries. While NMC batteries have high energy density and thus provide longer range, LFP batteries have longer life, better stability, are less toxic and have faster charging times.

electrolyte. Further, the anode of an EV battery consists of a carbon based porous/layered scaffolding (typically graphite) — which houses lithium atoms (a crude analogy is water stored in a sponge). The carbon scaffolding provides the required stability during charging

46. What is the common characteristic of the chemical substances generally known as CL-20, HMX and LLM-105, which are sometimes talked about in media?

- (a) These are alternatives to hydro-fluorocarbon refrigerants
- (b) These are explosives in military weapons
- (c) These are high-energy fuels for cruise missiles
- (d) These are fuels for rocket propulsion

CSIR-IICT develops new process to manufacture high-energy rocket propellant

Published - June 15, 2024 07:03 pm IST - HYDERABAD

CSIR-Indian Institute of Chemical Technology (IICT), in collaboration with Premier Explosives Ltd., has developed an indigenous process to prepare the key material used in CL-20, a high energy material primarily used as propellant in rockets and missiles.

CL-20 or China Lake-20 has better oxidiser-to-fuel ratio than conventional RDX and releases 20% more energy than traditional HMX-based propellants. CL-20 is prepared from the key material generally known as TAIW, using a high concentration of expensive noble metal catalysts. India currently imports TAIW to make CL-20.

47. Consider the following statements :

- I. It is expected that Majorana 1 chip will enable quantum computing.
- II. Majorana 1 chip has been introduced by Amazon Web Services (AWS).
- III. Deep learning is a subset of machine learning.

Which of the statements given above are correct?

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

Microsoft unveils new quantum chip Majorana 1

Microsoft on Wednesday unveiled a new chip that it said showed quantum computing is "years, not decades" away, joining Google and IBM in predicting that a fundamental change in computing technology is approaching

Updated - February 20, 2025 08:14 pm IST

48. With reference to **monoclonal antibodies**, often mentioned in news, consider the following statements :

- I. They are **man-made proteins**.
- II. They stimulate immunological function due to their **ability to bind** to specific antigens.
- III. They are used in treating viral infections like that of **Nipah virus**.

Which of the statements given above are correct?

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

SOURCE:

Covered under multiple articles

Nipah monoclonal antibody trials may begin in India in 2025 TH Premium

Published - July 13, 2024 09:10 pm IST

Indian Immunologicals working on bivalent human monoclonal antibody for rabies

Published - September 28, 2024 10:31 pm IST - HYDERABAD

Study finds lab-created antibody effective in preventing severe respiratory illness in infants

The findings indicate that the benefits of nirsevimab seen in clinical trials could be translated into real-world settings, potentially reducing the burden of RSV disease among infants and use of healthcare resources

Published - May 04, 2025 01:12 pm IST

A **monoclonal antibody** -- a protein created in a lab which mimics the work of a natural antibody -- could be highly effective in preventing severe RSV-- Respiratory syncytial virus, a respiratory infection and major cause of serious illness in infants, according to a research.

The monoclonal antibody is designed to bind to the Nipah virus F protein, preventing the virus from entering a host cell and causing infection in people. "This mechanism will offer protection against both known strains of Nipah virus (Bangladesh and Malaysia) and its closely related viral cousin, Hendra virus, for at least six months — enough time for vaccine immunity to build," says a CEPI release.

95. Consider the following statements regarding AI Action Summit held in Grand Palais, Paris in February 2025 :

- I. Co-chaired with India, the event builds on the advances made at the Bletchley Park Summit held in 2023 and the Seoul Summit held in 2024.
- II. Along with other countries, US and UK also signed the declaration on inclusive and sustainable AI.

Which of the statements given above is/are correct?

- (a) I only (b) II only
(c) Both I and II (d) Neither I nor II

India, 57 others sign Paris joint statement on inclusive, sustainable AI

The U.S. and U.K. abstained from signing the statement which calls for "promoting the accessibility of AI, and ensuring trust and safety in deploying the technology"

Published - February 11, 2025 10:15 pm IST - NEW DELHI

In early January, India accepted France's invitation to co-chair the AI Action Summit on February 10 and 11 in Paris. This summit will be the third of its kind, following meetings focussed on AI safety in the U.K. (2023) and South Korea (2024). In addition to AI safety, the agenda at Paris is to focus on innovation, public interest AI, future of work, and AI governance issues — presenting India an opportunity to continue its global engagement on AI safety and also amplify the voice of the Global South on broader AI issues.

India's opportunity at the AI Action Summit

TH Premium

As co-chair of the Paris meeting, India must leverage its position to advance the key AI priorities of the Global South

Published - February 10, 2025 12:15 am IST

90. Which organization has enacted the Nature Restoration Law (NRL) to tackle climate change and biodiversity loss?

- (a) The European Union
- (b) The World Bank
- (c) The Organization for Economic Cooperation and Development
- (d) The Food and Agriculture Organization

The case for a **nature restoration law** in India

TH Premium

The **law enacted by the European Union** recently is a model worth following

Updated - October 22, 2024 02:09 pm IST

What does the **European Union's new Nature Restoration Plan** include? | Explained

What does the law include, and what are the possible challenges it may face?

Updated - June 22, 2024 03:34 pm IST

83. Consider the following space missions :

- I. Axiom-4
- II. SpaDeX
- III. Gaganyaan

How many of the space missions given above encourage and support micro-gravity research?

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

Microgravity research experiments proposed by IISc. and UAS Dharwad to be conducted on board International Space Station

The experience gained through these experiments is expected to nurture a microgravity research ecosystem in India resulting in the induction of advanced microgravity experiments in various disciplines in the Indian space programme

Updated - April 28, 2025 01:06 pm IST - Bengaluru

Indian Space Research Organisation (ISRO) has shortlisted seven microgravity research experiments, which are expected to be conducted on board the International Space Station (ISS) during the upcoming Axiom-4 mission (Ax-4).

The upcoming Ax-4 mission, with Indian astronaut Group Captain Shubhanshu Shukla, is the fourth private astronaut mission to the ISS. The mission is likely to be launched in May.

SpaDEX: All you need to know about ISRO's groundbreaking space docking mission

ET Online - Last Updated: Dec 26, 2024, 03:59:00 PM IST

[FOLLOW US](#) [SHARE](#) [FONT SIZE](#) [SAVE](#) [PRINT](#) [COMMENT](#)

Synopsis

India is poised to enter a new era in space technology with the Space Docking Experiment (SpaDEX), set for launch on December 30, 2024. Using the PSLV-C60 rocket, ISRO will deploy two satellites, Chaser and Target, into a 470 km orbit to demonstrate in-space docking technology. The mission also includes experiments with microgravity using the PSLV's fourth stage. SpaDEX is a key step for India's future space station and lunar missions, advancing its position in global space exploration.

79. Consider the following pairs :

	Country	Resource-rich in
I.	Botswana	: Diamond
II.	Chile	: Lithium
III.	Indonesia	: Nickel

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

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

Botswana, the country with the biggest diamonds, gets an improved 10-year deal with miner De Beers

The Botswana government has signed a new diamond sales agreement crucial to its economy with the De Beers mining company after seven years of negotiations

Published - February 26, 2025 03:34 pm IST - GABORONE

Foreign-backed nickel hub in Indonesia causing mass deforestation: Report

The report of ecological damage in the nickel industry comes as Indonesia, home to the world's largest nickel ore reserves, seeks to extract more value from the mineral

Updated - January 22, 2024 11:43 am IST - JAKARTA

Coal India eyes lithium deposits of Chilean salt flats

Government of Chile in March 2024 announced new opportunities for private sector investors in lithium exploration

By Rishi Ranjan Kala

Updated - August 05, 2024 at 04:06 PM.



50. Consider the following statements :

Statement I :

Activated carbon is a good and an attractive tool to **remove pollutants** from effluent streams and to remediate contaminants from various industries.

Statement II :

Activated carbon exhibits a **large surface area** and a strong potential for **adsorbing heavy metals**.

Statement III :

Activated carbon can be easily synthesized from **environmental wastes** with high carbon content.

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
- (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

SOURCE:

Review: Recent Developments in the Implementation of Activated Carbon as **Heavy Metal Removal Management**

Review | [Open access](#) | Published: 09 September 2024

Volume 9, article number 62, (2024) [Cite this article](#)

Water contamination, particularly by heavy metals originating from industrial processes, presents a significant threat to environmental sustainability and socio-economic development. Activated carbon (AC) has garnered considerable attention as a treatment due to its exceptional adsorption properties, characterized by a high surface area (273–827 m²/g), significant total pore volumes (0.27–0.69 ml/g), and well-defined micropores (8.2–12.4 nm), alongside tunable surface chemistry. Research efforts have focused on

62. India is one of the founding members of the International North-South Transport Corridor (INSTC), a multimodal transportation corridor, which will connect

- (a) India to Central Asia to Europe via Iran
- (b) India to Central Asia via China
- (c) India to South-East Asia through Bangladesh and Myanmar
- (d) India to Europe through Azerbaijan

Vessel, container traffic increased via Chabahar Port and INSTC in FY24: Economic Survey

Sittwe Port in Myanmar, built as part of Kaladan multi-modal transport project, offers an alternative route to Northeastern States

Updated - February 01, 2025 07:50 am IST - NEW DELHI

The Shahid Beheshti Port at Chabahar connects Mumbai to Eurasia via the International North South Transport Corridor (INSTC), reducing transport costs and time, leading to a 43% increase in vessel traffic and a 34% rise in container traffic for the financial year 2023-24, according to the Economic Survey released on Friday.

Explained: The International North-South Transport Corridor and India's role in it

FP Explainers • March 18, 2025, 13:00:37 IST



The International North-South Transport Corridor (INSTC) is back in the news.

The 7,200 kilometre transit route links the Indian Ocean and Persian Gulf to the Caspian Sea via Iran and then to northern Europe via Russia's St Petersburg.

64. The World Bank warned that India could become one of the first places where wet-bulb temperatures routinely exceed 35 °C. Which of the following statements best reflect(s) the implication of the above-said report?

- I. Peninsular India will most likely suffer from flooding, tropical cyclones and droughts.
- II. The survival of animals including humans will be affected as shedding of their body heat through perspiration becomes difficult.

Select the correct answer using the code given below.

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

This Article is From May 28, 2024

Explained: What Is Wet Bulb Temperature And How Hot Is Too Hot

Wet bulb temperature is a meteorological term used to describe the lowest temperature that can be reached by evaporating water into the air at constant pressure.

69. Consider the following countries :

- I. United Arab Emirates
- II. France
- III. Germany
- IV. Singapore
- V. Bangladesh

How many countries amongst the above are there other than India where international merchant payments are accepted under UPI?

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

What purpose would increasing transaction limits on UPI serve?

TH Premium

In an announcement relating to developmental and regulatory policies on Monday, RBI proposed that NPCI engage with banks and other relevant stakeholders of the UPI ecosystem to revise such limits based on “evolving user needs”.

Updated - April 10, 2025 12:29 pm IST

Lastly, the revision could also potentially bode well for employing the payments interface on foreign soil. For perspective, at present, UPI is accepted in seven countries, they are: Nepal, Singapore, Mauritius, France, Bhutan, Sri Lanka and UAE.

Published - April 10, 2025 07:00 am IST

68. Consider the following statements in respect of RTGS and NEFT :

I. In RTGS, the settlement time is instantaneous while in case of NEFT, it takes some time to settle payments.

II. In RTGS, the customer is charged for inward transactions while that is not the case for NEFT.

III. Operating hours for RTGS are restricted on certain days while this is not true for NEFT.

Which of the statements given above is/are correct?

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

Source: Multiple articles mentioned

Account verification facility for NEFT, RTGS soon: RBI

The RBI on Wednesday also increased the UPI Lite wallet limit to ₹5,000 from ₹2,000 at present

Updated - October 09, 2024 11:19 am IST

Banks to provide beneficiary account name look-up facility in NEFT, RTGS by April 1

RBI has asked the National Payments Corporation of India to develop a facility for the same

Published - December 31, 2024 02:20 am IST - Mumbai:

RTGS, electronic funds transfer: Banks to introduce beneficiary bank account name look-up facility

RBI has directed banks to offer the facility by April 1, 2025

By BL Mumbai Bureau

Updated - December 31, 2024 at 06:52 PM.



70. Consider the following statements about 'PM Surya Ghar Muft Bijli Yojana' :

- I. It targets installation of one crore solar rooftop panels in the residential sector.
- II. The Ministry of New and Renewable Energy aims to impart training on installation, operation, maintenance and repairs of solar rooftop systems at grassroot levels.
- III. It aims to create more than three lakhs skilled manpower through fresh skilling, and upskilling, under scheme component of capacity building.

Which of the statements given above are correct?

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

PM Surya Ghar Yojana: Only 3,453 rooftop solar plants installed since 2022 in Bengaluru

Under the scheme, consumers get subsidies up to 60% for the installation of rooftop solar plants

Updated - April 28, 2025 09:40 pm IST - Bengaluru

“In the last ten years, 7.9 lakh rooftops have been installed in the country and in the last one year, 9 lakh residential rooftops have been installed. In this, the bills of 48 percent households have become zero,” said the report of the Parliamentary Standing Committee on Energy on the demand for grants of the **Ministry of New & Renewable Energy (MNRE) for FY25.**

Subscribe to our Daily
Newsletter

Subscribe

The Ministry has released subsidies to the bank accounts of about 6 lakh households. Apart from this, there is also a provision to give incentives to Discoms. Incentives worth Rs 2,000 crore have been released.

Under the PM Surya Ghar Muft Bijli Yojana, the Ministry aims at solarizing **one crore households** by providing free electricity up to 300 units every month through rooftop solar installations. The government has allocated around ₹75,000 crore and it has to be implemented by FY27.

These 1 crore installations will generate about one lakh crore units of electricity and lead to a reduction of 72 crore tonnes of CO2 emission.

Others

PM Surya Ghar: Muft Bijli Yojana - Redefining Solar Power and Energy Access

1.28 crore registrations and 14.84 lakh applications fuel India's solar energy expansion

Posted On: 12 AUG 2024 5:28PM

v. **Job Creation:** The scheme is also expected to create approximately 17 lakh direct jobs across various sectors, including manufacturing, logistics, supply chain, sales, installation, operations and maintenance (O&M), and other services, thereby boosting employment and economic growth in the country.

76. Consider the following countries :

- I. United Kingdom
- II. Denmark
- III. New Zealand
- IV. Australia
- V. Brazil

How many of the above countries have more than four time zones?

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

Countries with highest number of time zones

TRAVEL TRENDS , WORLD

Updated : May 8, 2024, 13:25 IST



Why do India and China have single time zones despite their vast landmass?

India follows a single time zone called Indian Standard Time (IST), which is set at GMT+5:30.



India Today Science Desk



New Delhi, UPDATED: Dec 18, 2024 13:36 IST

In Short

- India technically experiences a two-hour difference in solar time
- A single time zone was promoted as a shared sense of identity and unity
- A single time zone also comes with its challenges that have long been voiced

US President Donald Trump has shown his interest [in ending the Daylight Saving Time](#), which could add to complications in the United States functionality, which is divided in several time zones.

[Home](#) / [India News](#) / What is 'One Nation, One Time' and how will it benefit the country? Details

What is 'One Nation, One Time' and how will it benefit the country? Details

The Indian government has drafted comprehensive rules mandating use of Indian Standard Time (IST) across platforms to streamline timekeeping

One Nation, One Time

Sudeep Singh Rawat | New Delhi

4 min read Last Updated : Jan 29 2025 | 8:44 PM IST



Connect with us



99. Consider the following statements in respect of the first Kho Kho World Cup :

- I. The event was held in Delhi, India.
- II. Indian men beat Nepal with a score of 78–40 in the final to become the World Champion in men category.
- III. Indian women beat Nepal with a score of 54–36 in the final to become the World Champion in women category.

Which of the statements given above is/are correct?

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

Kho Kho World Cup: After women, Indian men's team also crowned champion

The Men in Blue dominated the final against Nepal with captain Pratik Waikar and tournament standout Ramji Kashyap leading from the front

Updated - January 20, 2025 12:31 am IST - New Delhi

The Indian men's team beat Nepal 54-36 in the final to win the inaugural Kho Kho World Cup title in New Delhi on Sunday (January 19, 2025).

The Indian men's team title came after the women's side were also crowned the champions after defeating Nepal in the final.

The Men in Blue dominated the final against Nepal with captain Pratik Waikar and tournament standout Ramji Kashyap leading from the front.

100. Consider the following statements :

- I. In the finals of the 45th Chess Olympiad held in 2024, Gukesh Dommaraju became the world's youngest winner after defeating the Russian player Ian Nepomniachtchi.
- II. Abhimanyu Mishra, an American chess player, holds the record of becoming world's youngest ever Grandmaster.

Which of the statements given above is/are correct?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

SPORTS

India scripts history with maiden gold at 45th Chess Olympiad

Grandmaster and World Championship challenger Gukesh beat Vladimir Fedoseev, while Erigaisi prevailed over Jan Subelj

By PTI

Updated - September 22, 2024 at 07:35 PM. | Budapest



98. Consider the following statements about Lokpal :

- I. The power of Lokpal applies to public servants of India, but not to the Indian public servants posted outside India.
- II. The Chairperson or a Member shall not be a Member of the Parliament or a Member of the Legislature of any State or Union Territory, and only the Chief Justice of India, whether incumbent or retired, has to be its Chairperson.
- III. The Chairperson or a Member shall not be a person of less than forty-five years of age on the date of assuming office as the Chairperson or Member, as the case may be.
- IV. Lokpal cannot inquire into the allegations of corruption against a sitting Prime Minister of India.

Which of the statements given above is/are correct?

- (a) III only
- (b) II and III
- (c) I and IV
- (d) None of the above statements is correct

In five years, Lokpal ordered probe in 24 cases, granted prosecution sanction in six

It got three complaints against Prime Minister in October and December last year; Nearly 90% of all complaints were rejected as they were not in correct format

Updated - January 18, 2025 06:27 am IST - New Delhi

Former Supreme Court judge A.M. Khanwilkar appointed Lokpal chairperson

Former High Court judges Lingappa Narayana Swamy, Sanjay Yadav and Ritu Raj Awasthi have been appointed as judicial members of the Lokpal.

Updated - February 28, 2024 02:10 am IST - New Delhi

SC stays Lokpal order giving itself jurisdiction over HC judges

The Supreme Court also issued a notice to the Union Government and sought the assistance of Solicitor General Tushar Mehta, senior advocates Kapil Sibal and P.B. Suresh

Updated - February 20, 2025 08:42 pm IST

Of the total complaints, 3% were against Prime Minister/Member of Parliament/ Union Minister, 21% complaints were against Group A, B, C or D officials of the Central government, 35% complaints against chairperson or members in Central government bodies, and 41% were against those in the "Others" category, which includes State government officials.

As per Section 53 of the Lokpal and Lokayuktas Act, 2013, a complaint can be entertained only if it filed within a period of seven years from the date of the alleged offence.

97. Consider the following statements with regard to BRICS :

- I. 16th BRICS Summit was held under the Chairship of Russia in Kazan.
- II. Indonesia has become a full member of BRICS.
- III. The theme of the 16th BRICS Summit was Strengthening Multiculturalism for Just Global Development and Security.

Which of the statements given above is/are correct?

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

Building blocks: On the 16th BRICS Summit in Kazan

The BRICS Summit showed that Russia was not without friends

Updated - October 25, 2024 11:00 am IST

BRICS Summit 2024 Oct 22 Highlights: PM Modi meets Putin, Iran President for bilateral talks

PM Modi thanked Putin for his 'strong friendship', praised growing cooperation and the evolution of BRICS but also said that India felt the conflict in Ukraine should be ended peacefully

Updated - October 23, 2024 06:59 pm IST

BRICS countries, including Brazil, Russia, India, China and South Africa, are set to welcome new members including Iran, Egypt, Ethiopia and the UAE, at the summit.

This year's summit has as its focus the integration of new BRICS members into BRICS cooperation mechanisms, also strengthening economic cooperation, promoting cooperation for energy and food security, promoting cooperation in a host of areas related to science, healthcare, environmental protection, culture, sports, youth exchanges and civil society, according to the MEA.

92. Consider the following statements in respect of BIMSTEC :

- I. It is a regional organization consisting of **seven member States** till January 2025.
- II. It came into existence with the signing of the Dhaka Declaration, 1999.
- III. Bangladesh, India, Sri Lanka, Thailand and Nepal are founding member States of BIMSTEC.
- IV. In BIMSTEC, the subsector of 'tourism' is being led by India.

Which of the statements given above is/are correct?

- | | |
|--------------|----------------|
| (a) I and II | (b) II and III |
| (c) I and IV | (d) I only |

CAME IN NEWS MULTIPLE TIMES

PM Modi offers linking UPI with payment systems of BIMSTEC nations

Prime Minister also proposed to set up a BIMSTEC Chamber of Commerce, organise annual business summits and explore promoting trade in local currencies within the region.

Published - April 04, 2025 12:09 pm IST - Bangkok

BIMSTEC acquires 'legal personality' after charter comes into force

Published - May 22, 2024 10:52 pm IST - NEW DELHI:

A new push in the Bay of Bengal TH Premium

The intent of BIMSTEC member states to push forth with a bold vision for the region was evident at the 2nd Foreign Ministers' Retreat

Updated - July 27, 2024 10:52 am IST

The BIMSTEC Summit, hosted by **Thailand**, is attended by leaders from **India, Bangladesh, Nepal, Myanmar, Sri Lanka and Bhutan**.

The BIMSTEC Summit adopted the Bangkok Vision 2030 to realise the shared commitment to prosperity, security, and inclusivity in the Bay of Bengal region.

94. GPS-Aided Geo Augmented Navigation (GAGAN) uses a system of ground stations to provide necessary augmentation. Which of the following statements is/are correct in respect of GAGAN?

- I. It is designed to provide additional **accuracy and integrity.**
- II. It will allow more uniform and high quality air traffic management.
- III. It will provide benefits only in aviation but not in other modes of transportation.

Select the correct answer using the code given below.

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

Small airports to be 1st to rely on GAGAN satnav for landings, at major Indian airports it would be the second choice

Manju V / TNN / Jun 20, 2024, 20:08 IST

SHARE

PRINT

AA

FOLLOW US

Augmented Navigation. GAGAN satellites take the basic GPS signals and augment them to improve its accuracy, integrity, availability, and continuity.

82. Consider the following statements :

- I. Indian Railways have prepared a National Rail Plan (NRP) to create a 'future ready' railway system by 2028.
- II. 'Kavach' is an Automatic Train Protection system developed in collaboration with Germany.
- III. 'Kavach' system consists of RFID tags fitted on track in station section.

Which of the statements given above are **not** correct?

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

Parliament Standing Committee concerned over slow roll out of 'Kavach'

Kavach has so far been deployed on 1,465 route km of the South Central Railway (SCR) and 80 route km on North Central Railway.

Updated - January 28, 2025 08:15 am IST - HYDERABAD

The Parliamentary Standing Committee on Indian Railways (24-25) has expressed concern over the slow roll out of the indigenous Automatic Train Protection (ATP) System or 'Kavach' and also about the lackadaisical approach towards research and development.

How does Kavach work on Railway Systems?

The Traffic collision avoidance system (TCAS), with the help of equipment on board the locomotive and transmission towers at stations connected with Radio Frequency Identification (RFID) tags, helps in two-way communication between the station master and loco-pilot to convey any emergency message. The instrument panel inside the cabin helps

(Explained article june2023)

Telegram : <https://t.me/carpediemias>