

1. Mitochondrial DNA

Why in News?

- ▶▶ A recent paper in the prestigious journal Nature claims to show that modern humans originated about 200,000 years ago in the region around northern Botswana.

Highlights:

- ▶▶ The scientists studied genetic data from many individuals from the KhoeSan peoples of southern Africa, who are thought to live where their ancestors have lived for hundreds of thousands of years.
- ▶▶ The researchers used their new data together with existing information about people all around the world to reconstruct in detail the branching of the human family tree.

Mitochondrial DNA:

- ▶▶ Mitochondrial DNA is the small circular chromosome found inside mitochondria.
- ▶▶ These organelles found in cells have often been called the powerhouse of the cell.
- ▶▶ The mitochondria, and thus mitochondrial DNA, are passed almost exclusively from mother to offspring through the egg cell.
- ▶▶ The study focused just on mitochondrial DNA. This means it isn't mixed up with DNA from fathers and so is easier to track across the generations.
- ▶▶ The new study doesn't tell about the origin of the human genome but the place and time where our mitochondrial DNA appeared.

Why Mitochondrial DNA was Studied?

- ▶▶ The fact that mitochondrial DNA comes almost only ever from mothers also means the story of its inheritance is much simpler than the histories of other genes.
- ▶▶ This implies that every bit of our genetic material may have a different origin, and have followed a different path to get to us.

2. Three Apps Developed by Employees' Provident Fund Organization (EPFO) launched

Why in News?

- ▶▶ On the 67th Foundation Day of EPFO, 3 Apps: Uan Registration, E-Inspection and DIGI Locker to Benefit EPF Subscribers and Stakeholders were launched.

Highlights:

▶▶ Online Facility for UAN generation by worker:

- ✓ Any workers can obtain Universal Account Number (UAN) directly on EPFO website which enrolls them for PF, Pension and Life Insurance benefits.
- ✓ This is in the direction of ease of living and ensuring universal social security.

▶▶ EPS Pensioner's PPO in DigiLocker Application (APP):

- ✓ EPFO integrates with DigiLocker of National e-Governance Division to create depository of electronic Pension Payment Orders (PPOs) which is accessible to individual pensioners.
- ✓ This is a move towards paperless system and ease of living for pensioners.

▶▶ e-Inspections:

- ✓ It is the Digital interface of EPFO with employers.
- ✓ The E-Inspection Form would be available in user login of employers not filing ECR which enables employer to inform either closure of business or unpaid dues with proposal for payment.
- ✓ It will nudge employers for compliant behavior and prevent undue harassment of non-willful defaulters and eliminate inspector raj.

Employees' Provident Fund Organisation (EPFO):

- ▶▶ The Employees' Provident Fund Organisation, is an organization tasked to assist the Central Board of Trustees, a statutory body formed by the Employees' Provident Fund and Miscellaneous Provisions Act, 1952.
- ▶▶ It is under the administrative control of the Ministry of Labour and Employment.
- ▶▶ It is the biggest social security organization of the world covering around six crore active members and 65 lakh pensioners and maintaining around 22 crore accounts of workers with a fund of approximately 13 lakh crore.