

Prelim Bits 04-04-2017

Desalination

 $n\n$

\n

• The process of converting sea water into potable water can be done using Graphene Oxide.

\n

- The Graphene oxide (GO) membranes can be used to filter common salts in sea water while allowing water to pass through on a commercial scale.
- However, there is a problem associated with the use of Graphene Oxide. The membranes have a tendency to slightly swell when immersed in water and this increased spacing between successive sheets allows smaller salts to flow through the membrane along with water without being filtered.
- \bullet Recently, the researchers has addressed this problem by developing Graphene Oxide membranes that do not swell when immersed in water. $\$
- They have achieved this through having a certain interlayer spacing by storing the membranes in high humidity and then physically restraining the membrane from swelling.
- \bullet This altered the rate at which water permeated through the membranes and efficiency of desalination process has increased. $\mbox{\sc h}$

 $n\n$

"Women and Men in India 2016" report

 $n\n$

\n

• The report is released by Ministry of Statistics and Programme Implementation.

\n

- According to the report, the mean age of women at the time of marriage in 21 major states was 22 years and 3 months in 2014. That figure was 25 years and 2 months for Jammu & Kashmir.
- According to the report, the average age of women at the time of marriage in rural India in 2014 was 21 years and 8 months, while that of women in urban India was 23 years and 2 months.
- It was the lowest for Jharkhand 21 years. n
- The report also highlighted that the average age of women improved from 18 years in 1991 to 22 years and 3 months in 2014, as the country witnessed economic development, education and literacy levels improved.
- \bullet While J&K has been historically progressive about not forcing women into early marriages. $\mbox{\sc h}$

 $n\n$

YEAR	INDIA	J&K
1961	15.7	17.5
1971	16.7	20.1
1981	17.8	21.1
1991	18.7	21.0
2012	21.2	24.6
2014	22.3	252
THE HIGH Jammu & Kerala	HEST AND LOW Kashmir	/EST, 2014 252 23.1

 $n\n$

National Payment Corporation of India

 $n\n$

\n

• NPCI has been set up as an umbrella organization owned and operated by the banks and registered under Companies Act, 2013.

\n

- NPCI has been authorised by Reserve Bank of India under the Payment and Settlements Systems Act, 2000.
- The authorised payment system operators including NPCI are required to follow the operational and technical standards laid out by RBI, follow the directions issued and submit the information / returns prescribed.
- RBI also conducts supervision of NPCI (both off-site and on-site) and also empowered to revoke authorisation and impose penalties / initiate prosecution proceedings for violations of the Regulations.

 $n\n$

 $n\n$

\n

