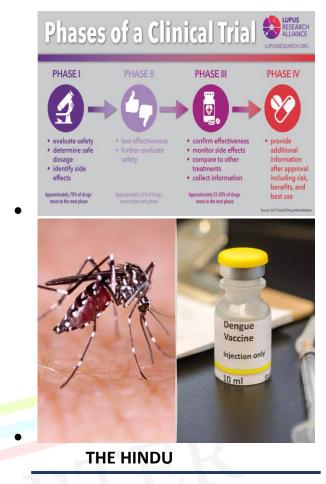
Dengue vaccine

- Moving a step closer to developing India's first vaccine against dengue, drug makers Serum Institute of India and Panacea Biotic have submitted their responses to the call by the Indian Council of Medical Research (ICMR) for an Expression of Interest for collaborative Phase 3 clinical trials for indigenous manufacturers. The development of a dengue vaccine is highly challenging due to the fact that the virus has four antigenically different serotypes (DENV1-4)
- For an ideal dengue vaccine, the vaccine should be effective against all four serotypes at the same time.
 Primary DENV infections are usually asymptomatic or with mild flu-like symptoms.
- Post DENV infection it takes antibodies ~1 week to develop.
- During primary infection with one DENV serotype, antibodies produced by this serotype usually result in a long-lasting protection against that particular serotype and short-lived protection against other serotypes



Collegium system

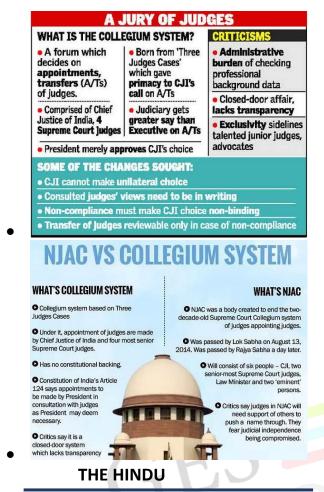
EVOLVING SYSTEM

Pre-1993 Law minister selected judges in 'consultation' with judiciary

assumed 'primacy' by creating collegiums in Supreme Court and high courts. HC judge is appointed after a collegium of judges of that court suggests his/her name, which then has to be cleared by a threemember SC collegium. The 3 judges include the CJI and at least one SC judge who has

been associated with that particular HC in the past. SC appointments cleared by 5-member collegium including CJI and 4 other seniormost judges

2014 Proposed judicial appointments commission seeks to make selection process more transparent. To have 6 members, including law minister, CJI, 2 SC judges and 2 'eminent persons'. At least 5 members will have to agree on each judge's appointment



Spurious liquor

- Contrary to popular belief, the World Health Organization has found that "no level of [its] consumption is safe for our health". Long-term use leads to dependence, heightens the risk of some cancers and heart disease, and may eventually cause death. . .
- Ethanol (C2H5OH) is one carbon atom bonded to three hydrogen atoms and one more carbon atom; the second carbon atom is also bonded to two hydrogen atoms and the hydroxyl group, also known as the ion OH—.

- Inside the body, it is metabolized in the liver and the stomach by alcohol dehydrogenase (ADH) enzymes to acetaldehyde.
- Then aldehyde dehydrogenase (ALDH) enzymes transform the acetaldehyde into acetate. The adverse effects of alcohol consumption, from the hangover to a cancer, are due to acetaldehyde.

What is spurious liquor?

- Spurious liquor is characterised by the liquid mixture containing methanol as well.
- The methanol molecule (CH3OH) consists of one carbon atom bonded with three hydrogen atoms and one hydroxyl group. Schedule I of the Manufacture, Storage, and Import of Hazardous Chemical Rules 1989 includes methanol.
- The most common way to produce methanol is to combine carbon monoxide and hydrogen in the presence of copper and zinc oxides as catalysts at 50-100 atm of pressure and 250°C.



Why to import cotton?



- 1) India has a large share in the world trade of cotton yarn, however trade in garments is only 4 per cent of the world's total.
- 2) The weaving, knitting and processing units cannot use much of the high quality yarn that is produced in the country.
- is produced in the country.

 3) Most of the production in fragmented small units, which cater to the local market, is a major drawback for the industry.
- 4) As a result, many of our spinners export cotton yarn while apparel/garment manufactures have to import fabric.
 5) The need to import is due to poor power supply, out-dated machinery in the weaving
- supply, out-dated machinery in the weaving and processing sectors, low output of labour and stiff competition with the synthetic fibre industry.

THE HINDU