

## 1. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana

### Why in News?

- Recently, the number of treatments for non-Covid procedures by both private and government facilities across the country dropped by over 20% between February, 2020 and April, 2020.

### Highlights:

- The lockdown and pandemic have adversely affected the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana's (AB-PMJAY) ability to cater to critical patients below the poverty line.
- The Cardiology treatments offered under AB-PMJAY Declined by 45%.
- The General Surgeries' Declined by 23%.
- The Procedures related to Gynaecology and Obstetrics Declined by 25%.
- The 'General Medicine' is the only Category of Treatment that showed an Increase.

### Ayushman Bharat Pradhan Mantri Jan Arogya Yojana:

- It offers a sum insured of Rs.5 lakh per family for secondary care (which doesn't involve a super specialist) as well as tertiary care (which involves a super specialist).
- It is an entitlement-based scheme that targets the beneficiaries as identified by latest Socio-Economic Caste Census (SECC) data.
- Once identified by the database, the beneficiary is considered insured and can walk into any Empanelled Hospital.
- The insurance cost is shared by the Centre and the state mostly in the ratio of 60:40.
- The **Packaged rates** is known as the Rates that include everything so that each product or service is not charged for separately
- It also mentions the number of average days of hospitalization for a medical procedure and supporting documents that are needed.
- It is flexible, but they can't charge the beneficiary once fixed by the hospitals.
- It also has prescribed a daily limit for medical management.
- **National Health Authority (NHA):** It has been constituted as an autonomous entity under the Society Registration Act, 1860 for effective implementation of PM-JAY in alliance with State Governments.
- **State Health Agency (SHA):** It is the apex body of the State Government responsible for the implementation of AB PM-JAY in the State.

## 2. Buddha Purnima

### Context:

- Recently, the Buddha Purnima is being celebrated annually on 7th may

### About Buddha Purnima:

- The day falls on the Purnima (full moon) of the Hindu month Vaishakha (April or May). It marks the birth anniversary of Gautama Buddha, founder of Buddhism.
- He belonged to the Sakya clan which ruled from Kapilvastu, Lumbini. At the age of 29, Gautama left home and rejected his life of riches and embraced a lifestyle of asceticism or extreme Self-Discipline.
- Gautama Buddha, after 49 consecutive days of meditation attained Bodhi (enlightenment) under a pipal tree at Bodhgaya, Bihar.
- He gave his first sermon in the village of Sarnath, near Varanasi in Uttar Pradesh.
- It is known as Dharma Chakra Pravartana (turning of the wheel of law).
- He died at the age of 80 in 483 BCE at Kushinagara, Uttar Pradesh. The event is known as Mahaparinibban or Mahaparinirvana.
- He is believed to be the eighth of the ten incarnations of Lord Vishnu (Dashavatar).

## 3. Black Panther in Netravali Sanctuary

### Why in News?

- A black panther was spotted in Goa's Netravali Sanctuary recently.
- While the area is a known habitat of tigers, this is for the first time a black panther has noticed in the sanctuary.

### About Black Panther:

- A black panther is the melanistic colour variant of any Panthera, particularly of the leopard in Asia and Africa, and the jaguar in the Americas.
- It is as shy as a normal leopard and very difficult to detect.
- It is mostly found in Densely Forested areas of southern India.

### About Netravali Wildlife Sanctuary:

- Netravali Wildlife Sanctuary is located in **South Eastern Goa** and constitutes one of the vital corridors of the Western Ghats.

- Netravali or Neturli is an important **tributary of River Zuari**, which originates in the sanctuary.
- It has **Two Important** waterfalls namely, Savari and Mainapi.
- Forests mostly consist of moist deciduous vegetation interspersed with evergreen and semi-evergreen habitat.
- **Fauna:** Leopard, Giant Squirrel, Mouse Deer, Nilgiri Wood Pigeon and Ceylon Frogmouth.

#### Areas where Black Panther has been Spotted Earlier:

- Periyar Tiger Reserve (Kerala)
- Bhadra Tiger Reserve, Dandeli-Anshi Tiger Reserve and Kabini Wildlife Sanctuary (Karnataka)
- Achanakmar Tiger Reserve (Chhattisgarh)
- Mhadei Wildlife Sanctuary (Goa)
- Mudumalai Tiger Reserve (Tamil Nadu)

#### 4. Vande Bharat Mission

##### Why in News?

- Indian Government has initiated two missions named “Vande Bharat Mission” and “Samudra Setu” to bring back Indians stranded abroad to India.

##### Vande Bharat Mission:

- Vande Bharat Mission is the biggest evacuation exercise to bring back Indian citizens stranded abroad amidst the coronavirus-induced travel restrictions.
- It is also considered as the largest exercise to bring back Indian citizens.
- The mission has given priority to Indian citizens with “compelling reasons to return” – like those whose employment have been terminated, those whose visas have expired and not expected to be renewed under the present circumstances and those who have lost Family Members in Recent Times.
- Air India and its subsidiary Air India Express will Operate flights to bring back stranded Indians from 12 countries.
- The entire cost of travel will be borne by the passengers under the mission.

### **Operation Samudra Setu:**

- The program named Samudra Setu by Indian navy entails to bring back around two thousand Indians in ships.
- INS Jalashwa and INS Magar are being operated as part of efforts to repatriate Indian nationals from foreign shores.

## **5. AYUSH Sanjivani App**

### **Why in News?**

- The Union Health & Family Welfare Minister launched the 'AYUSH Sanjivani' App and two AYUSH based studies related to the COVID-19 situation.

### **AYUSH Sanjivani App:**

- The App will help to generate data on the acceptance and usage of AYUSH advocacies and measures among the population and its impact in prevention of COVID-19.
- It is developed by the Ministry of AYUSH and the Ministry of Electronics and Information Technology (MeitY) and shall reach out to a target of 50 lakh people.
- The AYUSH Ministry, in collaboration with the Health Ministry, launched the clinical trials of Ayurvedic medicines for the novel coronavirus infection. The scientific studies on Ayurveda interventions as preventive prophylaxis and as an add-on to standard care to COVID-19 are a joint initiative of AYUSH Ministry, Health Ministry and Council of Scientific and Industrial Research (CSIR) with technical support of Indian Council of Medical Research (ICMR). Ayurvedic medicines such as Ashwagandha, Yashtimadhu, Guduchi Pippali, and a poly herbal formulation (Ayush-64) are being used in the clinical trials involving health workers and those working in COVID-19 high-risk areas.
- The researchers would test Ashwagandha for prevention against SARS-CoV-2 in subjects with increased risk during the COVID 19 Pandemic – a comparison with Hydroxychloroquine in the Health Care Providers.
- Another study is to assess the effectiveness of Ayurveda Formulation as an adjunct to 'Standard of Care' for the treatment of mild to moderate COVID-19.

## 6. Energy Storage Application of Nanomaterials

### Why in News?

- Researchers from IIT BHU have made significant achievements in developing nanomaterials-based supercapacitors to achieve high energy power density of supercapacitors.

### Highlights:

- Dr. Mishra and his research group at IIT (BHU) have developed a reduced graphene oxide (rGO) at a moderate temperature of 100°C with high capacitance performance.
- The production process is a cost-effective one, making it suitable for commercial purposes.
- The group has also developed a novel green approach for synthesis of Iron-based nanocatalyst, which can be used for large scale production of Carbon Nanotubes.
- They are also working on optoelectronic applications of nanomaterials. They are developing novel nanostructures of carbon and metal dichalcogenides semiconductors for photodetection and Surface-Enhanced Raman spectroscopy (SERS).
- The SERS can help detect harmful molecules present in water at ultra-low concentrations.

### Significance:

- Increasing energy demand due to the growth of human population and technological advancement poses a great challenge for human society.
- High energy density of supercapacitors suggests that constant current can be withdrawn for a longer duration without recharging.
- Hence automobiles can run longer distances without charging.
- These Supercapacitors can be an alternative for such purposes.
- The optoelectronics devices pave the way for the development of cost-effective and efficient devices, which can be used for energy storage application.
- Their findings make way for materials which can be used as advanced photodetectors and also be used as optical sensors for water pollution control.

### INSPIRE Faculty Award:

- The Department of Science and Technology has launched the “Innovation in Science Pursuit for Inspired Research (INSPIRE)” program in 2008.
- The program aims to attract talent for study of science and careers with Research.

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- INSPIRE Faculty Scheme offers contractual research awards to young achievers and opportunities for independent research and emerge as a future leader in the long term.
  - Each selected INSPIRE Faculty shall be eligible to receive a consolidated amount of Rs. 1,25,000/- pm.
  - In addition, a Research Grant of Rs 7 lakh per year for 5 years shall also be provided to each successful candidate.
  - The INSPIRE Faculty Award is for a Maximum Period of 5 (Five) Years.

