



Daily Current Affairs Prelims Quiz 07-10-2021 - (Online Prelims Test)

1) In a landmark announcement, the World Health Organization (WHO) has recently endorsed the Mosquirix Vaccine. It is the World's first vaccine for?

- a. Malaria
- b. Dengue
- c. Zika Virus
- d. West Nile virus

Answer : a

Mosquirix

- In a historic move, the World Health Organization (WHO) has recently endorsed the use of the first-ever malaria vaccine RTS, S/AS01 malaria or Mosquirix.
- It recommends the widespread application of the vaccine among children in sub-Saharan Africa and other regions with moderate to high malaria transmission.
- The vaccine was developed by the British drugmaker GlaxoSmithKline (GSK).
- Many vaccines exist against viruses and bacteria but this was the first time that the WHO recommended broad use of a vaccine against a human parasite.

Newer vaccines

- In May this year, a malaria vaccine candidate undergoing phase two trials reported an efficacy of 77 per cent.
- This vaccine, R21/Matrix M, is a modified version of Mosquirix, and has been developed by researchers at the University of Oxford.
- Lead researchers had believed this vaccine was the first to reach WHO's goal of at least 75 per cent efficacy.

2) Consider the following statements with respect to Malaria Elimination

1. Countries that have achieved at least 3 consecutive years of zero indigenous cases of malaria are eligible to apply for the WHO certification of malaria elimination.
2. No country in the African region has been certified by the World Health Organization as malaria-free so far.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

Malaria

- It is a life-threatening disease caused by parasites that are transmitted to people through the bites of infected female Anopheles mosquitoes.
- It is preventable and curable.

Global burden of Malaria

- Children aged under 5 years are the most vulnerable group affected by malaria.
- In 2019, they accounted for 67% (274,000) of all malaria deaths worldwide.
- In 2019, India had an estimated 5.6 million cases of malaria compared to about 20 million cases in 2020, according to WHO.

Malaria Elimination

- Globally, the elimination net is widening, with more countries moving towards the goal of zero malaria.
- In 2019, 27 countries reported fewer than 100 indigenous cases of the disease, up from 6 countries in 2000.
- Countries that have achieved at least 3 consecutive years of zero indigenous cases of malaria are eligible to apply for the WHO certification of malaria elimination.
- Over the last two decades, 11 countries have been certified by the WHO Director-General as malaria-free: United Arab Emirates (2007), **Morocco (2010)**, Turkmenistan (2010), Armenia (2011), Sri Lanka (2016), Kyrgyzstan (2016), Paraguay (2018), Uzbekistan (2018), Algeria (2019), Argentina (2019), and El Salvador (2021).

3) India is facing a severe coal shortage recently. Which of the following is/are the reason for coal shortage?

1. Decreased buying from Coal India
2. Sharp rise in imports of high priced coal
3. Continuous rainfall in coal bearing areas

Select the correct answer using the codes given below:

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

Answer : a

- A sharp uptick in power demand as the economy recovers from the Covid-19 pandemic coupled with supply issues have led to the current coal shortage.
- India consumed 124 billion units of power in August 2021 compared to 106 billion units of power in August 2019 which was not impacted by the pandemic.
- Coal fired thermal power plants have also supplied a higher proportion of the increase in demand leading the share of thermal power in India's power mix increasing to 66.4% from 61.9% in 2019.

The key reasons for the supply crunch include:

1. Lower than normal stock accumulation by thermal power plants in the April-June period
2. Continuous rainfall in coal bearing areas in August and September which led to lower production
3. Lower imports coupled with high international prices of coal

4) Consider the following:

1. Sitabhog
2. Mihidana
3. Jaynagarer Moa

These are GI tagged products of which of the following states?

- a. Odisha
- b. Mizoram
- c. West Bengal
- d. Madhya Pradesh

Answer : c

- Odisha Rasagola is a GI tagged product belongs to the state of Odisha.

5) With respect to Deep Brain Stimulation, consider the following statements:

1. It is a surgical procedure that involves implanting electrodes in the brain, which deliver electrical impulses that block or change the abnormal activity.
2. Depression can be treated using this Deep Brain Stimulation surgery.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

- Physicians at the University of California, San Francisco have successfully treated a patient with severe depression by recognising and tapping into the brain circuits linked with depressive brain patterns.
- The physicians have tried to reset these patterns, which they have said is the equivalent of using a pacemaker for the heart.
- The doctors used an existing technique called Deep Brain Stimulation (DBS), customising it for this patient's case.
- Conditions that are traditionally treated using DBS include dystonia, epilepsy, essential tumour, obsessive-compulsive disorder and Parkinson's disease.

Deep brain stimulation (DBS)

- It is a surgical procedure that involves implanting electrodes in the brain, which deliver electrical impulses that block or change the abnormal activity.

A DBS system has three components:

1. The electrode, or lead. This is a thin, insulated wire inserted through a small opening in the skull and implanted into a specific brain area.
2. The extension wire. This too is insulated, and is passed under the skin of the head, neck and shoulder, connecting the electrode to the third component of the system.
3. The internal pulse generator (IPG) is the third component. It is usually implanted under the skin in the upper chest.