To receive Daily news juice pdf on your WhatsApp, send name and city through WhatsApp on 75979-00000.

1. OpenAI's new Voice Engine clones human speech: How this poses a danger, what the company claims

Why in News?

OpenAI, the company behind AI chatbot ChatGPT, introduced that can replicate any voice in any language by simply using a brief audio sample. Known as Voice Engine, it lets users upload a 15-second audio sample and uses it to generate audio in the same voice and manner of speaking.

For example, if you upload a man's voice sample and add a text prompt saying, "Make him sing the American national anthem," the model will analyse the sample and create an output in his voice. It can also produce audio clips of the same speaker in another language.

However, the company has yet to release it for public use, reportedly over safety issues.

What is OpenAI's new Voice Engine?

Simply, Voice Engine is a text-to-audio tool that can generate new audio using a voice sample, based on a user's written prompt. Voice Engine is also capable of replicating voices across languages.

3 reasons why Voice Engine is groundbreaking

According to OpenAI, it can prove helpful in the following ways:

1. Providing reading assistance: This feature makes non-readers and children learn or understand languages through natural-sounding, emotive voices representing a variety of speakers.

2. Translating content: For professionals and content creators, this could be the most useful feature of the Voice Engine as it allows them to reach wider audiences. Crucially, it retains the accent and tonal nuances of the original user even while translating the audio content. This adds to the realism of the output.

3. Supporting people who are non-verbal, helping patients recover their voice: Among the listed use cases, Voice Engine is claimed to be beneficial for non-verbal individuals since it offers personalised, non-robotic voices. This will enable those with disabilities or learning needs to communicate easily and consistently, even in multilingual contexts.

Why is Voice Engine seen as potentially dangerous?
There have been numerous instances where AI voice cloning has been used to dupe people. These AI tools use deep learning algorithms to analyse voice samples to create speech. Owing to refinement in models over time, they generate realistic voices, making them dangerous tools.

This year, over 60 nations (including India) will go into elections. Deepfakes and AI cloning tools are already being used by malicious actors, who assume the identities of popular figures to sway political sentiments.

The new Voice Engine is likely to get many companies to rush to update their platforms, even while the new technology's risks are apparent. The absence of legal regulations around such powerful technologies is of concern.

Relevance: GS Prelims & Mains Paper III; Science & Technology
Source: Indian Express

2. Recording Religion of Parents during birth registration process

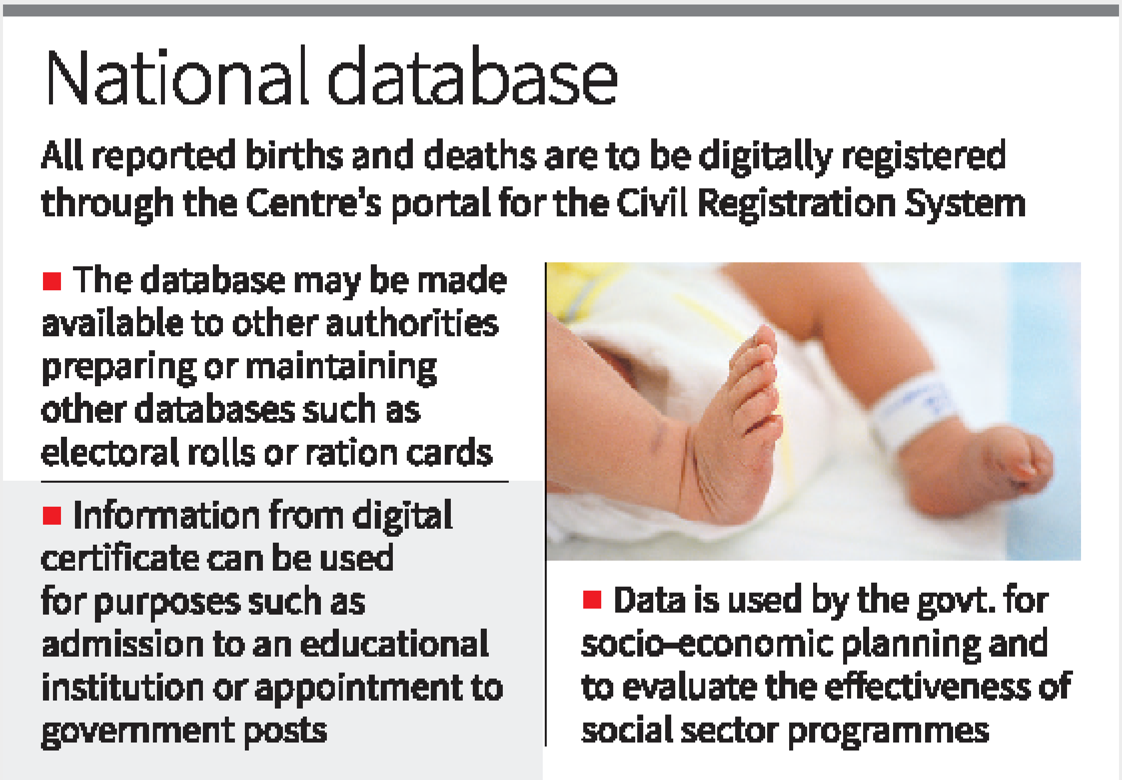
Why in News?
The Union Ministry of Home Affairs has introduced Model Rules mandating the separate recording of the religion of both parents during the birth registration process.

The rules have been introduced under Registration of Births and Deaths (Amendment) Act, 2023 which came into force from October 1, 2023.

Implication of Amendment
The amendment paved the way for digital birth certificates, a single document that can be used for admission to educational institutions, applications for driving licences, government jobs, passports, or Aadhaar, voter enrollment, and marriage registration.

The amendment was made to the 1969 Act. The law allows the Registrar General of India to establish a national and state-level database of birth and death registrations. As per the amended law, chief registrars (appointed by states) and registrars (appointed by states for local area jurisdiction) will be obligated to share data on registered births and deaths with the national database.

The Act also empowers the citizens of the country aggrieved by any action or order of the registrar or district registrar to appeal to the district registrar or chief registrar, respectively. Such an appeal must be made within 30 days from receipt of such action. Following this, the district registrar or the chief registrar must give their decision within 90 days from the date of appeal.



National Population Register

The centralised database will update the National Population Register (NPR), ration cards, property registration and electoral rolls. The NPR has a database of 1,190 million residents. The NPR is the first step to creating the National Register of Citizens (NRC), as per the Citizenship Act.

It will be made compulsory for the states to register births and deaths on the Centre's Civil Registration System (CRS) portal and share data with the Registrar General of India (RGI). The Act authorises the government to "collect Aadhaar numbers of parents and informants, if available, in case of birth registration".

Currently, either parent voluntarily provides the Aadhaar number for a newborn's birth certificate generated through the CRS.

Relevance: GS Prelims & Mains Paper II; Governance
Source: The Hindu

3. What is bank capital? What is the Basel III Endgame?

Why in News?

Bank capital is a measure of bank shareholders' investment in the business. In contrast to deposits or money a bank has borrowed, capital does not have to be paid back. A bank that has sufficient capital can cover customers' deposits even if the loans it has made aren't repaid or if its investments drop in value. In other words, it is a cushion or buffer that protects a bank from insolvency—and, thus, reduces the risk that a bank failure triggers system-wide financial instability. As the chart below illustrates, capital is the difference between a bank's assets (left) and its liabilities (right).

Who decides how much capital banks must hold?

Banks decide for themselves, but regulators all over the world require banks to hold a certain amount of capital—calculated as a percentage of their assets—so they are less likely to fail, seek a government rescue, or trigger a financial crisis.

If a bank has too little capital, managers may be tempted to take imprudent risks because their shareholders have little to lose if things go wrong and will profit handsomely if things go well. Because capital bears more risk, capital is more expensive for banks than raising funds by taking deposits or borrowing money. So banks want to have just enough capital to satisfy regulators, credit rating agencies, creditors, and shareholders, but no more. In general, the more capital a bank has to have, the lower its profits. Because banks are required to have a set amount of capital for every loan or security they hold, requiring them to hold more capital can make them charge more for some loans.

How much more is a subject of debate. But if banks have too little capital to absorb the risks they take, they can, in bad times, trigger economy-wide financial instability. It is clear now that many big banks had too little capital going into the Global Financial Crisis in 2007. Since then, U.S. regulators have increased the minimum amount of capital that banks are required to have. Regulators are now proposing further increases in required capital (known as the "Basel III Endgame"), to the dismay of many big banks who are lobbying aggressively against the proposal.

What is the Basel Committee?

The Basel Committee on Banking Supervision—so named because it meets in Basel, Switzerland—was established in 1974 to enhance financial stability by improving the quality of bank supervision. It is the primary global standard-setter for the prudential regulation of banks, but it has no legal authority to impose the minimum standards to which the Committee agrees. Adopting rules is the responsibility of the governments of the 26 countries (plus the European Union and Hong Kong) who comprise the committee. The U.S. is represented on the Basel Committee by the Federal Reserve Board in Washington, the New York Federal Reserve Bank, the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC).

What is the Basel III Endgame?

Basel III is a set of measures developed by the Basel Committee in the years following the global financial crisis of 2007-09. The measures, rolled out over several years, aim to strengthen the regulation, supervision, and risk management of banks. The final set of rules has been dubbed the "Basel III Endgame." These rules focus on the amount of capital that banks must have against the riskiness of their business. In July 2023, the Federal reserve published for comment proposed changes to bank capital rules in the U.S. that are intended to be aligned with the Basel III standards.

What are U.S. regulators proposing?

Regulators say the net effect of the proposal would be to increase the required highest-grade capital (essentially shareholders' equity plus retained profits) by about 16% on average, with a bigger increase imposed on the biggest banks. Put differently, the largest banks would have to hold an additional 2 percentage points of capital, or an additional $2 of capital for every $100 of risk-weighted assets. The proposal would change both the numerator and the denominator in the capital/risk-weighted assets calculation.

Among the major changes, the regulators would:

• Apply the stiffest risk-based capital approach to more banks, those with $100 billion or more of assets, up from the current threshold of $700 billion.

• Reduce the ability of banks to use their own models for calculating capital requirements for loans and instead require them to use a standard measure.

Relevance: GS Prelims & Mains Paper III; Economics