Polity

Place on record amended draft of Tribunal Rules: SC

The Supreme Court has directed the Centre to place on record the amended draft of the Central Tribunal, Appellate and other Authorities (Qualifications, Experience and other conditions of Service of Members) Rules, 2017, which is under challenge for modifying the terms of appointment and functioning in various statutory tribunals, including the National Green Tribunal, and causing dilution of judicial independence and posing a threat to the Constitution.

- Attorney General K.K. Venugopal submitted that the government would amend the rules and place the draft of the changes, before the Supreme Court.
- The court emphasised that the amendments should be in consonance with its past decisions in tribunal appointments.

The development came on several petitions, primarily one by Congress MP Jairam Ramesh, challenging the provisions of the 2017 Rules and the Finance Act, 2017, introducing the modifications in key tribunal appointments.

- He contended that Section 184 clothed the government with "uncanalised and unguided power to make rules to provide for qualifications, appointment, term of office, salary, allowances, resignation, removal and other terms and condition of service of chairpersons and members of several other tribunals and appellate tribunals."
- His petition had highlighted how the Finance Act bowled out the NGT Act the parent statute passed by Parliament which set up the tribunal to provide speedy justice against dangers to environment and ecology. The NGT Act had provided the qualifications and conditions for the appointment of NGT Chairperson and members.

But now, the Centre, through the Finance Act, had gifted to itself the power to control the functioning of the tribunal itself and, that too, when the government was itself a party in most cases before the tribunal, Mr. Ramesh had contended.

Polity

Fast-track alimony payment: Centre

Expressing concern over delay in disbursing money awarded as maintenance to women by courts, the Centre has asked the High Courts to set up a mechanism to fast-track the process.

- Law Minister has written to the Chief Justices of all High Courts flagging the issue of procedural delay.
- All the stakeholders, the Government of India, the judiciary, legal services authorities and State governments, need to take collective responsibility for ensuring that institutional mechanisms, such as the proposed committee comprising district judge and

- superintendent of police, work seamlessly to provide justice to women, he said in the letter.
- The Minister asked the High Courts to advise the district courts to monitor timely disbursal of maintenance and speedy execution of warrants awarded by the court.

Acting on the Law Minister's letter, several High Courts have set up committees now to monitor the process of disbursal of maintenance to women.

Polity

Withdraw triple talaq Bill: AIMPLB

The All India Muslim Personal Law Board (AIMPLB) demanded the withdrawal of the triple talaq Bill, saying it went against the Constitution and violated the rights of women.

- It accused the Centre of snatching the right of divorce from men.
- According to the board ,the draft of the Bill states that triple talaq [talaq-e-biddat] and other forms of talaq will be banned.

Senior woman member of the board AsmaZehra said: "The Bill is against the interests of Muslim women. If a husband gives triple talaq to his wife and is jailed for three years, how will the woman make her ends meet and look after her children."

The proposed law will allow the victim to approach a magistrate for "subsistence allowance" for herself and minor children. The woman can also seek the custody of her minor children from the magistrate who will take a final call on the issue.

IR

New sanctions are an act of war

The latest UN sanctions against North Korea are an act of war and tantamount to a complete economic blockade against it, North Korea's Foreign Ministry, threatening to punish those who supported the measure.

The UN Security Council unanimously imposed new sanctions on North Korea for its recent intercontinental ballistic missile test, seeking to limit its access to refined petroleum products and crude oil and its earnings from workers abroad.

- The UN resolution seeks to ban nearly 90% of refined petroleum exports to North Korea by capping them at 5,00,000 barrels a year.
- Repatriation of North Koreans working abroad within 24 months.
- The U.S.-drafted resolution also caps crude oil supplies to North Korea at four million barrels a year and commits the Council to further reductions if it were to conduct another nuclear test or launch another ICBM.

North Korea's Foreign Ministry said the new resolution is tantamount to a complete economic blockade.

The North's old allies China and Russia both supported the latest UN sanctions.

NCLTs got 4,300 IBC petitions in 18 months

Since the National Company Law Tribunal (NCLT) was set up 18 months ago, more than 4,300 cases have been filed at its various benches for resolution process, according to the Reserve Bank of India (RBI) data.

Of these, more than 500 applications, seeking admission for insolvency proceedings, were rejected, dismissed or withdrawn, it added.

The report said about 470 cases admitted by the NCLT were at various stages of the insolvency process.

Insolvency and Bankruptcy Code (IBC) came into existence in May 2016, replacing the Company Law Board regime.

In June this year, the RBI had asked banks to refer the 12 largest accounts, totalling about 25% of the gross NPAs of the banking system or worth about ₹2.5 trillion, to the NCLT for resolution. Now, 11 of them are in NCLT.

In August, the RBI gave the banks a list of a further 28 large accounts to be resolved by December 13, failing which those accounts would have to be referred to the NCLT by December 31.

These accounts constitute another 15% of the system-wide bad loans and of these, banks have sent as many as 25 to the NCLT.

Hybrid sperms used in therapy

Scientists have developed hybrid sperms that can deliver a cancer drug directly to a cervical tumours.

This approach could help treat the deadly disease with minimum side effects.

German researchers packaged a common cancer drug, doxorubicin, into bovine sperm cells and outfitted them with magnetic harnesses.

Using a magnetic field, a sperm-hybrid motor was guided to a lab-grown tumour of cervical cancer cells. When the harness arms pressed against the tumour, the arms opened up, releasing the sperm.

The sperm then swam into the tumour, fused its membrane with that of a cancer cell, and released the drug.

Mars absorbed water like sponge



However, today's Martian surface is barren, frozen and uninhabitable.

The Martian surface may have reacted with and absorbed the water that once flowed on the Red Planet, making it uninhabitable, scientists suggest.

Although today's Martian surface is barren, frozen and uninhabitable, a trail of evidence points to a once warmer, wetter planet, where water flowed freely.

The puzzle of what happened to this water is long standing and unsolved.

Previous research has suggested that the majority of the water was lost to space as a result of the collapse of the planet's magnetic field, when it was either swept away by high intensity solar winds or locked up as sub-surface ice. However, these theories do not explain where all of the water has gone.

Scientists from the Oxford University in the U.K. get convinced that the planet's minerology held the answer to this puzzling question.

They applied modelling methods to calculate how much water could be removed from the Martian surface through reactions with rock. These modeling methods are usually used to understand the composition of Earth rocks

The results revealed that the basalt rocks on Mars can hold approximately 25 per cent more water than those on Earth, and as a result drew the water from the Martian surface into its interior.

Panel exhorts Centre to staunch bank NPAs

Concerned over rising NPAs of banks, a Parliamentary panel asked the government to take urgent remedial measures to reduce the volume of stressed assets in the system and strengthen its vigilance mechanism.

The Committee on Petition in its reports said that even after having a 'vigilance mechanism' in vogue in the banking system, there are incidences of fraud relating to non-performing assets.

'Not yielding result'

The Committee opined that merely issuing of guidelines or advisories by the government or the RBI (for averting the incidences of fraud relating to NPAs) do not seem to have yielded the desired results.

It also said the RBI — being a Regulator — does not seem to have succeeded in implementation and enforcement of its own guidelines.

The Committee, therefore, recommended that the government impresses upon the Reserve Bank of India to monitor and follow up strict compliance of relevant instructions with banks and financial institutions on a regular basis.

It also recommended that the existing vigilance mechanism be revisited and, if required, be amended, to provide more teeth to it.

Photosynthesis began 1.25 billion years ago



The world's oldest algae fossils are a billion years old, according to a study, which found that the basis for photosynthesis in today's plants was set in place 1.25 billion years ago.

The study may resolve a mystery over the age of the fossilised algae, which were first discovered in rocks in Arctic Canada in 1990.

Largest amphibious aircraft takes off

China's home-grown AG600, the world's largest amphibious aircraft in production, took to the skies on 24.Dec.017 for its maiden flight.

The plane, codenamed 'Kunlong', took off from the southern city of Zhuhai and landed after roughly an hour-long flight.

With a wingspan of 38.8 metres and powered by four turboprop engines, the aircraft is capable of carrying 50 people and can stay airborne for 12 hours.

This successful maiden flight makes China among the world's few countries capable of developing a large amphibious aircraft.

The amphibious aircraft has military applications but will be used for firefighting and marine rescue.

The AG600's flight capabilities put all of China's island-building projects in the South China Sea well within range.

Its 4,500-km operational range and ability to land and take off from water makes it well-suited for deployment over China's artificial islands.

Territorial claims

The aircraft can fly to the southernmost edge of China's territorial claims — the James Shoal.

The shoal is also claimed by Taiwan and Malaysia, and is currently administered by Malaysia.

Hotly contested

Beijing's build-up in the South China Sea, through which some \$5 trillion in annual trade passes, is hotly contested by other nations.

The Philippines for many years was one of the region's strongest opponents of Chinese expansionism, and brought a complaint to a United Nations-backed tribunal.

The panel ruled last year that China's territorial claims in the sea were without legal basis, but the Philippines has backed away from the dispute under its new President Rodrigo Duterte.

The launch of the new amphibious aircraft further strengthens China's rapidly modernising military.

Earlier this year, it launched its first domestically built aircraft carrier, the Type 001A. This complemented the Liaoning, a second-hand Soviet carrier commissioned in 2012 after extensive refits.

System helps machines think just like humans



Scientists have developed a new type of neural network chip that can dramatically improve the efficiency of teaching machines to think like humans.

The network, called **a reservoir computing system**, could predict words before they are said during conversation, and help predict future outcomes based on the present.

Reservoir computing systems, which improve on a typical neural network's capacity and reduce the required training time, have been created in the past with larger optical components.

Researchers from University of Michigan in the U.S. created their system using memristors, which require less space and can be integrated more easily into existing silicon-based electronics.

Memristors are a special type of resistive device that can both perform logic and store data.

This contrasts with typical computer systems, where processors perform logic separate from memory modules.