

Prelim Bits 06-07-2018

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Higher Education Financing Agency (HEFA)

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- HEFA was formed as a non-banking financial company to give a major push for creation of high quality infrastructure in premier educational institutions.
- It was registered as a **Section 8 Company** under the Companies Act.
- It was set up as a joint venture between the **HRD ministry** and **Canara bank**.

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• Union Cabinet has recently permitted HEFA to mobilise **Rs. 1 lakh crore** to fund research and academic infrastructure in higher educational institutions by 2022.

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• It will rise funds from the market and mobilize CSR funds from PSUs/Corporates.

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• It will also have equity share from Central government (Rs. 5000 crore) and Canara Bank.

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- The funding will also be available to government-run schools KendriyaVidyalayas and Jawahar NavodayaVidyalayas.
- Funding HEFA will directly release the sanctioned amount to vendors or contractors only after the certification of executing agency and educational institutions.

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• All the Centrally Funded Institutions will have to repay the borrowed amount (loans) in a time frame of $\bf over~10~years.$

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Revitalising Infrastructure and Systems in Education (RISE) Scheme

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• RISE scheme was announced in 2018 budget to revitalize the infrastructure of higher educational institutions with a total investment of one lakh crore in the upcoming 4 years.

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• It will be financed via a restructured HEFA.

• This scheme will cover all centrally-funded institutes (CFIs) including central universities, IITs, IIMs, NITs and IISERs.

• These institutions can borrow a sum of Rs. 1,00,000 crore in next 4 years.

• Indian Institutes of Technology (IITs) will get largest part of loans on offer under RISE Scheme.

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Crew Escape System

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• Crew Escape System is an emergency escape measure to quickly pull the astronaut crew out to a safe distance from launch vehicle during a launch abort.

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• To demonstrate this system, ISRO recently successfully carried a test named "Pad Abort Test (PAT)".

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• PAT is the first in a series of tests to qualify a crew escape system technology of a manned mission in the future.

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• PAT is viewed as a major technology demonstrator and to ascertain the trustworthiness and efficiency of the crew escape system.

• The U.S, Russia and China have their own crew escape system in place.

• It is a small step closer to ISRO's ambition of sending Indians to space.

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First BS-VI engine certificate

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- International Centre for Automotive Technology (ICAT) releases first Bharat Stage -VI engine certificate for a heavy-duty engine model.
- It is much ahead of the implementation date of 1st April 2020 for rolling out of Bharat Stage-VI norms in the country.
- \bullet Thus, it gives sufficient time for product stabilization in terms of making it more robust and cost competitive for the end consumers. \n
- ICAT is the first of new world class centers established under the National Automotive Testing and R&D Infrastructure Project (NATRiP).
- \bullet It is under the administrative control of Ministry of Heavy Industries & Public Enterprises.
- Its main objective is to carry out Research & Development in the field of Automotive Engineering.

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Bharat Stage Emission Standards

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- They are emission standards instituted by the Government of India in the year 2000, based on EU standards.
- It is to regulate the **output of air pollutants** from internalcombustion engines and Spark-ignition engines equipment,including motor vehicles.
- The standards and the timeline for implementation are set bythe Central Pollution Control Board under the Ministry of Environment & Forests and climate change.
- \bullet All new vehicles manufactured after the implementation of BS norms must be compliant with the regulations. $\mbox{\sc h}$
- Major emissions governed under these norms are carbonmonoxide emissions, hydrocarbon emission limits. Nitrogen Oxides and particulate matter are also significant metrics.

- BS-IV standard was brought into place in country-wide in April 2017.
- Implementation of the BS V standard that was earlier scheduled for 2019 has now been skipped.

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- In 2016, the Indian government announced that the country would skip the BS-V norms altogether and adoptBS-VI norms by 2020.
- By moving to BS-VI, the country will be using the highest specifications of fuel standard available in the worldright now.

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Tejas

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• It is an indigenous fighter aircraft inducted in to Indian Airforce in the year 2016.

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• It has recently commenced its operation.

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• It is designed by the Aeronautical Development Agency (ADA) and Hindustan Aeronautics Limited (HAL).

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• It is a single-seat, single-jet engine, multirole light fighter.

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• It is the smallest and lightest multi-role supersonic fighter aircraft in its class.

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- \bullet It can fire Air to Air Missiles, carry bombs and Precision Guided ammunition. $\ensuremath{^{\backslash n}}$
- It has its root in the Light Combat Aircraft (LCA) programme, which began in the 1980s to replace the ageing MiG-21 fighters.
- MiG-21 fighters are purchased from Russia in 1961.

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Source: The Hindu, PIB

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