7. Short news

1. Conversion Therapy

The US Supreme Court has begun hearing arguments in a case that could determine how far states can regulate conversion therapy. The case challenges Colorado's 2019 law banning conversion therapy for minors, questioning whether such restrictions violate the First Amendment right to free speech or constitute legitimate regulation of professional conduct.

Conversion Therapy

Definition - Conversion therapy refers to psychological or behavioural interventions aimed at changing an individual's sexual orientation or gender identity.

Historical Practices - Historically involved coercive and harmful methods such as electric shocks, forced institutionalisation, and deprivation.

Medical Consensus - Major medical bodies, including the American Medical Association, have denounced these practices as unscientific and harmful, stressing that homosexuality and gender diversity are not mental disorders.

Health Impacts - Linked with depression, anxiety, and suicide, especially among minors.

Legal Status - Over 20 US states, including Colorado, have banned conversion therapy for minors, though the bans typically do not apply to religious leaders or unlicensed counsellors.

Status of Conversion Therapy in India

Regulatory and Legal Framework

National Medical Commission (NMC) Ban (2022) - In July 2022, the National Medical Commission (NMC) officially declared conversion therapy a form of professional misconduct. The directive, issued after the Madras High Court's S. Sushma v. Commissioner of Police (2021) judgment, instructed all State Medical Councils to take disciplinary action against any medical professional found engaging in such practices.

2. Roque Planet Cha 1107-7626

Astronomers have observed a young rogue planet, Cha 1107-7626, actively consuming its surrounding gas and dust, providing new insights into how such free-floating planets form.

About the Rogue Planet Cha 1107-7626

Cha 1107-7626 is located about 620 light-years away in the Chamaeleon constellation within the Milky Way galaxy. It has a mass estimated at five to ten times that of Jupiter and is around one to two million years old, making it extremely young in astronomical terms. The planet was detected by the European Southern Observatory's Very Large Telescope in Chile. While Cha 1107-7626 is a gas giant like our solar system's largest planets like Jupiter rather than a rocky world like Earth. It is forming similarly to a young star, with strong magnetic fields funneling material inward, a process typical in stellar birth. However, it lacks sufficient mass to trigger hydrogen fusion, the defining feature of a true star.

About Rogue Planets - Rogue planets, or free-floating planetary-mass objects, are planets that do not orbit a star but drift freely through space.

Scientific Significance - Studying such planets blurs the distinction between planetary and stellar formation, helping astronomers understand the diverse pathways of celestial evolution.

3. CISTANTHE LONGISCAPA

Scientists in Chile are studying Cistanthe longiscapa, a drought-resistant flower from the Atacama Desert, to develop crops resilient to worsening climate-induced droughts.

About Cistanthe longiscapa

Cistanthe longiscapa, locally called "pata de guanaco", is a fuchsia-colored flowering plant native to Chile's Atacama Desert. It creates the rare "flowering desert" phenomenon, blooming only after infrequent rainfalls.

Adaptation - The plant survives extreme aridity and temperature fluctuations, making it a model

species for studying resilience in desert environments. It demonstrates photosynthetic flexibility, switching between C3 (Calvin Cycle) and CAM (Crassulacean Acid Metabolism) photosynthesis to conserve water under drought, salinity, or intense sunlight.

Significance - The plant offers insights into gene-regulated metabolic shifts under stress conditions.

About the Atacama Desert

The Atacama Desert lies in northern Chile along the Pacific coast, bordered by the Andes Mountains. It is the driest non-polar desert on Earth, with some regions receiving less than 1 mm of rainfall annually. Despite its harshness, it supports unique biodiversity adapted to aridity and extreme solar radiation. The region faces severe water stress, and studies predict intensified drought by 2050, threatening agriculture in Chile's fertile valleys.

4. Times Higher Education (The) World University Rankings 2026

India has become the second most-represented country in the Times Higher Education (THE) World University Rankings 2026, with 128 institutions featured globally.

About The World University Rankings

The Times Higher Education (THE) World University Rankings evaluate global universities based on performance indicators to provide a comparative assessment of academic excellence.

Published by - UK-based Times Higher Education, the 2026 edition includes 2,191 universities from 115 countries and territories.

Ranking Criteria - Universities are assessed across five areas -

- 1. Teaching,
- 2. Research Environment,
- 3. Research Quality,
- 4. International Outlook, and
- 5. Industry Impact

THE considers 18 performance indicators, covering aspects such as learning environment, research strength, innovation, and global engagement. Beyond the top 100, universities are grouped into rank bands instead of specific positions.

Global Ranking

The University of Oxford in the United Kingdom has retained its position as world number one for the tenth consecutive year. Overall, the United States dominates the global top 10, securing seven spots, while the United Kingdom occupies the remaining three.

Key Findings on Indian Universities

Representation - India has 128 universities in the rankings, up from 107 last year, making it second only to the United States. The Indian Institute of Science (IISC), Bangalore leads the country, retaining its position in the 201–250 band. No Indian university has yet entered the top 200, but research productivity, growing international collaboration, and improved staff-to-doctorate ratios are driving progress.

5. SPARK-4.0

The Central Council for Research in Ayurvedic Sciences (CCRAS) has launched SPARK-4.0 (2025–26) to promote research aptitude among undergraduate Ayurveda students nationwide.

About SPARK-4.0

SPARK-4.0 is the fourth edition of the Studentship Program for Ayurveda Research Ken (SPARK), a flagship initiative to foster scientific curiosity among Bachelor of Ayurvedic Medicine and Surgery (BAMS) students. **Nodal Body** - CCRAS under the Ministry of Ayush, with registration open to students from NCISM-recognized Ayurveda colleges.

Objective - SPARK-4.0 aims to ignite research interest, develop analytical skills, and bridge classical Ayurvedic knowledge with modern scientific inquiry among undergraduates. It seeks to strengthen the long-term research ecosystem in the Ayush sector and cultivate evidence-based investigation practices.

Scope and Benefits - 300 BAMS students will receive a studentship of ₹50,000 each (₹25,000 per month

for two months). Participants undertake short-term, independent research projects under faculty mentorship, gaining exposure to research methodology, experimental design, and data analysis. Selected students receive a certificate upon successful completion and approval of their final research report.

