

## **Prelim Bits 23-07-2017**

### **Phobos**

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- Phobos is one of the smallest moons in the solar system orbiting around the Mars.

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- It is the only natural satellite in the solar system that circles its planet in a time shorter than the parent planet's day.

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- Red planet Mars has another natural satellite Deimos.

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- Phobos is the innermost and larger of the two.

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- Recently, NASA's Hubble Space Telescope has beamed back images of the moon Phobos in its orbital trek around the red planet.

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### **Urbanization and sacred groves**

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- Sacred groves are fragments of forests protected by local communities.

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- They are also known as "Devaru kadu" in Kannada and "Kavu" in Malayalam.

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- Sacred groves are usually dedicated to local folk deities and protected by communities because of their religious beliefs.

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- It helps in biodiversity conservation, recharge of aquifers and soil conservation.

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- Hunting and logging are not permitted in the sacred groves. As a result, many sacred groves still exists in urban areas.

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- With increasing urbanization, urban sacred groves are becoming home to large number of invasive ants. It is a clear indicator of human disturbances in the habitat.

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## **Fluorosis**

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- Fluorosis is a slow, progressive, crippling disease which affects every organ, tissue and cell in the body.

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- According to WHO, the fluoride concentration in drinking water should not exceed 1.5mg/l.

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- Thus fluorosis is caused by excessive exposure to fluoride, beyond a concentration of 1.5 mg/l.

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- It adversely affects the foetal cerebral function and neurotransmitters. Reduced intelligence in children is associated with exposure to high fluoride levels.

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- Dental fluorosis is a defect in the tooth enamel caused by excessive fluoride consumption, is not treatable and the strains are permanent.

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- Skeletal fluorosis is developed by the disturbance of calcium metabolism in the formation of bones in the body. It results in the softening and weakening of bones, resulting in deformities.

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- The main source of fluoride in groundwater is the rocks such as charnockite, quartzite, pegamatite, laterite etc.

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## **Northern River Terrapin**

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- A terrapin is one of several small species of turtle living in fresh or brackish water.

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- The northern river terrapin (Batagur baska) is a species of riverine turtle

native to Southeast Asia.

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- It is classified “Critically Endangered” by the IUCN.
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- The species is currently found in Bangladesh (in the Sundarbans), India (parts- West Bengal & Odisha), Indonesia, Cambodia and Malaysia.
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- The northern river terrapin is omnivorous and prefers freshwater habitats.
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- It moves to brackish river mouths or estuaries in the breeding season (December–March), returning after laying their eggs.
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- A captive conservation breeding programme has been implemented in Sunderbans Tiger Reserve to protect the species against natural risks and also facilitate genetic management.

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