

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 *Euclid space mission of the European Space Agency* (ESA) spotted an *Einstein ring in* (also known as an Einstein-Chwolson ring or Chwolson ring) the galaxy *NGC 6505*, (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).
- **Bruno Altieri (Astronomer) 1st noticed** 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.

To know more, click <u>here</u>

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

<u>Periodic Labour Force Survey (PLFS) :</u>

- PLFS is the *main source of data on employment and unemployment in India*.
- It provides key *indicators like Labour Force Participation Rate (LFPR), Worker Population Ratio (WPR), and Unemployment Rate (UR)*.
- It is released by <u>the Ministry of Statistics and Programme Implementation (MoSPI)</u>. (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 *overall unemployment rate* in urban areas *decreased from 6.5% to 6.4%*.
- 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.

To know more, click here

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

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Answer: b
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Blue-Cheeked Bee-eater :

- It is a <u>near passerine bird (perching bird) in the bee-eater family, Meropidae</u>. (Statement 1 is correct).
- It *breeds across Northern Africa and the Middle East*, 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 *first breeding site* of the Blue-Cheeked Bee-eater *in peninsular India* has been *discovered in the saltpans of Aandivilai near the Manakudy Mangroves in Kanniyakumari district*.
- 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

Answer:d

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.

To know more, click <u>here</u>

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 <u>710 km long, 6 lane, greenfield access-</u> <u>controlled expressway</u>. (Statement 1 is correct).
- It is an *umbrella scheme under Bharat Mala Yojana*. (Statement 2 is correct).
- Nodal Ministry <u>Ministry of Road Transport and Highways</u>.
- 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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