

NEWSPAPER HIGHLIGHT

India's passport power has improved compared to 2021. It now ranks at 83rd position in the Henley Passport Index, climbing seven places from 90th rank last year. However, in 2020, its rank stood at 84 while in 2016, India was ranked 85th along with Mali and Uzbekistan. Japan and Singapore top the index. The current rankings are for first quarter of 2022 and India shares the position with Sao Tome and Principe in Central Africa, behind Rwanda and Uganda. Since 2005, Henley Passport Index ranks world's passports according to the number of destinations their holders can access without prior visa and is based on data from International Air Transport Association (IATA).

Solar power generation is set to make rapid strides in Rajasthan with public sector banks acceding to the State government's request to grant loans without collateral security to farmers for installing solar plants at their infertile or semi barren land. The work was earlier affected as the farmers faced difficulty in getting bank loans. The Rajasthan Renewable Energy Corporation has allotted 722 MW plants to 623 farmers under the KUSUM scheme. The Centre's PMKUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan) Scheme envisages income generation for farmers from their infertile land with the establishment of solar power plants.

In view of the latest revelations made in the news portal The Wire, which laid bare an extensive and well funded network built around an app, Tek Fog, for cyberbullying journalists, the Editors Guild has demanded that the Supreme Court should take cognisance of the matter and order a probe. The Guild also urged the government to take steps to dismantle this "misogynistic and abusive digital ecosystem".

The Board of Directors of Vodafone Idea Ltd. late on Monday approved the conversion of interest — related to spectrum auction instalments and on adjusted gross revenue dues to the Centre — into equity. Post-conversion, the government would own 35.8% of the telecom carrier. This follows the reform package announced by the government last year.

The Supreme Court told Tamil Nadu

IMMUNE ARCHETYPES

1. Researchers have found '12 immune archetypes' that will help in identifying cancers & developing precision immunotherapies. Researchers have categorized the tumour specimens into 12 groups called immune archetypes, based on their immune microenvironment. [This microenvironment-based categorization was done by looking at which immune cells were present and which genes were expressed.]

2. Their findings offer a new way of looking at cancer immunotherapy that matches the immune environment around the tumour and points the way to personalized immunotherapies. This work will help clinicians find the right biology to target and avoid targeting cells that aren't present in the tumour.

3. The researchers have found that the tumors and their environments inform each other. The tumours contained a range of immune cells, such as macrophages, NK and B cells - beyond the T cells (which are the focus of current immunotherapies). Immune archetype of a tumor is not necessarily tied to a type of cancer. Some archetypes are largely drawn from just a few kinds of cancer. Others draw from many.

4. Tumors-Tumors are more than just out-of-control cells. They are also filled with immune cells which are supposed to kill the cancer cells. But in cancer, malignant cells are able to overcome the body's immune response and continue to multiply.

5. Immunotherapy-**Immunotherapy for cancer treatment harnesses the body's immune system to fight cancer. It has held great promise since it was first developed as a biological therapy used to treat a variety of cancers.** While it has proven successful for some patients, immunotherapy does not work for all patients. This is where immune archetypes come into help.

GATEWAY TO HELL

1. Turkmenistan President has ordered experts to find a way to extinguish the 50-year-old fire in the Darvaza natural gas crater. Also known as the 'Gateway to Hell' or the 'Door to Hell', this crater is located in the Karakum desert, 260 kms away from Ashgabat (Turkmenistan's capital). In 2018, the crater was officially renamed as the "Shining of Karakum".

2. **While the details of the origin of the crater are contested, it has been said that the crater was created in 1971 during a Soviet drilling operation. The drilling operation had hit a pocket of natural gas, containing methane, by mistake.** To stop that methane from leaking into the atmosphere, the scientists lit it with fire, assuming the gas present in the pit would burn out within a few weeks. But it is burning till now.

3. According to local geologists, the huge crater formed in the 1960s but was only lit in the 1980s. The recent order to extinguish this human-made crater was because of its negative effects both on the environment and the health of the people living nearby. Inside the "coliseum of fire", a bacteria living amidst the burning crater that was not found in any of the surrounding soil outside of the crater.

LIGHT COMBAT AIRCRAFT PROGRAMME

1. Hindustan Aeronautics Limited (HAL), expects to deliver all Final Operational Clearance (FOC) variant aircraft to the Indian Air Force (IAF) in 2022, while the LCA-MK1A is expected to take flight in June 2022. In 2021, Ministry of Defence signed a deal with HAL to supply 73 LCA Tejas Mk-1A fighter aircraft and 10 LCA Mk-1 trainer aircraft to the IAF.

2. The MK-1A will have over 40 modifications over the MK1 variant. Twin objectives of the LCA programme are, To develop LCA for the IAF and To reduce the gap in the field of aeronautical technology available in India and the advanced nations of the West. LCA is designed by Aeronautical Development Agency (ADA) under the Department of Defence Research and Development (DRDO).

3. The first LCA squadron No. 45 'Flying Daggers' in the IAF was formed in 2016. The second LCA squadron No. 18 'Flying Bullets' was operationalised in 2020. Light Combat Aircraft Light Combat

and Kerala that it was not there to “administer the dam” when a supervisory committee was already in place to examine the issue of safety of the Mullaperiyar Dam and the management of its water level. “The safety of the dam is related to the management of the water level. A committee has already been formed for that... We are not here to do the administration of the dam,” Justice A.M. Khanwilkar, heading a Bench including Justice Dinesh Maheshwari, said. The court said it was, however, concerned about the safety, security and health of the people living in the vicinity of the dam. The Bench said it was, hence, willing to examine the dam strictly on statutory basis and would not dabble in the administration of the dam, which was the job of the committee.

The Haryana government invoked the Essential Services Maintenance Act after the Outdoor Patient Department services across the State were crippled due to a daylong strike by the doctors in support of their demands. A large number of doctors went on the strike boycotting OPD services across the State under the banner of the Haryana Civil Medical Services' Association (HCMSA).

The Special Investigation Team (SIT) constituted to probe the killing of 14 civilians in Nagaland's Mon district submitted its preliminary report to the State government on January 9, four days after the stipulated time.

An extended range sea-to-sea variant of the BrahMos supersonic cruise missile was test fired from the recently commissioned stealth guided missile destroyer INS Visakhapatnam. “Advanced sea-to-sea variant of BrahMos supersonic cruise missile was tested from INS Visakhapatnam today. Missile hit the designated target ship precisely,” the Defence Research and Development Organisation (DRDO) said. The successful test-firing certifies the accuracy of the ship's combat system and armament complex and also validates a new capability the missile provides the Navy and the nation.

The Ministry of Home Affairs (MHA) has written to all States to ensure separate accommodation for transgender persons in prisons. It also advised the States and the Union Territories that the prison admission register may be suitably revised to include “transgender” as a category other than male and female gender. It also asked that similar provision may be made in the Prison Management System in maintaining electronic records. The government enacted the Transgender Persons (Protection of Rights) Act in 2019

Aircraft (LCA)-Tejas was conceptualised in 1984. LCA are the lightest, smallest and tailless multi-role supersonic fighter aircraft in its class.

4. It is designed to carry precision-guided air-to-air and air-to-surface, weapons. Since the first flight of the LCA technology demonstrator in 2001, the indigenous single engine 4.5 generation multi-role fighter jet christened as 'Tejas' by then Prime Minister in 2003.

DEVELOPING COUNTRY STATUS

1. Developing Country' Status China's status as a 'developing country' at the World Trade Organization (WTO) has become a issue with many countries as China being an upper middle-income nation derive benefits reserved for developing countries.

2. Concerns have been raised over the 'least developed country' (LDC) status, with Bangladesh potentially losing this tag after surpassing India in terms of GDP per capita. Classification - The WTO has not defined 'developed' and 'developing' countries. So, the member countries are free to announce whether they are 'developed' or 'developing'.

3. Benefits - Certain WTO agreements give developing countries special rights through 'special and differential treatment' (S&DT) provisions. S&DT provisions can grant developing countries longer timeframes to implement the agreements and even commitments to raise trading opportunities for such countries.

4. WTO pacts are often aimed at Reduction in government support to certain industries over time and Set more lenient target for developing nations and grant them more time to achieve these targets compared to developed ones. The classification allows other countries to offer preferential treatment.

COLLECTIVE SECURITY TREATY ORGANISATION

1. The Collective Security Treaty Organisation (CSTO) is the organisation helping Kazakhstan President deal with protesters. When the Cold War drew to a close in 1991, the Warsaw Pact, an alliance of 8 socialist states, and the Soviet Union's answer to NATO, dissolved.

2. Less than a year later, Russia and five of its allies in the Commonwealth of Independent States, which was a loose club of post-Soviet countries, signed a new Collective Security Treaty, which came into force in 1994. In 2002, as Central Asia loomed larger in geopolitics, it declared itself the Collective Security Treaty Organisation, a full-blown intergovernmental military alliance.

3. Also known as the “Tashkent Pact” or “Tashkent Treaty”, today, it has 6 members - Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia and Tajikistan. Uzbekistan had quit the alliance in 2012. Headquartered in the Russian capital of Moscow, it aims To strengthen peace, international and regional security including cybersecurity and stability, and To protect on a collective basis of the independence, territorial integrity and sovereignty of the member states.

PARTY SYMBOLS

1. Former Punjab CM Amarinder Singh's newly formed party Punjab Lok Congress has received its party symbol - Hockey stick and ball. How are symbols allotted to political parties - As per the guidelines, to get a symbol allotted: A party/candidate has to provide a list of three symbols from the EC's free symbols list at the time of filing nomination papers. Among them, one symbol is allotted to the party/candidate on a first-come-first-serve basis. When a recognised political party splits, the Election Commission takes the decision on assigning the symbol.

2. Powers of Election Commission: The Election Symbols (Reservation and Allotment) Order, 1968 empowers the EC to recognise political parties and allot symbols. Under Paragraph 15 of the Order, it can decide disputes among rival groups or sections of a recognised political party staking claim to its name and symbol. The EC is also the only authority to decide issues on a dispute or a merger. The Supreme Court upheld its validity in Sadiq Ali and another vs. ECI in 1971.

3. How many types of symbols are there - As per the Election Symbols (Reservation and Allotment) (Amendment) Order, 2017, party symbols are either: Reserved: Eight national parties and 64 state parties across the country have “reserved” symbols. Free: The Election Commission also has a pool of nearly 200 “free” symbols that are allotted to the thousands of unrecognised

and the advisory was sent to ensure their safety and to protect them against any form of exploitation in the context of prisons and correctional facilities.

Ukrainian President Volodymyr Zelensky called for a new summit with France, Germany and Russia to resolve the conflict in his country, at the centre of intensive talks between the West and Russia this week. "It is time to agree in a substantive manner on an end to the conflict and we are ready to take the necessary decisions during a new summit of the leaders of the four countries," Mr. Zelensky said in a statement

regional parties that pop up before elections.

4. Election Commission's powers in a dispute over the election symbol when a party splits-On the question of a split in a political party outside the legislature, Para 15 of the Symbols Order, 1968, states: **"When the Commission is satisfied that there are rival sections or groups of a recognised political party each of whom claims to be that party the Commission may decide that one such rival section or group or none of such rival sections or groups is that recognised political party and the decision of the Commission shall be binding on all such rival sections or groups."**

5. This applies to disputes in recognised national and state parties (like the LJP, in this case). For splits in registered but unrecognised parties, the EC usually advises the warring factions to resolve their differences internally or to approach the court. Please note that before 1968, the EC issued notifications and executive orders under the Conduct of Election Rules, 1961.