



## Daily Current Affairs Prelims Quiz 01-03-2023 (Online Prelims Test)

1) Which of the following are the significance of Millets?

1. Water intensive
2. High Gluten content
3. High antioxidant activity
4. High tolerance to drought
5. Low requirement of chemical fertilizers

Select the correct answer using the codes given below:

- a. 3, 4 and 5 only
- b. 2, 4 and 5 only
- c. 1, 2 and 3 only
- d. 1, 2, 3, 4 and 5

Answer : a

### Millets



- Millets are small-grained, annual, warm-weather cereals belonging to grass family and most of the millet crops are **native to India**.
- UN declared 2023 as the International Year of Millets.
- **Nutri-cereals** - They are popularly known as Nutri-cereals as they provide most of the nutrients required for normal functioning of human body.
- **Less Water intensive** - They are rain-fed grains which have low requirements of water and fertility when compared to other popular cereals.
- **High tolerance** - They are highly tolerant to drought and other extreme weather conditions.
- **Low chemical inputs** - They can be grown with low chemical inputs such as fertilizers and pesticides.

### Major Millets

1. Sorghum (Jowar)
2. Pearl millet (Bajra)
3. Finger millet (Ragi/Mandua)

### Minor Millets

- Foxtail Millet (Kanngani/Kakun)
- Proso Millet (Cheena)
- Kodo Millet (Kodo)
- Barnyard Millet (Sawa/Sanwa/Jhangora)
- Little Millet (Kutki)

- Brown top millet

## Pseudo Millets

- They are not part of the Poaceae botanical family, to which 'true' grains belong, however they are nutritionally similar and used in similar ways to 'true' grains.
- **Example** - Buck Wheat (Kuttu), Amaranth (Chaulai)

## Significance

- **Gluten Free** - Millets are highly nutritious, non-glutinous, non- allergenic and non-acid forming foods.
- Gluten is a protein found in wheat and several other grains.
- **Cardiovascular disease** - Millet consumption decreases triglycerides and C- reactive protein, thereby preventing cardiovascular disease.
- **Dietary fibre** - All millets are rich in dietary fibre which has water absorbing and bulking property.
- It increases transit time of food in the gut which helps in reducing risk of inflammatory bowel disease and acts as detoxifying agent in the body.
- **Lower Cholesterol** - Niacin in millet can help lower cholesterol.
- **Anti-oxidant property** - Millets with phytates, polyphenols, tannins, anthocyanins, phytosterols and pinacosanols present in it having important role in aging and metabolic diseases.
- All millets possess high antioxidant activities.

2) Non-Steroid Anti-Inflammatory Drugs (NSAID) are highly toxic to vultures. Which of the following drug(s) fall under NSAID?

1. Diclofenac
2. Aceclofenac
3. Nimesulide
4. Ketoprofen



Select the correct answer using the codes given below:

- a. 1 and 2 only
- b. 1 and 3 only
- c. 1, 3 and 4 only
- d. 1, 2, 3 and 4

Answer : d

## Vultures

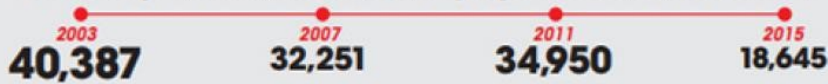
- Vultures play a very important role in our ecosystem as the **primary removers of carrion**.
- Vultures constitute the natural animal disposal system and keep our environment clean.
- The decrease in Vulture population may result in an increase in population of rats and feral dogs (main scavenging species in the absence of vultures) and the spread of diseases.
- Drastic decrease of vulture population in the recent decades was notably due to the use of Diclofenac, a drug used to treat livestock which is toxic to vultures.
- When the vultures eat the carcass of an animal recently treated with Diclofenac, a non-steroidal anti-inflammatory drug (NSAID) it causes visceral gout.
- Visceral gout is a disease where uric acid crystals accumulate on organs, particularly the kidneys and resulted in kidney failure.

- After the findings, the government banned the use of Diclofenac in 2008.
- **Alternatives** - Tolfenamic and Meloxicam were considered safe for vultures.
- Every first Saturday of September is celebrated as International Vulture Awareness Day.

## VANISHING VULTURES

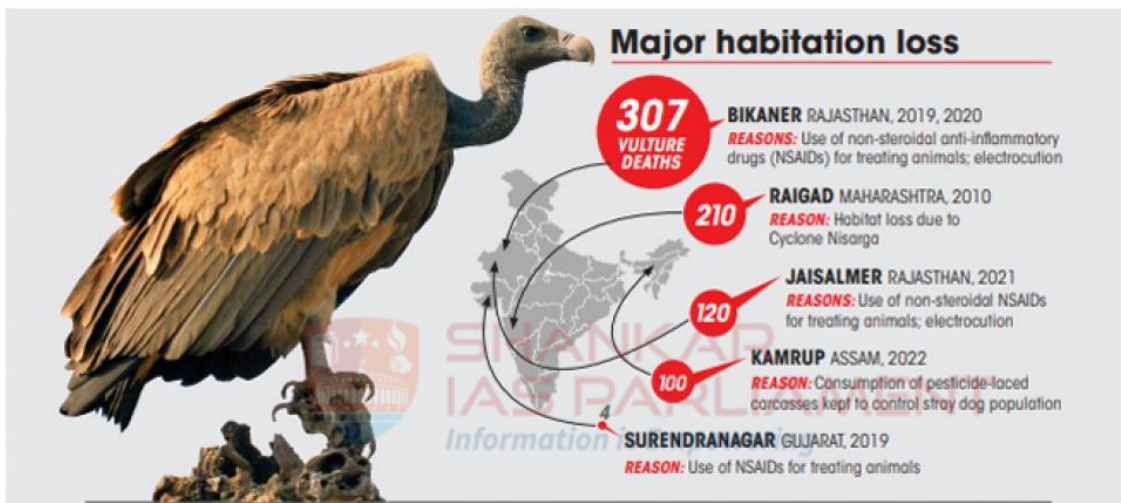
High mortality hinders India's plans of stabilising its vulture population

**53% drop in India's vulture population since 2003**



### The fatal four

DICLOFENAC	ACECLOFENAC	NIMESULIDE	KETOPROFEN
was banned for veterinary use in 2006 to arrest the shrinking vulture population	gets converted into diclofenac within hours of administration to cattle	causes visceral gout and renal failure in vultures within 30 hours of ingestion	causes death in vultures within 48 hour after ingestion due to heightened toxicity levels



3) Which of the following statements regarding Raman Effect is **incorrect**?

1. When a stream of light passes through a liquid, a fraction of the light scattered by the liquid is of a different colour.
  2. This happens due to the change in the wavelength of light that occurs when a light beam is deflected by molecules.
  3. The frequency also change as the light scatters through a transparent object.
  4. The Raman Effect involves scattering of light by molecules of gases, liquids, or solids.
- a. 2 only  
b. 4 only  
c. 1 and 3 only  
d. None of the above

Answer : d

### Raman Effect

- In 1986, the Government of India designated **February 28 as National Science Day** to commemorate the announcement of the discovery of the "Raman Effect".
- Theme of this year - **"Global Science for Global Wellbeing"**
- The Raman Effect refers to the phenomenon in which when a stream of light passes through a

liquid, a fraction of the light scattered by the liquid is of a different colour.

- This happens due to the change in the wavelength of light that occurs when a light beam is deflected by molecules.
- The frequency also change as the light scatters through a transparent object.
- It involves scattering of light by molecules of gases, liquids, or solids.
- Raman received **Nobel Prize in Physics** for this effect in **1930**.
- The discovery give birth to a new field known as **Raman spectroscopy** as a basic analytical tool to conduct nondestructive chemical analysis for both organic and inorganic compounds.

4) Consider the following statements related to E-Waste Management Rules, 2022.

1. E-Waste Management Rules, 2022, for the first time, included the EPR (Extended Producer Responsibility) for e-wastes.
2. The informal sectors got recognition from the rules to implement integrated informal aggregators for its collection mechanism.

Which of the following statements is/are correct?

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

Answer : d

### E-Waste Management Rules, 2022

- The first set of e-waste Rules was notified in 2011 and came into effect in 2012, introduced the Extended Producer Responsibility (EPR).
- Under EPR compliance, 'producers' are responsible for the safe disposal of electronic and electric products once the consumer discards them.
- E-waste rules 2016, which were amended in 2018, included provisions to promote 'authorisation' and 'product stewardship'.
- Ministry of Environment and Forests notified a new set of e-waste rules, 2022 that includes the provision of an EPR framework- '**Registration of Stakeholders**' (manufacturer, producer, refurbisher and recycler).
- The informal sector, which plays a crucial role in e-waste handling, draws **no recognition**.

5) Consider the following statements regarding Great Backyard Bird Count (GBBC) 2023

1. It is organized by the Bombay Natural History Society (BNHS).
2. West Bengal recorded the highest number of species during the Great Backyard Bird Count (GBBC) 2023.

Which of the following statements is/are correct?

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

Answer : b

### Great Backyard Bird Count (GBBC) 2023

- The GBBC was launched in 1998 and organised by the Bird Count India (BCI).
- It is an annual event that brings bird enthusiasts, students and nature enthusiasts together for

counting birds.

- West Bengal reported the highest number of species followed by Uttarakhand and Arunachal Pradesh during the Great Backyard Bird Count (GBBC) 2023.
- Kerala, on the other hand, recorded the highest number of checklists of birds.
- India holds the second-highest number of checklists after the United States of America and the third-highest species of any country.
- BCI is an informal partnership of organisations and groups working together to increase collective knowledge about bird distributions and populations.

