

Prelim Bits 18-01-2017

Raisina Dialogue 2017:

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• It is an annual conference held in New Delhi and India's flagship conference of Geopolitics and geo-economics.

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- It is organized by Ministry of External Affairs in partnership with Observer Research Foundation, an independent think tank in India.
- The first inaugural session was held in March 2016 with the theme "Connecting Asia".

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• The second edition is being held in Delhi with the theme "The New Normal: Multilateralism with Multi-Polarity".

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Google Tax:

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- \bullet The Google Tax was announced to introduce a tax on the income as accrue to a foreign e-commerce company outside of India. \n
- Any person or entity that makes a payment exceeding Rs 1 lakh in a financial year to a non-resident technology company will need to withhold 6% tax on the gross amount being paid as an equalisation levy or Google tax.
- This tax, however, is only applicable when the payment has been made to avail certain B2B services from these technology companies.

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5D technique to detect Alzheimer's and Parkinson's disease:

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• Proteins are essential to the function of every cell. Sometimes proteins don't form properly called as amyloids.

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• The amyloids can clump together into masses in the brain and block normal cell function, leading to brain cell degeneration and disease - Alzheimer's and Parkinson's diseases.

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• 5D finger printtechnique helps to identify the processes of how amyloids form and clump together.

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- The technique uses a nanopore 10-30 nanometers wide filled with a salt solution and passed an electric current through the solution.
- As a protein molecule tumbles through the nanopore, its movement causes measurable fluctuations in the electric current whichreveals the 5 dimensional signatures of protein.
- Thus, individual protein's shape, volume, electrical charge, rotation speed and propensity for binding to other molecules is measured to identify the process of formation of clumps.

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