



### **Daily Current Affairs Prelims Quiz 12-02-2022 - (Online Prelims Test)**

1) Consider the following statements regarding the state of Goa:

1. Goa became the first Portuguese colony in entire Asia when Alfonso de Albuquerque defeated the forces of the sultan of Bijapur.
2. The first Trading port established by the Portuguese in Goa marked the commencement of the colonial era in India.

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

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

Answer : a

The Prime Minister has raked up a six-decade-old debate on decisions taken by Jawaharlal Nehru in the final years of Portuguese rule to accuse the Congress of apathy towards Goa and Goans.

### **Portuguese and Goa**

- The first Portuguese to land in India was Vasco De Gama in 1498.
- The Portuguese Empire established the first European trading centre at Quilon (Kollam) in 1502.
- This marked the commencement of colonial era in India.
- When Francisco de Almeida arrived to serve as the first Portuguese viceroy of the East (1505-1509), already there was a regional war on the Malabar coast.
- The admiral Alfonso de Albuquerque became second viceroy (1509-1515).
- Goa became the first Portuguese colony in entire Asia in 1510, when Admiral Alfonso de Albuquerque defeated the forces of the sultan of Bijapur, Yusuf Adil Shah.

2) Consider the following statements regarding Koalas:

1. Koalas are marsupials i.e. they give premature birth to young ones.
2. They survive on a strict diet of up to a kilogram of eucalyptus leaves every day.
3. Chlamydia, a sexually transmitted disease causes blindness and cysts in the Koalas reproductive tract.

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

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

d. 1, 2 and 3

Answer : d

Australia has listed koalas as endangered species.

## Koalas

- Once found in abundance, Australia's much-loved koalas have now been officially classified as 'endangered' after widespread bushfires, drought and land clearing destroyed much of their eucalyptus-rich habitat.
- According to fossil records, Koala species have inhabited parts of Australia for at least 25 million years, a WWF report states.
- But today, only one species remains — the *Phascolarctos cinereus*.
- They are found in the wild in the southeast and eastern sides of Australia — in coastal Queensland, New South Wales, South Australia, and Victoria.
- They are marsupials.
  - Marsupials are characterized by premature birth and continued development of the newborn while attached to the nipples on the mother's lower belly.
- They survive on a strict diet of up to a kilogram of eucalyptus leaves every day.
- Due to the low nutritional value of these leaves, koalas tend to sleep for extended periods, often up to 18 hours a day, to conserve energy.
- Chlamydia, a bacterial disease, which is sexually transmitted, has wrought havoc on koala populations by forming cysts inside breeding adults, leading to infertility.

3) Consider the following statements regarding Nuclear Fusion Technology:

1. In a thermonuclear fusion reaction, lighter atoms like those of hydrogen fuse to produce slightly heavier atoms like helium.
2. Unlike nuclear fission reactors, nuclear fusion reactors pose the danger of a radioactive leak.
3. If nuclear fusion has to take place, then the first step has to be the creation of hot plasma.

Which of the above statement(s) is/are **incorrect**?

- a. 1 and 3 only
- b. 2 only
- c. 2 and 3 only
- d. None of the above.

Answer : b

China's Experimental Advanced Superconducting Tokamak (EAST), the Joint European Torus (JET) fusion experiment in Oxfordshire, U.K., are rehearsals for the upcoming International Thermonuclear Experimental Reactor (ITER), a global experiment to generate 500 MW of power by fusing hydrogen atoms into helium atoms by 2035.

## Nuclear Fusion Technology

- In a thermonuclear fusion reaction, lighter atoms like those of hydrogen fuse to produce slightly heavier atoms like helium.
- When four hydrogen atoms are combined, it transmutes (change in form) into a helium atom.
- If we fuse four grams of hydrogen into helium, about 0.0028 grams of mass would be converted to  $2.6 \times 10^{11}$  joules; with that energy, we can light a 60-watt light bulb for over 100 years!
- 600 million tons of hydrogen are fused every second in the Sun, producing 596 million tons of helium.

## How atoms get fused

- In stars such as the sun, hydrogen atoms combine to produce helium in the thermonuclear reaction and release immense energy in light and radiation.
- Ordinarily, the atoms cannot fuse.
- The like charges of the electron clouds surrounding the atoms would repulse and keep them at bay from coming too close.
- However, in the core of the stars, the temperature is some 15 million Kelvins.
- All the electrons are ripped away at these temperatures, forming what is known as plasma.
- Further, due to gravity, the pressure builds up 200 billion times greater than Earth's atmospheric pressure, making the density to become 150 times that of water.
- In this sizzling heat, intense pressure, and dense core, the plasma of hydrogen fuse with each other to form helium, spewing colossal energy in the form of light and heat.

## Tokamak

- If only one can mimic the condition of the interior of the stars, we can artificially ignite fusion; and the fusion reactors which permit us to do so are Tokamaks.
- If fusion has to occur, the first step has to be the creation of hot plasma.
- Heating a tiny pellet of hydrogen to millions of degrees and generating plasma is not that hard; lasers could do the job well.
- The Tokamak is an acronym for tongue-twisting Russian terms 'toroidalnaia kamera magnitnykh katushkami', which means "toroidal chamber with magnetic coils".
- Although alternative designs such as z-pinch and stellarator have been designed and tested, tokamaks are still the rage for achieving fusion.

4) Consider the following statements regarding Collegium System in India:

1. The constitution of India provides for reservation for the appointment of Judges of the Supreme Court and High Court.
2. The power to increase the number of judges in the Supreme Court and the High Court lies with the Collegium constituted by the President.

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

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

Answer : d

## Collegium System in Indian Judiciary

- Appointment of Judges of the Supreme Court and High Courts is made under Articles 124, 217 and 224 of the Constitution of India, which do not provide for reservation for any caste or class of persons.
- Under both provisions, the President has the power to make the appointments "after consultation with such of the Judges of the Supreme Court and of the High Courts in the States as the President may deem necessary".

## The Three Judges Cases

- In three cases — which came to be known as the Judges Cases — in 1981, 1993 and 1998, the Supreme Court evolved the collegium system for appointing judges.

- A group of senior Supreme Court judges headed by the CJI would make recommendations to the President on who should be appointed.
- These rulings not only shrank the executive say in proposing a candidate for judgeship, but also took away the executive's veto power.
- In the First Judges Case — S P Gupta v Union of India (1981) — the Supreme Court ruled that the President does not require the "concurrence" of the CJI in appointment of judges.
- The ruling affirmed the pre-eminence of the executive in making appointments, but was overturned 12 years later in the Second Judges Case.
- In the Supreme Court Advocates-On-Record Association v Union of India (1993), a nine-judge Constitution Bench evolved the 'collegium system' for appointment and transfer of judges in the higher judiciary.
- The court underlined that the deviation from the text of the Constitution was to guard the independence of the judiciary from the executive and protect its integrity.
- In 1998, President K R Narayanan issued a Presidential Reference to the Supreme Court over the meaning of the term "consultation" — whether it required "consultation" with a number of judges in forming the CJI's opinion, or whether the CJI's sole opinion could by itself constitute a "consultation".
- The ruling on this established a quorum and majority vote in the collegium to make recommendations to the President.
- Parliament, which has the power to increase the number of judges, has gradually done so by amending the Supreme Court (Number of Judges) Act — from 8 in 1950 to 11 in 1956, 14 in 1960, 18 in 1978, 26 in 1986, 31 in 2009, and 34 in 2019.

5) Consider the following statements regarding Question Hour:

1. It is an Indian parliamentary innovation, not mentioned in the parliamentary rules book.
2. It is not mandatory for a cabinet minister to be present during the question hour in the Rajya Sabha.
3. Question hour is held on all days of the session, except on the day President addresses the house and on the day of budget.

Which of the above statement(s) is/are **incorrect**?

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

Answer : b

Senior Congress leader Jairam Ramesh said in the Rajya Sabha, that this was the first time in 70 years that no Cabinet Minister had replied to questions posed by members during the Question Hour.

## Question Hour

- The first hour of every parliamentary sitting is slotted for the Question Hour.
- However, in 2014 the Question Hour was shifted in the Rajya Sabha from 11 am to 12 noon.
- During this one hour, Members of Parliament (MPs) ask questions to ministers and hold them accountable for the functioning of their ministries.
- The questions can also be asked to the private members (MPs who are not ministers).
- It is regulated according to parliamentary rules.
- The presiding officers of the both Houses (Rajya Sabha and Lok Sabha) are the final authority with respect to the conduct of Question Hour.
- Question Hour in both Houses is held on all days of the session. But there are two days when an exception is made:

- The President addresses MPs from both Houses.
- On the day the Finance Minister presents the Budget.
- It is not mandatory for a cabinet minister to be present during the question hour in the Rajya Sabha.

