

# Daily Current Affairs Prelims Quiz 24-02-2025 (Prelims Test)

1)Which of the following statements is correct with respect to Einstein Ring that was recently in news?

- a. It was spotted by NASA's Voyager in the galaxy NGC 6505.
- b. It was first predicted by Isaac Newton in his theory of universal gravitation.
- c. It is an optical illusion caused by the Earth's atmosphere.
- d. It occurs due to gravitational lensing as predicted by Einstein's General Theory of Relativity.

Answer: d

### **Einstein Ring:**

- The <u>Euclid space mission of the European Space Agency</u> (ESA) spotted an <u>Einstein ring in</u> (also known as an Einstein-Chwolson ring or Chwolson ring) the galaxy <u>NGC 6505</u>, (590 million light-years from the earth).
- NGC 6505 is an elliptical galaxy in the Draco constellation, about 608 million light years away from the Milky Way, discovered in 1884 by Lewis A. Swift.
- An Einstein ring is a ring-shaped image that occurs when light from a distant galaxy is bent around a massive object in the foreground. This phenomenon is called gravitational lensing.
- Albert Einstein's general <u>theory of relativity predicted this phenomenon.</u> (Option (d) is correct).
- <u>Bruno Altieri (Astronomer) 1st noticed</u> the Einstein ring (Nicknamed as Alteri's Ring) in galaxy NGC 6505 in 2023 in a blurry image captured by Euclid mission of European Space Agency.

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- 2) Which of the following releases the Periodic Labour Force Survey (PLFS) in India?
  - a. Ministry of Labour and Employment
  - b. Ministry of Finance
  - c. Ministry of Statistics and Programme Implementation
  - d. NITI Aayog

Answer: c

## Periodic Labour Force Survey (PLFS):

- PLFS is the <u>main source of data on employment and unemployment in India</u>.
- It provides key <u>indicators like Labour Force Participation Rate (LFPR)</u>, <u>Worker Population Ratio (WPR)</u>, and <u>Unemployment Rate (UR)</u>.
- It is released by <u>the Ministry of Statistics and Programme Implementation</u> (MoSPI). (Option (c) is correct).
- The Key Findings of the latest PLFS are as follows:
- The LFPR for people aged 15 and above in urban areas *increased from 49.9% to 50.4%*.
- The Worker Population Ratio (WPR) for people aged 15 and above in urban areas *increased from*

#### 46.6% to 47.2%.

- The <u>overall unemployment rate</u> in urban areas <u>decreased from 6.5% to 6.4%.</u>
- State-wise Unemployment Trends:
- Assam recorded the highest urban youth unemployment rate, increasing from 23.9% to 27.5%.
- Kerala, Chhattisgarh, Uttar Pradesh, Maharashtra, and Gujarat showed slight decreases in unemployment rates.

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- 3) Consider the following statements regarding the Blue-Cheeked Bee-eater:
  - 1. It is a near-passerine bird belonging to the Meropidae family.
  - 2. It is an endemic species found only in India.
  - 3. The bird is listed as Endangered by the IUCN Red List.

How many of the statements given above is/are *not* correct?

- a. Only one
- b. Only two
- c. All Three
- d. None

Answer: b

## **Blue-Cheeked Bee-eater:**

- It is a <u>near passerine bird</u> (perching bird) in the bee-eater family, Meropidae. (Statement 1 is correct).
- It <u>breeds across Northern Africa and the Middle East</u>, from eastern Turkey to Kazakhstan and India.
- Occasionally, this bird appears as a rare vagrant north of its usual range, particularly in Italy and Greece. It *is not endemic to India*. (*Statement 2 is not correct*).
- Recently, the <u>first breeding site</u> of the Blue-Cheeked Bee-eater <u>in peninsular India</u> has been <u>discovered in the saltpans of Aandivilai near the Manakudy Mangroves in Kanniyakumari district</u>.
- The nesting sites are often located in sandy banks, embankments, or low cliffs, and occasionally on the shores of the Caspian Sea.
- Its breeding was primarily recorded in regions such as Nile Delta, Pakistan, and Iran while its wintering grounds include parts of Africa.
- The bird is listed as **Least Concerned by the IUCN Red List.** (Statement 3 is not correct).
- 4) Consider the following minerals:
  - 1. Barytes
  - 2. Feldspar
  - 3. Mica
  - 4. Quartz

Which of the above minerals were recently moved from minor to major mineral category by the Ministry of Mines?

- a. 1 and 2 only
- b. 2, 3, and 4 only
- c. 1, 3, and 4 only
- d. 1, 2, 3, and 4

#### **Minerals:**

- Ministry of Mines moved 4 minerals-(Barytes, Felspar, Mica, and Quartz) from minor to major status.
- Quartz -
- Common mineral in Earth's crust.
- Found in all forms of rock.
- Used in clocks and watches.
- Feldspar -
- Aluminosilicate minerals containing calcium, sodium, or potassium.
- Comprises more than half of Earth's crust.
- Used in glassmaking, ceramics, construction, and manufacturing.
- Mica -
- Group of minerals that are light, soft, and flexible.
- Used in cosmetics, medicine, and electronics.
- Barytes -
- Naturally occurring mineral made of barium sulphate (BaSO4).
- Used in paint, rubber, and concrete.

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- 5) Consider the following statements regarding the Varanasi-Ranchi-Kolkata Expressway:
  - 1. It is a six-lane greenfield access-controlled expressway.
  - 2. It is being developed under the Bharatmala Pariyojana.
  - 3. It will pass through the states of Uttar Pradesh, Bihar, Jharkhand, and Odisha.

Which of the statements given above are correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer: a

## Varanasi-Ranchi-Kolkata Expressway Project:

- Varanasi-Kolkata Expressway (NH-319B) is an **710** km long, 6 lane, greenfield access-controlled expressway. (Statement 1 is correct).
- It is an umbrella scheme under Bharat Mala Yojana. (Statement 2 is correct).
- Nodal Ministry Ministry of Road Transport and Highways.
- Objective To **boost trade and freight movement**, particularly benefiting industries reliant on the Kolkata and Haldia ports.
- States covered <u>Uttar Pradesh, Bihar, Jharkhand, and West Bengal.</u> (Statement 3 is not correct).

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