

Que-1 With reference to Narcotic Drugs and Psychotropic Substances (NDPS) Act, consider the following statements

1- Enacted in 1985, the NDPS Act is the main legislation that deals with drugs and their trafficking.

2- The NDPS Act defines cannabis (hemp) as a narcotic drug based on the parts of the plant that come under its purview.

3- As a “special provision”, the Act states that the government “may allow cultivation of any cannabis plant for industrial purposes only of obtaining fibre or seed or for horticultural purposes”.

Which of the following given above is/are correct

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

Que-2 Consider the following statements about Soli Sorabjee committee

1- The Government of India established a committee under the chairmanship of former attorney general Soli Sorabjee to frame a Model Police Act.

2- The committee submitted its recommendations on October 30, 2006, “to enable the police to operate as an efficient, effective, people-friendly, and responsive agency.”

3- The Government of India had introduced many recommendations of the Sorabjee Committee.

Which of the following given above is/are correct

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

Que-3 With reference to “Cloud seeding”, consider the following statements

1- Cloud seeding is a weather modification technique aimed at enhancing precipitation from clouds.

2- Glaciogenic cloud seeding aims at speeding up droplet coalescence in liquid clouds, leading to production of large droplets that start to precipitate.

3- Hygroscopic cloud seeding trigger ice production in supercooled clouds, leading to precipitation.

Which of the following given above is/are correct

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

Que-4 What are anti-radiation pills?

1- Sodium iodide (KI) tablets, or anti-radiation pills, are known to provide some protection in cases of radiation exposure.

2- They contain non-radioactive iodine and can help block absorption, and subsequent concentration, of radioactive iodine in the thyroid gland.

3- This contains so much non-radioactive iodine, the thyroid becomes full and cannot absorb any more iodine – either stable or radioactive – for the next 24 hours

Which of the following given above is/are correct

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

Que-5 Consider the following statements about International Whale Shark Day

1- The whale shark (*Rhincodon typus*) is the largest fish on Earth and a keystone species in marine ecosystems.

2- International Whale Shark Day is celebrated on September 1.

3- The fish is listed as a Schedule I animal under the Wild Life (Protection) Act, 1972.

Which of the following given above is/are correct

- a) 1 and 2 only b) 1 and 3 only

- c) 1, 2 and 3 d) 3 only

Que-6 With reference to methamphetamine — meth for short, consider the following statements

1- It is a powerful, highly addictive stimulant that affects the central nervous system.

2- It is used to treat attention-deficit hyperactivity disorder (ADHD) and narcolepsy, a sleep disorder.

3- Meth lowers the amount of dopamine in the brain.

Which of the following given above is/are correct

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

Que-7 Consider the following statements about Peer pressure

1- It is an influence by which you do something because you want to feel valued or accepted by your friends or society.

2- It can be something as small as being forced to do well in studies because the child next door is performing better than you in academics during your school days, or something big that forces you to choose a career or even a life partner.

Which of the following given above is/are correct

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

ANSWER**Que-8 Consider the following statements about Artemis I mission**

1- Artemis I mission will carry two mannequins designed to study the effects of radiation on women's bodies so that NASA can learn how to protect female astronauts better.

2- Artemis was a major deity in ancient Greece, worshiped at least as early as the beginning of the first millennium B.C., or even earlier.

3- Artemis I will send a rocket without a crew on a monthlong journey around the Moon.

Which of the following given above is/are correct

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

1- (c)

- Enacted in 1985, the NDPS Act is the main legislation that deals with drugs and their trafficking. Various provisions of the Act punish production, manufacture, sale, possession, consumption, purchase, transport, and use of banned drugs, except for medical and scientific purposes.
- The NDPS Act defines cannabis (hemp) as a narcotic drug based on the parts of the plant that come under its purview. The Act lists these parts as:
 - (a) Charas: "The separated resin, in whatever form, whether crude or purified, obtained from the cannabis plant and also includes concentrated preparation and resin known as hashish oil or liquid hashish."
 - (b) Ganja: "The flowering or fruiting tops of the cannabis plant (excluding the seeds and leaves when not accompanied by the tops), by whatever name they be known or designated."
 - (c) "Any mixture, with or without any neutral material, of any of the above forms of cannabis or any drink prepared therefrom."

- The Act, in its definition, excludes seeds and leaves “when not accompanied by the tops”. Bhang, which is made with the leaves of the plant, is not mentioned in the NDPS Act.
- Section 20 of the NDPS Act lays out the punishment for the production, manufacture, sale, purchase, import and inter-state export of cannabis, as defined in the Act. The prescribed punishment is based on the amount of drugs seized.

2- (a)

- The Government of India promised in Parliament that a Model Police Act based on the recommendations of the Sorabjee Committee would be introduced in the near future. This has not yet occurred.

3- (b)

- There are two principal cloud seeding techniques. Hygroscopic cloud seeding aims at speeding up droplet coalescence in liquid clouds, leading to production of large droplets that start to precipitate. Cloud seeding material consists usually of large salt particles dispersed by some means to the cloud base.
- The idea of the other technique, glaciogenic cloud seeding, is to trigger

ice production in supercooled clouds, leading to precipitation. Glaciogenic cloud seeding is usually done by dispersing efficient ice nuclei, such as silver iodide particles or dry ice (solid carbon dioxide) into the cloud, causing heterogeneous ice nucleation. Another possibility is to use liquid carbon dioxide which cools the cloud sufficiently so that the supercooled water droplets freeze homogeneously. Glaciogenic cloud seeding is usually applied to convective clouds, or winter orographic clouds. The largest body of scientific research on cloud seeding has been done on AgI seeding on these two cloud types.

4- (d)

- Potassium iodide (KI) tablets, or anti-radiation pills, are known to provide some protection in cases of radiation exposure.

How do these pills work?

- After a radiation leak, radioactive iodine floats through the air and then contaminates food, water and soil.
- While radioactive iodine deposited during external exposure can be removed using warm water and soap, according to the World Health Organisation, the bigger risk is inhaling it.

- “Internal exposure, or irradiation, occurs when radioactive iodine enters the body and accumulates in the thyroid gland,” says the WHO.
 - The thyroid gland, which uses iodine to produce hormones to regulate the body’s metabolism, has no way of telling radioactive from non-radioactive iodine.
 - Potassium iodide (KI) tablets rely on this to achieve ‘thyroid blocking’. KI pills taken a few hours before or soon after radiation exposure ensure that non-radioactive iodine in the medicine is absorbed quickly to make the thyroid “full”.
 - “Because KI contains so much non-radioactive iodine, the thyroid becomes full and cannot absorb any more iodine – either stable or radioactive – for the next 24 hours,” says the US Centre for Disease Control and Prevention.
 - But KI pills are preventive only and cannot reverse any damage done by radiation to the thyroid gland. Once thyroid gland absorbs radioactive iodine, those exposed are at a high risk of developing thyroid cancer.
- 5- (b)
- International Whale Shark Day is celebrated on August 30.
- It can grow to a length of approximately 18 metres and weigh as much as 21 tonnes.
 - Although distributed widely across tropical and warm temperate seas, limited information is available on the population trends of this species, especially along the Indian coastline.
 - The whale shark is distributed all along the Indian coast. However, the largest whale shark aggregation is along the Gujarat coast. The fish is listed as a Schedule I animal under the Wild Life (Protection) Act, 1972.
 - The International Union for Conservation of Nature (IUCN) has noted that whale shark populations are on the decline and its global status is notified as ‘Endangered’.
 - According to IUCN, the main threat to these plankton feeders is accidental entanglement in fishing nets. This can result in mortality.
 - The only way to curb such mortality is to ensure the release of the entangled whale sharks from the fishing net without any delay.
- 6- (a)
- Crystal methamphetamine or crystal meth is a form of the drug that looks like glass fragments or shiny, bluish-

white rocks. It is chemically similar to amphetamine.

- Methamphetamine can be smoked, swallowed in the form of a pill or tablet, snorted, and injected after dissolving the powder in water or alcohol.
- Methamphetamine can lead to myocardial infarction (heart attack); it can cause stroke. The drug can affect the heart, the brain, and the kidneys. It can result in the blood pressure shooting up suddenly. So, it is a very dangerous drug if there is an overdose.
- Meth raises the amount of dopamine in the brain. Dopamine, a natural chemical, plays a role in body movement, motivation, and reinforcement of rewarding behaviours. According to NIDA, the ability of the drug to rapidly release high levels of dopamine in reward areas of the brain strongly reinforces drug-taking behaviour, making the user want to repeat the experience.
- The programme aims to increase women's participation in space exploration – 30% of its engineers are women.
- NASA expects to bring the first woman and person of colour to the Moon on Artemis III sometime after 2024.
- Artemis was a major deity in ancient Greece, worshiped at least as early as the beginning of the first millennium B.C., or even earlier. She was a daughter of Zeus, the chief god of the Olympians, who ruled the world from the summit of Mount Olympus. She was also the twin sister of Apollo, god of the Sun and oracles.
- As the goddess of animals and the wilderness, Artemis has also inspired environmental conservancy programs, in which the goddess is viewed as an example of a woman exercising her power by caring for the planet.

7- (c)

8- (c)

- Artemis I will send a rocket without a crew on a monthlong journey around the Moon.