

# PRABHA IAS IPS COACHING ACADEMY



## DAILY DOSE

### CURRENT AFFAIRS – 03/04/2026

#### 1. Yuva Vigyani Karyakram (YUVIKA):

**Recent** - The Union Government recently informed Parliament that the YUVIKA initiative has trained more than 1,300 students to date.

Yuva Vigyani Karyakram (YUVIKA), or the Young Scientist Programme, is a student outreach initiative launched by the Indian Space Research Organisation (ISRO) in 2019.

**Objective:** To impart foundational knowledge of space technology, space science, and space applications, while encouraging students to pursue STEM careers.

**Target Group:** It targets Class 9 students, with 15% weightage for those from rural areas to promote inclusive scientific exposure.

#### 2. Qdenga Dengue Vaccine:

**Recent** - The Drugs Controller General of India has recently cleared Qdenga vaccine for use in individuals aged 4 to 60 years, making it India's first approved dengue vaccine.

Qdenga is a live-attenuated, tetravalent dengue vaccine developed by Takeda Pharmaceutical of Japan.

**Serotype Coverage:** Targets all four dengue serotypes (DENV-1 to DENV-4) but shows uneven efficacy, strongest against DENV-2 and weaker against DENV-3 and DENV-4.

**Deployment:** It does not require pre-vaccination screening; two doses are administered 3 months apart.

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## 3. New TB Gene Regulation Research Could Help Fight Drug Resistance:

**Recent** - Scientists at the Bose Institute discovered a new gene regulation mechanism in the Tuberculosis (TB) bacterium (*Mycobacterium tuberculosis*).

**Earlier View:** Scientists believed all bacteria follow the sigma cycle mechanism for gene transcription.

**Transcription:** It is the process by which a specific DNA segment is copied into a complementary RNA strand by the enzyme RNA polymerase (RNAP).

**Sigma Cycle:** In this process, the sigma factor (a protein) binds to RNA polymerase to initiate transcription, then detaches during DNA-to-RNA synthesis.

**Key Finding:** The study found that in TB bacteria, the sigma factor ( $\sigma^F$ ) remains continuously attached to RNA polymerase throughout the entire transcription process.

## 4. Capacity Building Commission:

**Recent** - PM Modi recently addressed the Karmayogi Sadhana Saptah on the foundation day of the Capacity Building Commission (CBC).

CBC was established in 2021 as the executive body and custodian of the Mission Karmayogi.

It is an autonomous body reporting to the Prime Minister's Public Human Resources Council (PMHRC).

**Objective:** To transform civil services from a rules-based system into a roles-based administration.

## 5. SAMPANN Platform:

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**Recent** – the Goa government and the Cochin Port Authority have taken a significant step towards modernizing pension disbursement by signing agreements to onboard the SAMPANN digital platform.

SAMPANN (System for Accounting and Management of Pension) is the flagship digital pension and financial management platform of the Department of Telecommunications.

It is managed by the Office of the Controller General of Communication Accounts (CGCA).

It was designed to streamline pension sanction, authorisation, accounting and payment through a single digital platform.

It was launched on 29<sup>th</sup> December, 2018.

It provides direct credit of pension into the bank accounts of pensioners.