# **Daily News Juice**

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### 1. Gross Domestic Knowledge Product (GDKP)

#### Introduction

Gross Domestic Knowledge Product: What is it, what is the 2021 idea govt is reviving



approach is needed.

#### **Historical Context**

Recently, the Government of India revived a proposal to measure the Gross Domestic Knowledge Product (GDKP). This initiative aims to supplement the traditional Gross Domestic Product (GDP) metric. The Ministry of Statistics and Programme Implementation (MoSPI) is leading this effort.

## What is GDKP?

The GDKP concept aims to quantify the contributions of knowledge, innovation, and intellectual assets to the economy. It recognises that GDP alone does not fully capture the value generated by knowledgebased activities. Some knowledge-related data is already recorded under GDP, but a structured

The idea was first discussed in 2021 by NITI Aayog. At that time, concerns were raised about the lack of a clear methodology for data collection. Recently, MoSPI held a session to explore the GDKP measurement framework. MoSPI is now actively working to develop this framework.

#### **Methodological Challenges**

There are certain methodological challenges in measuring GDKP. First, There is no clear method to capture the knowledge economy yet. Second, Identifying relevant parameters for measurement poses a challenge. Third, Data availability is another concern.

#### **Satellite Account Approach**

MoSPI is considering a "satellite account" approach to measure the knowledge economy. A satellite account is an additional system used to track specific economic activities. This method is similar to existing satellite accounts for tourism, culture and the ocean/blue economy. The goal is to create a separate framework that accurately captures the knowledge base.

#### **Technical Committee Formation**

MoSPI plans to establish a technical committee. This committee will evaluate the GDKP proposal and guide the measurement process. Collaboration with various ministries will be essential for effective implementation.

Relevance: GS Prelims & Mains Paper III; Economics

2. UK-India Young Professionals Scheme

#### Introduction



The ballot for this year's United Kingdom-India Young Professionals Scheme (YPS) will open next week. The scheme offers both British and Indian nationals the opportunity to live, study, travel, and work in the other country for up to two years.

However, while there is a ballot system for Indians to apply to live in the UK, with a cap of 3,000 announced this year, there is no such ballot for British citizens to apply under the scheme.

#### What is the scheme?

Launched in February 2023, the YPS is a reciprocal scheme under which UK and

Indian nationals, who are aged from 18 to 30 can live, study, travel, and work in the other country for up to two years. It is part of the Migration and Mobility Agreement that the two countries signed in 2021, capping the number of young professionals admitted to either country at 3,000 per year.

#### What are other conditions?

While the YPS does not require any pre-approved employer certificate or salary conditions, it allows Indians to land in the UK and seek a job or self-employment if they have enough savings to support their stay. However, YPS is not extendable unless the regular work visas which are valid for five years can be extended. The scheme also does not allow any dependent children to accompany the applicant.

Relevance: GS Prelims & Mains Paper II; Bilateral Relations Source: Indian Express

#### 3. Scientists discover 'Einstein ring' around nearby galaxy: What it is, its significance

#### Introduction

The European Space Agency's (ESA) Euclid space telescope has discovered a rare ring of light, known as an Einstein ring, around a galaxy nearly 590 million light-years away from Earth. The ring was discovered around NGC 6505, a galaxy that was first found in the 19th Century.

#### What is an Einstein ring?

An Einstein ring is a ring of light around a form of dark matter, galaxy or cluster of galaxies. It is essentially an example of gravitational lensing.

#### **Gravitational lensing**

Gravitational lensing is a phenomenon which occurs when a massive celestial body — such as a galaxy or cluster of galaxies — creates a gravitational field which distorts and amplifies the

light from distant galaxies that are behind it but in the same line of sight. The body causing the light to curve is called a gravitational lens.

In the case of the recently discovered Einstein ring, NGC 6505 was the gravitational lens. The nearer galaxy distorted and amplified the light coming from a distant unnamed galaxy, located 4.42 billion light-years away. A light-year is the distance light travels in one year, which is 9.46 trillion kilometres.



#### Named after Einstein

Einstein rings are named after mathematician and physicist Albert Einstein, whose general theory of relativity predicted that light could bend and brighten around objects across the cosmos. The first Einstein ring was discovered in 1987, and since then, several more have been discovered. However, it remains unclear how many such rings exist. Notably, they are extremely rare — less than 1% of galaxies have an Einstein ring.

Einstein rings are not visible to the naked eye, and can be observed only through space telescopes such as Euclid.

#### Why do scientists study Einstein rings?

These rings help scientists investigate dark matter, which has never been detected but is believed to make up 85% of the total matter in the universe.

Moreover, Einstein rings enable scientists to learn about distant galaxies, which otherwise might not be visible. They can also provide information about the expansion of the universe as the space between the Earth and other galaxies is stretching.

# Relevance: GS Prelims; Science & Technology Source: Indian Express

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