

**NATIONAL SOCIAL ISSUES- WOMEN, POPULATION, URBANISATION, EMPOWERMENT ETC****'India Rankings 2020' For Higher Educational Institutions**

Union HRD Minister released "India Rankings 2020" for Higher Educational Institutions in various categories on the basis of their performance on five broad categories of parameters.

**About:**

- Instituted by: This is the fifth consecutive edition of India Rankings of the institutions of higher education by the Ministry of Human Resource Development (MHRD).
- The National Institutional Ranking Framework (NIRF), launched in 2015, outlines a methodology to rank institutions across the country.
- Parameters: The ranking framework evaluates institutions on five parameters –
  - Teaching, Learning and Resources (TLR) – 30% Weightage
  - Research and Professional Practice (RP) – 40%
  - Graduation Outcomes (GO) – 5%
  - Outreach and Inclusivity (OI) – 15%
  - Perception (PR) – 10%
- Categories: Dental institutions have been included for first time in "India Rankings" bringing the total tally to 10 categories / subject domains.

**GEOGRAPHY- PHYSICAL AND ECONOMIC****Athirapally Hydrel Electric Project**

Recently, the Kerala government has approved the proposed Athirapally Hydro Electric Project (AHEP) on the Chalakudy river in Thrissur district of the state. There are already five dams for power and one for irrigation and it will be the seventh along the 145 km course of the Chalakudy river.

**Chalakudy River**

- It originates in the Anamalai region of Tamil Nadu and is joined by its major tributaries Parambikulam, Kuriyarkutti, Sholayar, Karapara and Anakayam in Kerala.
- The river flows through Palakkad, Thrissur and Ernakulam districts of Kerala.
- It is the 4th longest river in Kerala and one of very few rivers of Kerala, which is having relics of riparian vegetation in substantial level.
- A riparian zone is the interface between land and a river or stream. Plant habitats and communities along the river margins and banks are called riparian vegetation, characterized by hydrophilic plants.
- It is the richest river in fish diversity perhaps in India as it contains 85 species of freshwater fishes out of the 152 species known from Kerala only.
- The famous waterfalls, Athirappilly Falls and Vazhachal Falls, are situated on this river.
- It merges with the Periyar River near Puthenvelikkara in Ernakulam district.

**SOCIO-ECONOMIC DEVELOPMENT****Border Adjustment Tax**

Recently, a NITI Aayog member has favoured imposing a Border Adjustment Tax (BAT) on imports to provide a level-playing field to domestic industries. This suggestion comes in the backdrop of the USA-China trade tensions (trade war) which are expected to rise even further post-Covid-19.

**Key Points**

- BAT is a duty that is proposed to be imposed on imported goods in addition to the customs levy that gets charged at the port of entry.
- BAT is a fiscal measure that imposes a charge on goods or services in accordance with the destination principle of taxation.
  - Under this principle, a government taxes products based on the location of their sale to the final consumer rather than on the location of their production or origin.
- Thus, to adjust a tax "at the border," a country:
  - taxes imported products and domestically produced products sold on its market on the same basis and at the same rate; and
  - exempts from this tax products exported for sale to foreign consumers.
- Generally, BAT seeks to promote "equal conditions of competition" for foreign and domestic companies supplying products or services within a taxing jurisdiction.

- The World Trade Organisation (WTO) rules allow for the adjustment of certain types of internal taxes at the border under certain conditions. The main conditions are:
  - The tax must be applied equally to imports and "like" domestic products.
  - The tax must be "borne" by a product and not be "direct".
  - A permitted border tax adjustment must not subsidize exports.
- Impact of BAT on trading partners:
  - At the macro level, with imports reduced and exports increased, a country can cut its trade deficit.
  - If a country is a major export market for many developing countries, the tax plan will have serious adverse effects on them after implementation.
  - BAT may render some firms less profitable and if the prices are forced upwards they may lose competitiveness with substitute products or locally-made similar products.
- Various taxes such as electricity duty, mandi tax, clean energy cess and royalty are imposed on domestic goods leading to the escalation of price. This gives imported goods a price advantage in India.
  - Complaints have always been raised by Indian industries about such domestic taxes that get charged on domestically produced goods as these duties get embedded into the product.
  - However, many imported goods do not get loaded with such levies in their respective country of origin and this gives such products a price advantage in India.
- It was highlighted that advocating self-reliance under Atmanirbhar Bharat vision, should not imply that India would embrace isolationist policies. India has to go global but with a supply chain which is more local.

### **SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR, DEFENCE ETC**

#### **Deep Submergence Rescue Vehicle (DSRV) Complex**

The Deep Submergence Rescue Vehicle (DSRV) Complex was inaugurated at Visakhapatnam.

#### **About:**

- The DSRV Complex is designed to accommodate the newly inducted Submarine Rescue System with state of the art facilities to store the DSRV assets in a Rescue-Ready state.
- The DSRV system consists of a Submarine Rescue Vessel, a Remote Operations Vehicle, Side Scan Sonar and associated equipment. It also has Diver Decompression Chambers and hyperbaric medical equipment to decompress submariners after being rescued from a sunken submarine.
- The DSRV system can be rapidly mobilised by air or road to facilitate submarine rescue operations even at distant locations.
- The Indian Navy has inducted two such systems which will provide rescue cover to submarines on the West and East coast of India respectively.
- Currently, there are about 40 nations that operate submarines in the world out of which only a few have any form of submarine rescue capability.

#### **AXONS**

Scientists from Raman Research Institute (RRI), an autonomous institute under the Department of Science & Technology have found out that spectrin, which are flexible rod-shaped molecules present in axons, act as 'shock absorbers' to protect axons from stretch-induced damage.

#### **About:**

- The study can help in understanding and treatment of concussion from head injuries as well as stretch-induced nerve injuries.
- Axons are long tubular extensions of nerve cells that transmit electrical signals across long distances and can be up to a meter long in the case of humans.
- At such lengths, they are subjected to large stretch deformations during limb or other bodily movements. Axons in the brain too undergo significant deformations, even during normal activities like jumping.

#### **Axons vs Dendrite:**

- An axon is one of two types of cytoplasmic protrusions from the cell body of a neuron; the other type is a dendrite.

- Axons are distinguished from dendrites by several features, including
- shape (dendrites often taper while axons usually maintain a constant radius),
- length (dendrites are restricted to a small region around the cell body while axons can be much longer), and function (dendrites receive signals whereas axons transmit them).

### **Placenta**

According to a new study by researchers, a new concern of injuries in placentas has emerged around pregnant women who have Covid-19. In 16 women who had tested positive for Covid-19 while pregnant, tests conducted immediately after birth found their placentas had evidence of injury.

#### **About:**

- The placenta is a temporary organ that connects the developing fetus via the umbilical cord to the uterine wall. The placenta is expelled from the body upon birth of the fetus.
- The placenta supplies all the oxygen and nutrients essential for growth of the foetus, and if it fails to develop properly the pregnancy can end with a low birthweight baby or even a stillbirth.

## **PRELIMS SPECIFIC FACTS- INDICES, DAYS, EVENTS, AWARDS ETC**

### **Nature Index, 2020**

In the recently-released Nature Index table 2020, India is placed twelfth globally in science research output. The top five positions have gone to the United States of America, China, Germany, United Kingdom and Japan.

#### **What is the Nature Index?**

- The Nature Index is a database of author affiliation information collated from research articles published in an independently selected group of 82 high-quality science journals.
- The database is compiled by Nature Research, a division of the international scientific publishing company Springer Nature that publishes academic journals. Nature Research's flagship publication is Nature, a weekly multidisciplinary journal first published in 1869.
- The Nature Index provides a close to real-time proxy of high-quality research output and collaboration at the institutional, national and regional level.
- The Nature Index is updated monthly and also releases annual tables of country.

#### **Key findings of Nature Index, 2020 on India:**

- Globally the top-rated Indian institutions in this list are Council of Scientific and Industrial Research (CSIR), a group of 39 institutions at the 160th position and Indian Institute of Science (IISc) Bangalore at the 184th position.
- Three of the autonomous institutions of the Department of Science & Technology, Government of India have found their place among top 30 Indian Institutions as per Nature Index 2020 ratings. These are
- the Indian Association for the Cultivation of Science (IACS), Kolkata at 7th position,
- Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore at 14th position and
- N. Bose National Centre for Basic Sciences, Kolkata at 30th position.

### **World Day Against Child Labour**

The World Day Against Child Labour (WDAKL) is being observed on 12 June under the theme “COVID-19: Protect children from child labour, now more than ever”, focussing on the impact of coronavirus crisis on child labour.

#### **About:**

- Nodal agency: It is an International Labour Organization (ILO)-sanctioned holiday aiming to raise awareness and activism to prevent child labour.
- Date of observance: The Day is observed every year on June 12.
- Background: It was first launched in It was spurred by ratifications of ILO Convention No. 138 on the minimum age for employment and ILO Convention No. 182 on the worst forms of child labour.

**Related Info:** Target 8.7 of the UN Sustainable Development Goals calls for an end to child labour in all its forms by 2025.

**Ramon Magsaysay Awards**

The Ramon Magsaysay awards have been cancelled this year due to the coronavirus pandemic, the only third time the annual awards were disrupted in six decades. The awards were also cancelled due to a financial crisis in 1970 and a disastrous earthquake that hit the Philippines in 1990.

**About:**

- Ramon Magsaysay award is popularly known as Asia's Nobel Prize.
- Criteria: It is given to individuals and organizations in Asia regardless of race, creed, sex, or nationality, who have achieved distinction in their respective fields. (There are some instances where the winners came from Non-Asian countries, but accomplished something in Asia).
- Name: It is named after Ramon Magsaysay, the third president (1953-57) of Philippines.
- Background: It was established in 1957 by New York based Rockefeller Brothers Fund (RBF), with the consent of Philippine government. The first Awards were given in 1958. Vinoba Bhave of India was one of the recipients.
- Awardees are presented with a certificate and a medal.

**DAILY ANSWER WRITING PRACTICE**

**Q. To resolve the issue of unemployment, there is a need for multi-prong approach. In this light discuss the steps needed to resolve this long-standing issue and also mention the measures taken by the government in this regard.**

Unemployment is a situation where person is capable of working both physically and mentally at the existing wage rate, but does not get a job to work. As per the recent statistics unemployment rate in India rose to 7.2% in 2019. Unemployment represent itself in various forms such as: disguised, seasonal, cyclical, frictional unemployment etc.

To tackle the issue of unemployment following steps must be adopted:

- There is a need for rapid industrialization so as to shift the labour forces from agriculture to manufacturing sector.
- The curriculum at education centers should be changed to focus on learning and skill development.
- Self-employment must be encouraged with the help of liability free loans, government assistance etc.
- Incubation centers need to be promoted to cultivate original business ideas that will be financially viable.
- Government as well as business houses should seek to invite more foreign collaboration and capital investment so as to increase avenue for employment.
- The labour intensive manufacturing sectors such as food processing, leather and footwear need to be promoted to create employment.

Further, to increase the avenue for employment, the government has taken various steps such as:

- Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) to provide social security by guaranteeing a minimum of 100 days paid work.
- Pradhan Mantri Kaushal Vikas Yojana (PMKVY) with objective of enabling a large number of Indian youth to take up industry-relevant skill training.
- Start Up India Scheme aims at developing an ecosystem that promotes and nurtures entrepreneurship.
- Stand Up India Scheme/ MUDRA scheme to facilitate bank loans between Rs 10 lakh and Rs. 1 crore to at least one SC or ST borrower and at least one women borrower per bank branch for setting up a greenfield enterprise.
- Thus, to tackle unemployment a strategy of multi prong approach need to be adopted so as to tap demographic dividend.