

NEWSPAPER HIGHLIGHT

As part of the celebrations of 75 years of Independence, the Union Social Justice and Empowerment Ministry has asked the States to speed up implementation of the Unique Disability ID (UDID) scheme for persons with disabilities (PwD) who have been selected for their connection with the Freedom Struggle from among 75 districts across India. In a letter to the States on April 29, the Department of Empowerment of PwD under the Ministry said the Rural Development Ministry had selected the UDID programme as a part of its 90 day campaign ending on July 27 in districts "selected on the basis of unsung heroes of India's freedom struggle" under Azadi ka Amrit Mahotsav.

5.5 million, the number of people to have fled Ukraine since the war began on February 24, according to the U.N. Refugee Agency (UNHCR). The statistics were compiled from a variety of sources, mainly data provided by authorities from official border crossing points. Just over three million fled to Poland, while Romania has taken in 8,17,000 and Slovakia nearly 3,72,000, as of April 29. Meanwhile, U.S. President Joe Biden has proposed a \$33 billion package to arm Ukraine in its war against Russia.

18.05 lakh Indian accounts banned by WhatsApp in March on the basis of complaints received from users via the grievances channel and through its own mechanism to prevent and detect violations, according to a monthly report published by the platform. The new IT rules, which came into effect in 2021 require digital platforms (with over 50 lakh users) to publish compliance reports every month, mentioning the details of complaints received and action taken.

The Supreme Court upheld the right of an individual against forcible vaccination and the government's COVID19 vaccination policy to protect communitarian health, but found certain vaccine mandates imposed by the State governments and Union Territory administrations disproportionate as they tend to deny access to basic welfare measures and freedom of movement to unvaccinated individuals.

The Election Commission (EC) has

NATIONAL RESEARCH FOUNDATION

1.National Research Foundation (NRF) is a professional and comprehensive research and education framework that was aimed to strengthen the research ecosystem in India. **The aim of proposing NRF is that it will improve linkages between Research & Development, academia, and industry. It will be set up under National Education Policy 2020.**

2.The total proposed outlay of the National Research Foundation is Rs 50,000 crore over a period of five years. Structure- The NRF will be established initially as a Society under the Societies (Registration) Act, 1860. Within three years, the NRF will by an Act of Parliament, become an autonomous body of the Government of India.

3.The NRF will be governed by an 18-member NRF Governing Board consisting of eminent researchers and professionals in their respective fields. Experts may be drawn from within the country and internationally, and it is expected that about a third of the Board member are women. A President, Vice-President, and Chief Operating Officer will be searched for and selected by the NRF Board.

4.The NRF will consist of ten major Directorates, each Directorate with a Chair and Vice-Chair, appointed by the NRF Board. The NRF will be given an annual grant that will eventually aim to reach at least 0.1% of GDP and will be conferred with the autonomy to set its own finances, governance, and statutes.

5.Significance-The NRF was expected to bring thousands of colleges and universities under its ambit. As most of the country's scientific research is being conducted by government laboratories and a few premier institutes, NRF was thought to be a game-changer by its intent of democratisation of the knowledge base. An autonomous, more participatory and less bureaucratic system is needed to unleash the fullest potential of Indian science.

LI-ION BATTERY

1.The Union Government has constituted an expert panel to probe the recent series of LI-ION battery explosions in electric vehicles (EVs).

2.**Every Li-ion battery consists of three active components Anode- Typically graphite Cathode- Typically based on a nickel, cobalt, and manganese-based oxide Electrolyte- Typically a salt of lithium in an inorganic solvent.** The sheets of the anode and cathode are assembled into a sandwich structure held apart by a thin separator (about 15 microns in thickness) to prevent shorting. Accidental shorting of the electrodes is a known cause of fires in Li-ion cells.

3.Safety features, such as thermal switches that turn off if the battery overheats, are added into a battery cell. Battery cells are assembled into modules and then further assembled into packs that are designed to ensure uniform temperature profile with minimal thermal variation during operation.

4.**Battery fires occur due to the convergence of three parts of the "fire triangle" - heat, oxygen, and fuel.** Heat- If an adverse event such as a short circuit occurs in the battery, the internal temperature can raise as the anode and cathode release their energy in an uncontrolled manner, along with oxygen.

5.Oxygen- Such events also rupture the sealed battery further exposing the components to the second part of the fire triangle, namely, oxygen. Fuel- The final component of the triangle is the liquid electrolyte, which is flammable and serves as a fuel.

6.Trigger for battery fires Internal shorts - manufacturing defect that results in sharp objects penetrating the separator. External events-puncture of the cell and shorting of the electrodes. overcharging the battery. Faulty battery management system. Bad thermal design at the module and pack level.

AYUSH AND HERBAL MEDICINE WORLDWIDE

1.AYUSH refers to Ayurveda, Yoga, Unani, Siddha and Homoeopathy systems of medicine. The global market for herbal medicine was valued at 657.5 billion dollar in 2020 and is

sent a notice to Jharkhand Chief Minister Hemant Soren over an office of profit charge against him for allotment of a mining lease in his name last year, an EC official said on Monday. Under Section 9A of the Representation of the People Act, 1951, Mr. Soren could face disqualification for entering into a government contract.

India's manufacturing sector recorded a slight acceleration in new orders and output in April, indicates the S&P Global India Manufacturing Purchasing Managers' Index (PMI), which rose to 54.7 last month from 54 in March, even as inflationary pressures intensified. A reading above 50 on the survey based index indicates an expansion in business activity.

Tata Steel Ltd., one of the major importers of Russian coal in recent months, has decided to stop procurement from the country citing 'uncertainties' over supplies following international sanctions imposed on it after Ukraine invasion.

The EU accused Apple on Monday of blocking rivals from its popular "tap-asyougo" iPhone payment system, opening a fresh battlefront between the U.S. tech giant and Europe.

India currently requires 49 lakh surgeries to clear the backlog of blindness due to cataract and 53.63-lakh surgeries are needed to clear the backlog of severe visual disabilities due to cataract. Over the next three years, an addition of 61.58 lakh surgeries are expected to be added to both these groups, Union Health Minister Mansukh Mandaviya said on Monday. The delays were caused due to medical establishments slowing down surgeries due to the pandemic in the past two years, he said.

Ahead of Buddha Purnima (birth anniversary) on May 16, the government is planning a visit by Prime Minister Narendra Modi to Lumbini in Nepal, the Buddha's birthplace recognised as a UNESCO World Heritage Site, sources confirmed. Nepal Prime Minister Sher Bahadur Deuba is expected to be in Lumbini to mark the occasion.

Indira Gandhi International (IGI) Airport in Delhi emerged as the second busiest airport in the world in March 2022, toppling the Dubai International Airport, according to travel data provider OAG. Atlanta Hartsfield Jackson International Airport (ATL) retained the top position with 44.22 lakh seats.

expected to grow to 746.9 billion dollars in 2022.

2.The Indian herbal medicine market is worth 18.1 billion dollars and the Indian Ayush sector has grown by 17% between 2014 and 2020. In China, the value of traditional Chinese medicine (TCM) market was 37.41 billion dollars in 2018. In 1982, the Constitution of China gave full recognition to TCM. Since 2009, there has been continuous support for TCM in health policies. China has focused upon developing quality infrastructure for TCM to co-exist with modern medicine under the same roof.

3.The National Ayush Mission (NAM) is a Centrally Sponsored Scheme that was launched in 2014 by the Ministry of AYUSH. The basic objective of NAM is to- Promote AYUSH medical systems through cost effective AYUSH services. strengthening of educational systems. Facilitate the enforcement of quality control of Ayurveda, Siddha and Unani & Homoeopathy (ASU &H) drugs. Sustainable availability of ASU & H raw-materials.

4.Components of the Mission-Mandatory Components-AYUSH Services.AYUSH Educational Institutions. Quality Control of ASU &H Drugs. Medicinal Plants. Flexible Components-Under the 'Medicinal Plants' component of the NAM scheme, the cultivation of prioritised medicinal plants in identified clusters/zones is being supported.

5.For the cultivation of plants, subsidies at 30%, 50% and 75% of the cultivation cost for 140 medicinal plants are being provided. The National Medicinal Plant Board (NMPB) implements the medicinal plant component of Ayush through state bodies—State Medicinal Plant Boards (SMPBs).

SIGNIFICANCE OF FUEL TAXES

1.Excise duty and VAT on fuel constitute an important source of revenue for both the Centre and the states. Excise duty on fuel makes up about 18.4% of the Centre's gross tax revenues. Petroleum taxes with states are shared out of basic excise duty.

2.The Centre also levies additional excise duty and cesses on petroleum products. Of the revenue receipts of states, central tax transfers comprise 25-29%, and own tax revenues 45-50%.

3.Central and state taxes currently account for about 43% and 37% of the retail price of petrol and diesel respectively in Delhi.The tax on fuel does not fall under the Goods and Services Tax (GST). Taxes on petrol and diesel are split into multiple components at the state and central level. States apply an ad valorem VAT or sales tax on the base price, freight charges, excise duty and dealer commission on petrol and diesel.

4.While state VAT collections have risen along with higher fuel prices and previous hikes in excise duties, the states' share of excise duties on fuel was reduced in the FY2022 Budget. Changes introduced The Basic Excise Duty (BED) on petrol and diesel was cut by Rs 1.6 and Rs 3 per litre respectively.

5.The special additional excise duty was cut on both by Rs 1 per litre. An Agriculture Infrastructure and Development Cess (AIDC) of Rs 2.5 per litre on petrol and Rs 4 on diesel was introduced. It reduced the states' share as collections from cesses are not part of the shareable pool. The Latin phrase ad valorem means "according to value." All ad valorem taxes are based on the assessed value of the item being taxed.

ENERGY SECURE SOUTH ASIA

1.While universal coverage can catalyse the South Asia's economic growth, energy trade must be linked to peace building.

2.The IEA defines energy security as the uninterrupted availability of energy sources at an affordable price. South Asia has almost a fourth of the global population and the electricity generation in South Asia has risen exponentially, from 340 terawatt hours (TWh) in 1990 to 1,500 TWh in 2015. Coverage- Bangladesh has achieved 100% electrification recently while Bhutan, the Maldives, and Sri Lanka accomplished this in 2019. India has achieved 94.4% of electrification. Cost- Bhutan has the cheapest electricity price in South Asia (0.036 dollar per kWh) while India has the highest (0.08 dollar per kWh.)

3.Transition to renewable- India is trying to make a transition to renewable energy to provide for 40% of total consumption, while Pakistan is still struggling to reduce power shortage. Electricity policies- The objective of electricity policies of South Asian countries is to supply reliable and quality electricity in an efficient manner, at reasonable rates and to protect consumer interests. Sources- Geographical differences between these countries call for a different approach depending on resources.

The IsakMuivah faction of the National Socialist Council of Nagaland (NSCNIM) was involved in 44% of insurgency related incidents in Nagaland in 2020, the annual report of the Ministry of Home Affairs (MHA) has said. In 2015, the Union government signed a framework agreement with the NSCNIM, one of the largest Naga groups, to find a solution to the Naga political issue. The negotiation is yet to be concluded.

4.Is there any regional energy trade agreements-Bilateral and multilateral energy trade agreements. **India-Nepal petroleum pipeline deal. India-Bhutan hydroelectric joint venture. Myanmar-Bangladesh-India gas pipeline. Bangladesh-Bhutan-India-Nepal (BBIN).sub-regional framework for energy cooperation Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline.** **5.**The South Asian Association for Regional Cooperation (SAARC) prepared the regional energy cooperation framework in 2014. Energy trade- India exports to Bangladesh, almost 25% of the daily energy demand, with a significant amount from the Kokrajhar power plant in Assam. Bhutan exports 70% of its own hydropowered electricity to India while Nepal not only sells its surplus hydroelectricity to India but also exports fossil fuel to India.