- Millets are a group of highly variable small-seeded grasses, widely grown around the world as cereal crops or grains for fodder and human food. Most species generally referred to as millets belong to the tribe Paniceae, but some millets also belong to various other taxa.
- Bajra (pearl millet), jowar (sorghum), ragi (finger millet), kodo (kodo millet), kutki (little millet), kakun (foxtail millet), sanwa (barnyard millet), cheena (proso millet), kuttu (buckwheat) and chaulai (amaranth) are high-nutrient different types of millets.
- The Union Agriculture Ministry, in April 2018, declared millets as "Nutri-Cereals", considering their "high nutritive value" and also "anti-diabetic properties".
- The year 2018 was observed as the National Year of Millets". The UN General Assembly adopted an India-sponsored resolution to mark 2023 as the "International Year of Millets".

Q.22) Ans: d
Exp:
Entomopathogenic fungi

- An entomopathogenic fungus is a fungus that can act as a parasite of insects and kills or seriously disables them. Entomopathogenic fungi (EPF) are common in terrestrial environments and can be important natural regulators of insect and arachnid populations.
- Entomopathogenic fungi, unlike other groups of insect pathogenic microorganisms, infect their hosts directly through the exoskeleton. In contrast, insect-associated viruses, bacteria and microsporidia penetrate and infect the host via the mid-gut following ingestion.
- Entomopathogenic fungi specifically infect and often kill insects and other arthropods. Most are non pathogenic to plants, and relatively non-toxic to humans and animals. Though fungus-infected insects can be commonly found in nature, and epizootics are observed impacting pest populations, mortality from fungal infection rarely occurs naturally at sufficiently high levels or early enough in a pest cycle to prevent economic loss.

Q.23) Ans: c
Exp:
'Harit Dhara'

- Indian Council of Agricultural Research (ICAR) institute has developed an anti-methanogenic feed supplement 'Harit Dhara'. When given to bovines and sheep, it not only cuts down their methane emissions by 17-20%, but also results in higher milk production and body weight gain. In other words, win-win for both the environment and livestock farmers.
- Harit Dhara acts by decreasing the population of protozoa microbes in the rumen, responsible for hydrogen production and making it available to the archaea for reduction of CO2 to methane.
- The Indian Council of Agricultural Research (ICAR) is an autonomous body responsible for co-ordinating agricultural education and research in India. It reports to the Department of Agricultural Research and Education, Ministry of Agriculture. The Union Minister of Agriculture serves as its president.

Q.24) Ans: c
Exp:

- Ranjit Sub1, Swarna Sub1 and Bahadur Sub1 are flood-tolerant paddy varieties developed by the Indian Council of Agricultural Research and the Manila-based International Rice Research Institute.
- The 'sub' mentioned in the varieties is the introduced submergence genes which are responsible for greater yields under flooded conditions.
- With its major rivers the Brahmaputra and Barak, which have more than 50 tributaries, the state of Assam is prone to floods and erosion. Low-lying areas remain submerged for as long as two weeks after flash floods, so switchover from traditional varieties of paddy is of prime importance.

Q.25) Ans: c
Exp:

- **Statement 1 is correct** : Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) is a **Department of Biotechnology, Ministry of Science and Technology** initiative that empowers farmers, especially women farmers. It aims to understand the problems of water, soil, seed and market faced by the farmers and provide simple solutions to them. The Scheme is for farmers, developed by and with farmers, it empowers