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Drinking Water Supply Quality Management System

- Bureau of Indian Standards (BIS) has prepared a draft standard for the supply system of piped drinking water.
- The draft is named as Drinking water supply quality management system requirements for piped drinking water supply service.
- The draft has been developed keeping in view the Centre's Jal Jeevan Mission for providing safe and adequate drinking water to all rural households by 2024 through tap connections.
- **IS10500 -** It states that the drinking water after treatment should conform to the Indian Standard (IS) 10500 developed by the BIS.
- The IS 10500 outlines the acceptable limit of substances such as heavy metals, other parameters like the pH value of water, its turbidity, the total dissolved solids in it, and the color and odor.
- **District Metering Area -** It is a concept for controlling leakages in the water network in which flow meters are installed to detect leaks.
- **Water Sampling –**Water should be sampled at the treatment plant every 4 hours, at the water reservoirs for every 8 hours and random sampling at household levels.
- **Water Audit -** It is a calculation of the amount of water put into distribution against the amount that is consumed and it should be conducted on a quarterly basis.

Agri-Entrepreneurship Component of RKVY

- Rashtriya Krishi Vikas Yojana (RKVY) is an ongoing centrally sponsored scheme started from XI Five Year Plan period.
- The scheme will incentivize States in enhancing more allocation to Agriculture to achieve 4% growth rate.
- Ministry of Agriculture is funding start-ups under the innovation and agri-preneurship component of RKVY in 2020-21.
- These start-ups are in various categories such as agro-processing, artificial intelligence, digital agriculture, farm mechanisation, waste to wealth, dairy, fisheries etc.
- The following are the components of this scheme:

1. **Agripreneurship Orientation -** 2 months duration with a monthly stipend of Rs. 10,000/- per month. Mentorship is provided on financial, technical, IP issues etc.
2. **Seed Stage Funding of R-ABI Incubatees –** Funding up to Rs. 25 lakhs (85% grant & 15% contribution from the incubatee).
3. **Idea/Pre-Seed Stage Funding of Agripreneurs –** Funding up to Rs. 5 lakhs (90% grant and 10% contribution from the incubatee).

- Other Sub-schemes under RKVY include

1. Bringing Green Revolution to Eastern India (BGREI)
2. Additional Fodder Development Programme (AFDP)
3. Saffron Mission
4. Crop Diversification Program
5. Livestock Health & Disease Control / Foot & Mouth Disses (FMD)
6. Beekeeping
7. Targeting Rice Fallow Areas (TRFA)

Thumbimahotsavam

- Thumbimahotsavam is a part of a national dragonfly festival.
- It is being organized by the following organizations –

1. WWF India
2. Bombay Natural History Society
3. National Biodiversity Board
4. UNEP, UNDP and IUCN-Centre for Environment Conservation
5. India Dragonfly Society

- The third edition of the National Dragonfly Festival was organized online in August, 2020.

- Kerala is set to host first-ever state Dragonfly Festival.
- WWF-India State unit has joined hands with the Society for Odonate Studies (SOS) and Thumbipuranam for the state dragonfly festival.
- It aims at building awareness about the importance of dragonflies and damselflies and the need to conserve them.
- Some specific target groups for this festival include zoology teachers.
- Dragonflies act as important bio-indicators of the ecological health of an area.

P-Notes

- According to SEBI data, the value of participatory note (P-note)

investments in Indian capital markets increased to Rs. 63,288 crore till July 2020-end.

- This is the fourth consecutive monthly rise in investments through P-notes.
- Derivative is a financial instrument which derives its value from the underlying assets.
- P-notes are issued by registered foreign portfolio investors (FPIs) to overseas investors who wish to be part of the Indian stock market without registering themselves directly with SEBI.
- These are among the group of investments considered to be Offshore Derivative Investments (ODIs).
- These are popular investments due to the investor remaining anonymous.
- P-notes have Indian stocks as their underlying assets.
- Though P-note holders have less stringent registration requirements, they have to go through a proper due diligence process of SEBI.

Magnetic Hyperthermia-Mediated Cancer Therapy (MHCT)

- Scientists from Institute of Nano Science & Technology (INST) are making efforts to make magnetic hyperthermia-mediated cancer therapy as desired therapy for inoperable tumours.
- INST is an autonomous institute of Department of Science and Technology (DST).
- Magnetic hyperthermia-mediated cancer therapy (MHCT) is a non-invasive cancer treatment.
- The technique involves the delivery and localization of magnetic materials within the targeted tumour site followed by subsequent application of an alternating magnetic field (AMF), thereby generating heat at the tumour site.
- It can efficiently act against deep-seated inaccessible solid tumours like glioblastoma and is highly thermo-sensitive towards normal cells with minimal toxicity against healthy counterparts.
- Scientists are on the lookout for new materials which can make this treatment more efficient.

Nano Medicine for Visceral Leishmaniasis

- Visceral Leishmaniasis (VL) is also called as Kala- Azar is one of the most neglected tropical diseases.
- It is characterized by irregular bouts of fever, substantial weight loss, swelling of the spleen and liver, and anaemia (which may be serious).

- If the disease is not treated, the fatality rate in developing countries can be as high as 100% within 2 years.
- Around 95% of which is reported from Bangladesh, Brazil, China, Ethiopia, India, Kenya, Nepal, Somalia, South Sudan, and Sudan.
- Scientists from the Institute of Nano Science & Technology (INST), have developed an oral Nano medicine, for combating Visceral Leishmaniasis (VL).
- The Oral Nano medicine has been developed with the help of surface-modified solid lipid nanoparticles based combinational cargo system.
- The oral therapeutics could help in the control and elimination of VL.

Click here to know more about Kala-Azar

Source: PIB, the Hindu, Indian Express

