

Daily Mcqs- November 21st

1. Consider the following statements about Indian Regional Navigation Satellite System (IRNSS)

- 1) IRNSS is an independent regional navigation satellite system being developed by India.
- 2) It is designed to provide accurate position information service to users in India only.
- 3) All the satellites in IRNSS are located in the geostationary orbit.

Which of the statements given above is/are correct?

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

Answer: A

Explanation

Indian Regional Navigation Satellite System (IRNSS): NavIC (Navigation with Indian Constellation)

- **Statement 1 is correct:** IRNSS is an **independent regional navigation satellite system** being developed by India
- **Statement 2 is incorrect:** It is designed to provide **accurate position information service to users in India as well as the region extending up to 1500 km from its boundary**, which is its primary service area.
- An **Extended Service Area** lies between primary service area and area enclosed by the rectangle from Latitude 30 deg south to 50 deg North, Longitude 30 deg East to 130 deg East
- IRNSS will provide two types of services, namely **Standard Positioning Service (SPS)** which is provided to all the users and **Restricted Service (RS)**, which is an **encrypted service provided only to the authorised users**.
- The IRNSS System is expected to provide a **position accuracy of better than 20 m** in the primary service area.
- **Statement 3 is incorrect:** IRNSS is a **constellation of seven satellites in space**. Out of these, **three are located in the geostationary orbit** over the Indian Ocean and the other

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four in geosynchronous orbits, with the desired inclination and equatorial crossings in two different planes.

Geosynchronous Orbit

- About 35,786 kilometers above the Earth's surface, satellites are in geostationary orbit. At any inclination, a **geosynchronous orbit synchronizes with the rotation of the Earth**. More specifically, the time it takes for the Earth to rotate on its axis is 23 hours, 56 minutes and 4.09 seconds, which is the same as a satellite in a geosynchronous orbit

Geostationary Orbits

- While geosynchronous satellites can have any inclination, the key difference to geostationary orbit is the fact that **they lie on the same plane as the equator**.
- Geostationary orbits fall in the same category as geosynchronous orbits, but it's parked over the equator. This one special quality **makes it unique from geosynchronous orbits**.

Some applications of IRNSS are

- Terrestrial, Aerial and Marine Navigation
- Disaster Management
- **Vehicle tracking and fleet management**
- **Integration with mobile phones**
- Precise Timing
- Mapping and Geodetic data capture
- Terrestrial navigation aid for hikers and travellers
- **Visual and voice navigation for drivers**

Why in the news?

- The **Indian Regional Navigation Satellite System (IRNSS)** has been accepted as a component of the **World Wide Radio Navigation System (WWRNS)** for operation in the **Indian Ocean Region** by the **International Maritime Organization (IMO)**.
- This will enable merchant vessels to use IRNSS for **obtaining position information** similar to GPS and GLONASS to assist in the **navigation of ships in ocean waters** within the area covered by 50°N latitude, 55°E longitude, 5°S latitude and 110°E longitude (approximately up to 1500 km from Indian boundary).

<https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1674483>

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<https://www.isro.gov.in/irnss-programme>

<https://economictimes.indiatimes.com/definition/irnss>

2. Under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, diversion of forest land for public utility facilities managed by the Government, such as schools & dispensaries is to be recommended by:

- (a) Gram Sabhas
- (b) Divisional Forest Officer
- (c) District Collector
- (d) Zilla parishad

Answer (a)

(Excerpt taken from the act) Notwithstanding anything contained in the Forest (Conservation) Act, 1980, the Central Government shall provide for diversion of forest land for the following facilities managed by the Government which involve felling of trees not exceeding seventy-five trees per hectare, namely:-

- (a) schools;
- (b) dispensary or hospital;
- (c) anganwadis;
- (d) fair price shops;
- (e) electric and telecommunication lines;
- (f) tanks and other minor water bodies;
- (g) drinking water supply and water pipelines;
- (h) water or rain water harvesting structures;
- (i) minor irrigation canals;
- (j) non-conventional source of energy;

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(k) skill up-gradation or vocational training centers;

(l) roads; and

(m) community centers:

Provided that such diversion of forest land shall be allowed

only if, -

(i) the forest land to be diverted for the purposes mentioned in this subsection is less than one hectare in each case; and

(ii) **the clearance of such developmental projects shall be subject to the condition that the same is recommended by the Gram Sabha.**

Hence option a is correct.

3. Ministry of New and Renewable Energy (MNRE) has launched the Pradhan Mantri Kisan Urja Suraksha evem Utthan Mahabhiyan (PM KUSUM) Scheme. Consider the following statements with respect to the scheme:

1. It provides for installation of solar pumps and grid connected solar and other renewable power plants.
2. It provides 100% central financial assistance for Solarisation of Grid Connected Agriculture Pumps.

Which of the statements given above is/are incorrect?

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

Answer: (b)

Statement 2 is incorrect: Centre gives only 30 % assistance for component B and C.

PM KUSUM scheme

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- **Ministry of New and Renewable Energy (MNRE)** has launched the Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan (PM KUSUM) Scheme for farmers for installation of **solar pumps and grid connected solar and other renewable power plants** in the country. Hence, **Statement 1 is correct.**
- The scheme aims to add solar and other renewable capacity of 25,750 MW by 2022 with total central financial support of Rs. 34,422 Crore including service charges to the implementing agencies.

Scheme Components

The Scheme consists of three components:

- Component A:** 10,000 MW of **Decentralized Ground Mounted Grid Connected Renewable Power Plants** of individual plant size up to 2 MW. (by individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/Water User associations (WUA) on barren/fallow land)
- Component B:** Installation of 17.50 lakh **standalone Solar Powered Agriculture Pumps** of individual pump capacity up to 7.5 HP for replacement of existing diesel Agriculture pumps / irrigation systems in off-grid areas, where grid supply is not available. Pumps of capacity higher than 7.5 HP can also be installed, however, the financial support will be limited to 7.5 HP capacity.
- Component C: Solarisation of 10 Lakh Grid-connected Agriculture Pumps** of individual pump capacity up to 7.5 HP. The farmer will be able to use the generated solar power to meet the irrigation needs and the excess solar power will be sold to DISCOMs at a pre-fixed tariff.

Central Financial Assistance (CFA)/ State Government Support:

- Component A:** Procurement Based Incentive (PBI) @ 40 paise/kWh or Rs. 6.60 lakhs/MW/year, whichever is less, will be provided for the first five years **by MNRE to DISCOMs**, for buying the power from farmers/developers.
- Component B & C:** CFA of **30% of the benchmark cost or the tender cost**, whichever is lower. **State Government** subsidy **30%**; Remaining **40% by the farmer.**

In **North Eastern States, Sikkim, J&K, Himachal, Uttarakhand, Lakshadweep and A&N Islands**, CFA of **50%**, State Government subsidy **30%**, Remaining **20% by the farmer.**

Scheme benefits

- The scheme will open a stable and continuous source of income to the rural landowners for a period of 25 years by utilisation of their dry/uncultivable land.
- Further, in case cultivated fields are chosen for setting up solar power projects, the farmers could continue to grow crops as the solar panels are to be set up above a minimum height.

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- The proposed scheme would ensure that sufficient local solar/ other renewable energy based power is available for feeding rural load centres and agriculture pump-set loads, which require power mostly during the day time.
- As these power plants will be located closer to the agriculture loads or to electrical substations in a decentralized manner, it will result in **reduced Transmission losses** for STUs and Discoms.
- Moreover, the scheme will also help the Discoms to achieve the RPO (Renewable Purchase Obligation) target
- The solar pumps will save the expenditure incurred on diesel for running diesel pumps and provide the farmers a reliable source of irrigation through solar pumps apart from preventing harmful pollution from running diesel pumps.
- In light of the long waiting list for electric grid connection, this scheme will benefit 17.5 lakh farmers over a period of four years, without adding to the grid load.

<https://vikaspedia.in/energy/policy-support/renewable-energy-1/solar-energy/scheme-for-farmers-for-solar-pumps-and-power-plant>

<https://mnre.gov.in/pm-kusum-scheme>

4. **The Sustainable Development Goals (SDGs) also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. In this context, which of the following has been assigned the role of overseeing the implementation of SDGs in India?**

- a) National Biodiversity Authority (NBA)
- b) NITI Aayog
- c) Sustainable Development Cell (SDC)
- d) Bureau of energy efficiency

Answer: B

Explanation

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- The Sustainable Development Goals (SDGs) were **adopted in September 2015 as a part of the resolution**, 'Transforming our world: the 2030 Agenda for Sustainable Development'
- India is committed to **achieve the 17 SDGs and the 169 associated targets, which comprehensively cover social, economic and environmental dimensions of development** and focus on ending poverty in all its forms and dimensions
- At the Central Government level, **NITI Aayog has been assigned the role of overseeing the implementation of SDGs in the country**
- To spread awareness about the Goals, bring together stakeholders and build capacities for the realization of SDGs, **NITI Aayog has organized several national and regional level consultations**

5. Consider the following statements regarding the Anticipatory bail

1. As opposed to Ordinary bail, which is granted to a person who is under arrest, in anticipatory bail a person is directed to be released on bail even before a arrest is made
2. According to provision of Code of Criminal Procedure (CrPc), only the Sessions Court and High Court can grant anticipatory bail

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

Ans: C

Explanation

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- Recently, the Supreme Court recently ruled that **no time restriction should ordinarily be fixed for anticipatory bail** and that it can continue even until the end of the trial.
- As opposed to Ordinary bail, which is granted to a person who is under arrest, **In anticipatory bail a person is directed to be released on bail even before a arrest is made.**
- **Section 438 of the Code of Criminal Procedure (CrPc) lays down the law on anticipatory bail.** Sub-section (1) of the provision reads: “When any person has reason to believe that he may be arrested on an accusation of having committed a **“non-bailable offence”**, he may **apply to the High Court or the Court of Session** for a direction under this section and that Court may, if it thinks fit, direct that in the event of such arrest, he shall be released on bail.”
- The protection granted under **Section 438 of the Code of Criminal Procedure (CrPc)** “should not invariably be limited to a fixed period”, a 5-judge Constitution bench, deciding a reference made to it following **“conflicting views” of some other benches of the court**
- The provision empowers **only the Sessions Court and High Court to grant anticipatory bail**

