UPSC CURREENT AFFAIRS MCQS 16-01-2024

1. Question

Consider the following statements about Genetic Engineering Appraisal Committee (GEAC)

1. It is the statutory committee constituted under Wild Life (Protection) Act, 1972.

2. It functions under the Ministry of Environment, Forest, and Climate Change (MoEF&CC).

3. Clearance of GEAC is mandatory for the environmental release of GM crops.

How many of the statements given above are correct?

a) Only one

b) Only two

c) All three

d) None of the above

Solution (b)

It is the statutory committee constituted under the "Rules for the Manufacture, Use/Import/Export and Storage of Hazardous Microorganisms/Genetically Engineered Organisms or Cells (Rules, 1989)" framed under Environment (Protection) Act, 1986. It functions under the Ministry of Environment, Forest, and Climate Change (MoEF&CC).

Composition:

GEAC is chaired by the Special Secretary/Additional Secretary of MoEF&CC and co-chaired by a representative from the Department of Biotechnology (DBT).

Presently, it has 24 members and meets every month to review the applications in the areas indicated above.

The members comprise experts from other ministries as well as institutions such as the ICAR, ICMR, CCMB, and so on.

Functions:

It is responsible for the approval of activities involving large-scale use of hazardous living microorganisms and recombinants in research and industrial production from an environmental perspective.

The committee is also responsible for the appraisal of proposals relating to the release of genetically engineered (GE) organisms and products into the environment, including experimental field trials.

Clearance of GEAC is mandatory for the environmental release of GM crops.

Context: The Supreme Court recently questioned the Centre on why reports of the court-appointed Technical Experts Committee (TEC) on the biosafety of genetically modified (GM) crops were not looked into by the Genetic Engineering Appraisal Committee (GEAC).

2. Question

Consider the following statements about Astra Missile

1. Astra is a beyond-visual-range (BVR) surface-to-air missile designed to be mounted on fighter aircraft.

2. It is indigenously developed by the DRDO and manufactured by Bharat Dynamics Ltd. (BDL) for the Indian Air Force.

Choose the correct statements:

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Solution (b)

Astra is a beyond-visual-range (BVR) air-to-air missile designed to be mounted on fighter aircraft.

The missile is designed to engage and destroy highly manoeuvring supersonic aircraft.

It is the best in its class of weapon systems in the world in the category of air-to-air missiles.

The missile is being developed in multiple variants to meet specific requirements.

The ASTRA Mk-I Weapon System, integrated with SU-30 Mk-I aircraft, is being inducted into the Indian Air Force (IAF).

It is indigenously developed by the Defence Research and Development Organisation (DRDO) and manufactured by Bharat Dynamics Ltd. (BDL) for the Indian Air Force (IAF).

Features of ASTRA Mk-I:

It has a range of 80 to 110 km in a head-on chase and can travel at 4.5 Mach speed (almost hypersonic).

The missile also has a locally developed Ku-band active radar guidance system and a 15-kg warhead.

It offers the pilot the option to choose between “Lock on Before Launch – LOBL” and “Lock on After Launch – LOAL” and later allows the aircraft to shoot and scoot to safety after firing the missile in the direction of the target.

It is based on advanced solid-fuel ducted ramjet (SFDR) engine technology.

It is capable of operating under all weather conditions, both day and night, and offers high overall reliability and a very high ”Single Shot Kill Probability – SSKP”.

Context: The Minister of State for Defence recently flagged off the indigenously developed Astra Missiles for supply to the Indian Air Force (IAF) at Bharat Dynamics in Hyderabad.

3. Question

Consider the following statements about Kalaram Temple

1. It is built in 1720 by Bajirao I, Peshwa of the Maratha Confederacy.

2. It is located on the banks of the River Godavari in the Panchavati area of the Nashik in Maharashtra.

3. It is also the site of a landmark agitation led by Babasaheb Ambedkar demanding temple entry rights for Dalits.

How many of the statements given above are correct?

a) Only one

b) Only two

c) All three

d) None of the above

Solution (b)

Built in – 1792, with the efforts of one Sardar Rangarao Odhekar.

Name – It derives its name from a black statue of the Lord Kala Ram translates literally to "Black Ram."

Location – On the banks of the River Godavari in the Panchavati area of the Nashik in Maharashtra.

Features – It has 14 steps, which represent the 14 years of Ram's exile and has 84 pillars, which represents the cycle of 84 lakh species that one must complete to be born as a human.

Sanctum sanctorum – Statues of Ram, Sita, and Lakshman, and a black idol of Hanuman at the main entrance.

Historical importance – It is also the site of a landmark agitation led by Babasaheb Ambedkar demanding temple entry rights for Dalits more than 90 years ago.

Nashik Satyagraha in 1930

Lead by – B R Ambedkar along with the Marathi teacher and social activist Pandurang Sadashiv Sane, known as Sane Guruji.

Aim – To demand access for Dalits to Hindu temples.

Context: Recently, Prime Minister of India took part in cleaning the Kalaram temple premises under the 'Swachh Bharat Abhiyan' campaign.

4. Question

Consider the following statements about Poppy straw

1. It is the husk left after the opium is extracted from the pods which also contains very small morphine content.

2. It is one of the narcotic drugs under the Narcotic Drugs and Psychotropic Substances Act, 1985 (NDPS).

Choose the incorrect statements:

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Solution (d)

Poppy straw – It is the husk left after the opium is extracted from the pods which also contains very small morphine content.

India is one of the few countries that legally cultivate opium poppy and is the only country on earth that illicitly produces opium gum.

Farmers sell the poppy straw to those licensed by the State Governments to purchase poppy straw and any excess poppy straw is ploughed back into the field.

Drug – It is one of the narcotic drugs under the Narcotic Drugs and Psychotropic Substances Act, 1985 (NDPS).

Legal regulation – Possession, sale, use, etc. are regulated by the State Governments under the State NDPS Rules.

Violation – Anyone possessing, selling, purchasing or using it without a license or in violation of any conditions of the license is liable to prosecution under the NDPS Act.

Control operations – In 2023, record high anti-narcotics operations were undertaken.

Under Operation Prahaar in 2023, 10,326 hectares of illicit opium field was destroyed in Arunachal and Manipur.

Context: Over 10,000 kg of poppy straw, under the cover of cattle feed, has been seized by the Central Bureau of Narcotics in the last 1 year.

5. Question

1. Samavesha project, sometimes in news is related to which of the following?

a) Aims to enhance research collaboration in India by improving accessibility to facilities and labs

b) Aims to expand and enhance the country's rural internet connectivity

c) To promote self-employment in rural areas through formation and skilling of SHGs

d) To promote entrepreneurship among SC/ST communities

Solution (a)

The project aims to enhance research collaboration in India by improving accessibility to facilities and labs.

The platform allows researchers and industries to connect with institutions that have the required equipment, enabling them to rent it for experiments.

The initiative aims to save capital expenditure for researchers, industries, and startups and prevent duplication of resources at the national level.

The Indian Science, Technology, and Engineering Facilities Map (I-STEM) is a national web portal that helps researchers find the facilities they need for their R&D work. The portal also aims to connect resources to researchers.

Context: The Indian Science, Technology, and Engineering Facilities Map (I-STEM) is launching the Samavesha project at IISc., Bengaluru.