

APICULTURE

‘Apis’ is Latin for bee, and Apiculture is the science and practice of bee keeping. It refers to the keeping of bees for the production of honey, beeswax, propolis, pollen, royal jelly and to pollinate crops. A place where bees are kept is called **APIARY** or **BEE YARD** and a beekeeper is called **APIARIST**.

TYPES OF BEES

- i) **Indigenous Bees:** It refers to the local or native bee produced or kept within the country.
- ii) **Exotic Bees:** These are the imported bees or foreign bees kept within the country.

SERVICES RENDERED BY BEES

- ✓ The maintenance of biodiversity by the pollination of flowering plants
- ✓ The pollination of crops
- ✓ Apitherapy – medicine using bees’ products

PRODUCTS HARVESTED FROM BEES

- ✓ Honey
- ✓ Beeswax
- ✓ Pollen
- ✓ Propolis
- ✓ Royal jelly and venom

IMPORTANCE OF BEE KEEPING

1. **Pollination**
Bees pollinate flowering plants and thereby maintain the ecosystem. Bees pollinate cultivated crops.
2. **Honey**
People everywhere know and like honey, a valuable food and income source.
3. **Beeswax and other products**
Beeswax, propolis, pollen and royal jelly all have many uses, and can be used to create income.
4. **Few resources are needed**
Beekeeping is feasible even for people with minimal resources. Bees are obtained from the wild. Equipment can be made locally. Bees do not need the beekeeper to feed them.
5. **Land ownership not essential**
Hives can be placed anywhere convenient, and so beekeeping does not use up valuable land. Bees collect nectar and pollen wherever they can find it, so wild, cultivated and wasteland areas all have value for beekeeping.
6. **Nectar and pollen are otherwise not harvested**
Nectar and pollen are not used by other livestock: only bees harvest these resources, so there is no competition with other animals. Without bees these valuable resources could not be harvested.
7. **Different sectors and trades benefit from a strong beekeeping industry**
Other local traders benefit by making hives and equipment, and from using and selling the products.
8. **Beekeeping encourages ecological awareness**

Beekeepers have a financial reason to conserve the environment: ensuring that flowers are available and bees are protected.

9. **Everybody can be a beekeeper**

Bees can be kept by people of all ages. Bees do not need daily care and beekeeping can be done when other work allows.

10. **Beekeeping is benign**

Beekeeping generates income without destroying habitat. Encouraging beekeeping encourages the maintenance of biodiversity.

Other importance of Bee keeping include:

- ♣ Generation of foreign exchange earning.
- ♣ For medicinal purposes.
- ♣ For further extension of research on the usefulness of bee.

METHODS OF BEE KEEPING

i) **Traditional Method:** This is the use of local means and knowledge in keeping bee. This is done with local equipment.

ii) **Modern Method:** It is the use of advanced and foreign knowledge in the keeping of the bee.

BEE KEEPING EQUIPMENT

Beehives: A beehive is a secluded structure where honey bee hive and raise their young ones.



BEEHIVE

ii) **Hive Tools:** Hive tool is used to pry apart hive bodies and supers. Its large hooked end is ideal for lifting up frames and the flat end is used to scrape off any excess wax or propolis on the frames and hive walls.



HIVE TOOL

iii) **Bee Smokers:** Mostly called smoker, it is used in beekeeping to calm honey bees. It generates smoke from the smouldering.



BEE SMOKER

iv) **Jungle Boots:** Jungle boots are carefully crafted boots for use in hot, wet, and humid environments where other leather boots are not suitable.



JUNGLE BOOT

v) **Brushes:** It is a handy brush to brush bees off frames when inspecting or harvesting honey.



BEE BRUSH

PRECAUTIONARY MEASURES IN BEE KEEPING

- i) Locate apiaries far from human dwellings.
- ii) Put warning symbol near apiary.
- iii) Creation of space and ventilation for its increment.

ASSIGNMENT,

What are macro and micro nutrients?

Mention 5 examples of each of micro nutrients and macro nutrients.