



Daily Current Affairs Prelims Quiz 23-11-2024 (Online Prelims Test)

1) Consider the following statements:

Statement-I: G-quadruplex (GQ) are special patterns in the Mpox virus's genetic material (DNA).

Statement-II: Fluorogenic Molecular Probe (BBJL) is a new method that can accurately detect the Mpox virus's genetic material (DNA).

Select the correct answer using the codes given below:

- a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c. Statement-I is correct but Statement-II is incorrect
- d. Statement-I is incorrect but Statement-II is correct

Answer : a

Fluorogenic Molecular Probe (BBJL)

Scientist from Jawaharlal Nehru Centre for Advanced Scientific Research have identified a new route to understand the virology of Monkey Pox Virus (MPV) by using the BBJL.

- Fluorogenic molecular probe (BBJL) is a tiny molecular tool to find specific patterns in the Mpox virus's DNA.
- **Working mechanism** - When BBJL isn't connected to anything, it stays dark and doesn't glow.
- When it finds and attaches to the special DNA patterns (called G-quadruplex or GQ) in the Mpox virus, it lights up very brightly.
- The glow is incredibly strong such that it is about 250 times brighter than its normal state.
- This dramatic change in brightness makes it easy for scientists to know when they've found the virus.

G-quadruplex (GQ) are special patterns that are found in the Mpox virus's genetic material (DNA).

- **Features of BBJL:**
- **Accuracy** - BBJL only lights up when it finds the exact DNA pattern from Mpox virus.
- **Specificity** - It won't get confused by similar patterns in other viruses or human DNA.
- **Sensitivity** - The strong glow makes it easy to detect even small amounts of the virus.
- **Reliability** - It helps avoid false positive results that can happen with other testing methods.

2) 'Jobs at Your Doorstep' Report, sometimes seen in the news recently, is an initiative of?

- a. World Bank

- b. International Labour Organization
- c. World Economic Forum
- d. United Nations Office for Project Services

Answer : a

'Jobs at Your Doorstep' Report

Union Minister for Education has recently launched a report titled Jobs at Your Doorstep: A Jobs Diagnostics for Young People in 6 States, in New Delhi.

- 'Jobs at Your Doorstep' Report was launched by Education Minister Dharmendra Pradhan and Labour Minister Mansukh Mandaviya.
- It's a **World Bank report** focusing on jobs diagnostics for young people.
- It covers 6 states such as Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Odisha and Rajasthan.
- **Purpose of the Report** - Acts as both a diagnostic tool and roadmap.
- Links education with India's jobs agenda.
- Identifies priority sectors with highest employment potential for secondary school graduates.
- Analyses skills gaps between school trades and local industry needs.
- **Strengthening Teaching-Learning and Results for States (STARS) Program** - The World Bank assists the Ministry of Education under this program.
- It has a national component under which key reforms are shared and disseminated for implementation.
- **Features of the report** - The report underscores the significant benefits of embedding skill-based education from Classes 9-12 to prepare students for diverse career paths relying on a bottom-up approach, going deep in districts of the six states.
- These present varying socio-economic profiles offer a nuanced view of how industry and government can both contribute towards the jobs agenda.
- **Significance** - It uses a bottom-up approach focusing on district-level analysis.
- Aims to prepare workforce for future job markets.
- Emphasizes decentralized, market-led skill development.
- Focuses on making vocational education fiscally sustainable.

3) Consider the following statements with respect to World Crafts Forum, 2024

1. It marks a unique moment to elevate the country's contributions to the global craft sector.
2. It was organised by Export Promotion Council for Handicrafts and Development Commissioner of Handicrafts, in collaboration with the World Crafts Council.
3. Kamaladevi Chattopadhyay is one of the founders of World Crafts Council.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

Answer : c

World Crafts Forum, 2024

The World Crafts Forum is being held at New Delhi, India showcasing craftsmanship, innovation, and sustainability while promising to inspire a resurgence of the crafts

movement worldwide.

- World Crafts Forum, 2024 aids to elevate the country's contributions to the arts and crafts but celebrates India's rich craft and cultural legacy.
- It *creates a global ecosystem for artists and craftsmen* by showcasing many of India's artisans and craft traditions, giving them a unique display with the global craft market.
- This showcase is about the most valued traditional crafts as well as inspiring the young generation.
- It is held at the National Crafts Museum & Hastkala Academy, Delhi.
- It is **organised by the Export Promotion Council for Handicrafts (EPCH) and Development Commissioner of Handicrafts, in collaboration with the World Crafts Council (WCC).**
- The Forum will be a congregation of craftspeople from as many as **20 countries** and artisans from across India.
- **World Crafts Council (WCC) AISBL** - It was founded at the 1st World Crafts Council General Assembly in New York on June 12, **1964**.
- The **founder** of WWC include Ms. Aileen Osborn Vanderbilt Webb, Ms. Margaret M. Patch, and **Smt Kamaladevi Chattopadhyay**.
- The main objective of the World Crafts Council AISBL is to *strengthen the status of crafts in cultural and economic life*.
- The Council aims to *promote fellowship among crafts-persons* by offering them encouragement, help, and advice.

Smt Kamaladevi Chattopadhyay was one of the first women to contest an election in colonial India and to be arrested for civil disobedience.

- **India is one of the members of it.**
- WCC fosters and assists cultural exchange through conferences, international visits, research study, lectures, workshops, exhibitions, and other activities.

4) WOH G64, sometimes seen in the news recently, is associated with?

- a. A giant star that dwells in the Large Magellanic Cloud.
- b. A medicinal plant that increases metabolism in humans.
- c. A newly identified species of Silver-line butterfly.
- d. Waxy substance in the digestive system of sperm whales.

Answer : a

WOH G64

European Southern Observatory's Very Large Telescope Interferometer (ESO's VLTI) recently observed that WOH G64, that revealed some crucial details about its activity and surrounding layers.

- The WOH 64 is a **giant star** that dwells in the *Large Magellanic Cloud*, a dwarf or satellite galaxy that orbits Milky Way.
- It was discovered in the 1970s by Bengt Westerlunds, Olander, and Hedin.
- Incidentally, the WOH in its name is the acronym for the names of its three discoverers.
- The star is believed to be around 1,60,000 light years away from Earth.
- The star is **classified as a red supergiant** owing to its size, which is roughly 2,000 times that of the Sun.

- In 2005 and 2007, the team reportedly used *European Southern Observatory's Very Large Telescope Interferometer (ESO's VLTI)* in the *Atacama Desert of Chile* to ascertain the features of the star.
- To get an accurate image, the team had to wait for the development of GRAVITY, a set of VLTI's second-generation instruments.
- Red super-giants like WOH G64 shed their outer layers, which are mainly gas and dust, in the final stages of their lifecycles.
- This process can continue for thousands of years.
- This star is one of the most extreme of its kind, and any drastic change may bring it closer to an explosive end.
- According to the team, the materials that are being shed could be responsible for the dimming of the star and the unusual shape of the dust cocoon around it.

5) Consider the following statements with respect to Pravridhhi

1. It is a pan-India Product Accelerator Programme to transform India's manufacturing landscape and drive technological self-reliance.
2. It is a platform that collaborates enterprises, academia, research laboratories and investors.
3. It was launched by the Indian Institute of Technology, Madras.

Select the correct answer using the code given below:

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

Answer : b

Pravridhhi



Pravridhhi, a product accelerator programme was recently launched by the Indian Institute of Science (IISc).

- Pravridhhi is a *pan-India Product Accelerator Programme* to transform India's manufacturing landscape and drive technological self-reliance.
- It *serves as a platform* for enterprises, academia, research laboratories, and investors to collaborate to drive innovation and new product development for a self-reliant India.
- It was **launched by the Foundation for Science, Innovation and Development (FSID) at Indian Institute of Science (IISc).**
- It unites premier Indian institutions and enterprises to develop innovative solutions through strategic partnerships and cutting-edge R&D.