Prelim Bits 12-07-2017

MAD Doctrine

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- Mutually Assured Destruction is a military doctrine, which states that when two adversaries possess nuclear weapons, neither of them is likely to use them.
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- This doctrine is considered an application of **Nash equilibrium**, wherein the threat of a strong retaliatory attack prevents both sides from initiating a conflict.
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- And also both sides are likely to suffer severe losses from a nuclear attack, irrespective of who attacks first. Thus the result is lasting prevention of a nuclear attack.
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- The doctrine has been criticised for assuming that the victim of the first attack will possess sufficient capabilities after the attack to retaliate strongly.
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Cooperative Societies' polls

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- Rajasthan has become the first state in the country to lay down the minimum educational qualifications for contesting elections to village cooperative societies and various other cooperative bodies.
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- The educational qualifications will range from Class V to Class VIII for members of governing boards of diary societies and various other cooperative societies.
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- A co-operative society shall be formed under the Co-operative Societies Act, 1912 or under the relevant state co-operative society's law.
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- The elections to various posts in the societies after a certain level would be conducted through the state cooperative election authority.
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Mission Parivar Vikas

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- Ministry of Health and Family Welfare launches this mission on the occasion of World Population Day.
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- The mission focuses on family planning initiatives and targeted approaches for population stabilisation through better services delivery approach.
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- It will focus on 146 high fertility districts in 7 states with high TFR.
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- A new program "**Antara**" was launched under this mission. Under this program, a new injection will be used which will acts as an alternative to the current birth control methods.
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Juno Spacecraft

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- Recently, NASA's Juno mission completed a close flyby of Jupiter and its Great Red Spot.
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- The spacecraft was launched as part of New Frontiers Program in 2011.
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- Its mission is to measure Jupiter's composition, gravity field, magnetic field, and polar magnetosphere.
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- Jupiter's Great Spot is a 16,000-km wide storm monitored since 1830 and possibly existing for more than 350 years.
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- Recently, the spacecraft reached "**Perijove**", the point at which an orbit comes closest to Jupiter's centre.
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Falun Gong

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- Falun Gong is the ancient Chinese holistic system. It is banned in China.
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- It is spiritual practice that combines meditation and exercises with a moral philosophy centered on Truth, Compassion and Tolerance.
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- The Falun Dafa Association of India has been campaigning for months to familiarise the challenges faced by the followers in china.
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- The association decided for a peace parade this month, to spread the message of Falun Gong and focus on persecution against practitioners in Beijing.
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Removal of Oil Spill

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- Scientists have developed a simple, cheap and environment-friendly system that can effectively remove crude oil from sea that can pollute and even destroy marine ecosystems.
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- The method is based on absorption by cellulose with porous carrier and impregnated with **oleogelator**, a cheap organic compound.
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- Oleogelator congeal oils selectively from a biphasic mixture of oil and water and form a 3D fibre network through hydrogen bonding.
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- Thus the oil trapped in the gelator form a rigid gel, turns the liquid oil into a solid one, which can be simply scooped out.
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- The gelator renders the cellulose matrix hydrophobic. It did not suck in water as naked cellulose does.
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Sixth Mass Extinction

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- Scientists have warned that the Earth is undergoing its sixth mass extinction.

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- The last extinction was happened about 66 million years ago which wiped out non-avian dinosaurs.
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- The current extinction is considered as the worst since 3 quarters of life on earth.
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- More than 30% of vertebrate animals are declining in the range and population.
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- Tropical regions have seen the highest number of declining species and while fewer species are disappearing in temperate zones, the percentage is more or less same as tropical regions.
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