

Prelim Bits 21-08-2018

4D Printing

\n\n

\n

- Scientists have successfully developed the world's first 4D printing for ceramics.

\n

- It can be used to create complex, shape-changing objects.

\n

- 4D printing is conventional 3D printing combined with the additional element of **time as the 4th dimension**.

\n

- The 4D printed objects can re-shape or self-assemble themselves over time with external stimuli, such as mechanical force, temperature, or a magnetic field.

\n

- The existing 3D-printed ceramic productions are usually difficult to deform and hinder the production of ceramics with complex shapes.

\n

- A novel ceramic ink was developed to stretch the ceramic products beyond its initial length and allow complex shapes with heat treatment.

\n

\n\n

Pradhan Mantri Awas Yojana

\n\n

\n

- PMAY aims at helping people below the poverty-line (BPL) in construction of dwelling units and upgradation of existing unserviceable kutcha houses through assistance in the form of full grant.

\n

- Government will soon introduce provision of 'lock-in' period of five years for the houses purchased under PMAY.

\n

- Those who have purchased houses will not be able to sell properties within 5 years of buying to avoid the misuse of the scheme.

\n

- Beneficiaries are people belonging to SCs/STs, freed bonded labourers and non-SC/ST categories, widows or next-of-kin of defence personnel killed in action, ex-servicemen and retired members of the paramilitary forces, Disabled persons and Minorities.
- Under **PMAY - Gramin**, Government aims to construct 1 crore pucca (permanent) houses for the rural poor by 2019.
- Beneficiaries would be chosen based on the according to data taken from the Socio-Economic Caste Census of 2011.
- Under **PMAY - Urban**, Government envisions “Housing for All” by 2022.
- Beneficiaries - Urban poor who does not own a pucca house, Economically Weaker Section (EWS), Middle Income Groups (MIG) and Lower Income Groups (LIG).
- Credit Linked Subsidy Scheme is an interest subsidy available to a loan amounts up to 12 lakhs at the rate of 4% (6 to 9 lakhs) and 3% (9 to 12 lakhs).
- It is for purchase/construction/extension/improvement of house to cater EWS/LIG/MIG.

\n\n

BIMSTEC

\n\n

- Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organisation involving a group of countries in South Asia and South East Asia.
- Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan and Nepal are its members.
- Its headquarters is in Dhaka, Bangladesh.
- The main objective of BIMSTEC is technological and economic co-operation among south Asian and south east Asian countries along the coast of the Bay of Bengal.
- Commerce, investment, technology, tourism, human resource development,

agriculture, fisheries, transport and communication, textiles, leather etc. have been included in it.

\n

- It uses the alphabetical order for the Chairmanship. Accordingly, Nepal formally took over the new Chairmanship as on 2014.

\n

- Its 2018 summit is going to be held in Kathmandu.

\n

- The previous summit was held in Myanmar in 2014.

\n

- Free Trade Agreement among the members is yet to be finalised.

\n

\n\n

NABH Nirman Scheme

\n\n

\n

- NABH (NextGen Airports for BHarat) Nirman is an initiative by the Ministry of Civil Aviation.

\n

- Under the scheme, the government proposed to expand airport capacity by more than five times to handle a billion trips a year.

\n

- The three aspects of NABH Nirman are building of airport capacity through,\n

\n

i. fair and equitable land acquisition,

\n

ii. long-term master plan for airport and regional development,

\n

iii. balanced economics for all stakeholders

\n

\n

\n

\n\n

Funding for National Calamity

\n\n

\n

- There is no provision in the law or rules for the government to designate a disaster as a “national calamity”.

\n

- The funding for disaster relief are governed by the National Disaster Management Policy.
\n
- As per the policy, the State governments have to provide disaster relief from their respective State Disaster Response Funds (SDRFs).
\n
- Additional assistance will be provided from the National Disaster Response Fund (NDRF) only for a “calamity of severe nature”.
\n
- Click [here](#) to know the criteria to define calamity of severe nature.
\n
- **NDRF** - The NDRF is funded through a National Calamity Contingent Duty levied under GST for selected goods and contribution from any person or institutions.
\n
- **SDRF** - It is contributed by the Union government and the respective State governments in a 75:25 ratio for general category States and 90:10 for Special Category States.
\n
- The allocation of the SDRF for each State is done by the Finance Commission, and the Centre contributes its specified share each financial year.
\n

\n\n

\n\n

Source: The Hindu, PIB, Business Standard

\n\n

\n

