Updated

QB365 Question Bank Software Study Materials

Economic Biology Important 2,3 & 5 Marks Questions With Answers (Book Back and Creative)

9th Standard

Science

Total Marks : 75

2 Marks

10 x 2 = 20

1) Define

a. Pisiculture

b. Apiculture

c. Vermiculture

d. Mariculture

e. Floriculture

f. Compost

g. Pomiculture

h. Pinning

Answer : a) Pisiculture

Pisiculture or Fish culture is the process of breeding and rearing of Economically important fishes under controlled conditions in ponds, reservoirs, lakes, rivers and paddy fields.

b) Apiculture

Apiculture is the rearing of honey bee for honey. Honey bee is domesticated by farmers to produce honey.

c) Vermiculture

The artificial rearing or cultivation of earthworms for the production of vermicompost.

d) Mariculture

Culture of fishes and other aquatic organism in marine water near the sea coast.

e} Floriculture

Production of ornamental plants.

f} Compost

A decomposed organic matter which is rich in nutrients. It is a soil conditioner, fertilizer, natural pesticide.

g} Pomiculture

Growing (or) cultivation of fruits.

h} Pinning

During Mushroom cultivation Mycelium starts to form little bud, which will develop into mushroom. Those little white buds are called pins.

2) How are classified feed for dairy cattle?

Answer : The feed for dairy cattle is broadly classified into two.

a) Roughages

b) Concentrates

3) Name the type of Biomanuring.

Answer : They are classified into three types. They are,

i) Animals manure

ii) compost

iii) Green manure

4) Where is green manure obtained?

Answer : Green manure is obtained by decomposition of green leaves, twigs of trees, shrubs and herbs growing in wetlands, field bunds, etc.

5) Give some types of Biofertilizers.

Answer : Rhizobium , Azospirillum, Azotobacter, Azolla and Mycorrhizae.

6) Give the expanded form.

i) CISR

ii) NBRI

iii) CIMAP

iv) BGR.34

Answer : i) CISR - The Council of Scientific and Industrial Research

ii) NBRI - National Botanical Research Institute

iii) CIMAP - Central Institute for Medicinal and Aromatic plants.

iv) BGR.34 - Blood Glucose Regulator.

7) Give some examples of Mushroom.

Answer : i) Button Mushroom (Agaricus bisporus)

ii) Oyster Mushroom (Pleurotus sps)

iii) Paddy straw Mushroom (Volvariella volvacea)

8) How is silage prepared?

Answer : Silage is prepared from green grass sorghum, cereals and weeds by using the entire green plant.

9) Give some examples of Indigenous and Exotic varieties of Honey bees. Indigenous varieties:

Answer : i) Apis dorsata (Rock bee or wild bee)

ii) Apis florea (Little bee)

iii) Apis indica (Indian bee)

Exotic varieties:

i) Apis mellifera (Italian bee)

ii) Apis Adamsoni (African bee)

10) List out the types of fish culture practices.

Answer : 1. Extensive fish culture

2. Lake culture
3. Intensive fish culture
4. Mono culture
5. Pond culture
6. Poly culture
7. Riverine fish culture
8. Integrated fish farming
9. Dam culture

3 Marks 10 x 3 = 30

11) What are secondary metabolites?

Answer : All the major system of medicines such as Ayurveda, Yoga, Unani, Siddha, Homeopathy use drugs obtained from plants and animals. These drugs from medicinal plants are called secondary metabolites.

12) What are the types of vegetable garden?

Answer : i) Kitchen or Nutrition gardening.

ii) Commercial gardening.

iii} Vegetable forcing.

13) Mention any two mushroom preservation methods.

Answer : i) Freezing

ii) Drying

iii) Canning

iv) Vacuum cooling

v) Gamma radiation and storing at 15°C

14) Enumerate the advantages of vermicompost over chemical fertiliser.

Answer : 1. It is a rich source of nutrients essential for plant growth. It makes the soil fertile.

2. It improves soil structure, texture aeration and water holding capacity and helps to prevent soil erosion .

3. It contains valuable vitamins, enzymes and growth regulator substances for increasing growth, vigour and yield of plants.

4. It enhances decomposition of organic matter in soil.

5. Vermicompost is free from pathogens and toxic elements.

6. Vermicompost is rich in beneficial microflora.

15) What are the species of earthworm used for vermiculture?

Answer : Perionyx excavatus (Indian blue worm), Eisenia fetida (Red worms), Eudrilus eugeniae (African night crawler) are the species of earthworm used for vermiculture.

16) List the medicinal importance of honey.

Answer : 1. Honey has an antiseptic and antibacterial property. It is a blood purifier.

2. It helps in building up of Haemoglobin content in the blood.

3. It is used in Ayurvedic and Unani system of medicines.

4. It prevents cough, cold, fever and relieves sore throat .

5. It is a remedy for ulcers of tongue, stomach and intestine.

6. It enhances digestion and appetite.

17) Why do we call Haryana and Kankrej breed of cattle as dual purpose breeds?

Answer : Because these breeds are fairly good with yielders and also useful for farm work. So they are called as dual purpose breeds.

18) What are Lingzhi mushrooms? Give some of its benefits?

Answer : Ganoderma lucidum is commonly known as Lingzhi mushroom which produces triterpenes similar to steroids.
Its benefits are

i) Oxygenates the body and boosts stamina.

ii) Provides more energy and vigour

iii) increases brain power

iv) Improves quality of sleep and blood circulation.

v) Reduces blood pressure

19) What is Panchagavya? How it is prepered?

Answer : 1. Panchgavya is an organic liquid fertilizer .

2. This product has the potential to play the role of promoting growth and, providing immunity to plant system.

3. It is prepared by mixing various products namely cow dung (25%), cow urine (25%), Fresh milk (15%) curd (10%), ghee (5%), Banana (5%), Tender coconut water (5%) and jaggery (10%).

20) Explain how soil gets affected by the continuous plantation of crops in a field.

Answer : Crops utilize minerals and nutrients form soil for growth and development. Regular sowing of crops in soil leads to exhaustion of soil minerals and nutrients. This adversely affects the crop yield and soil fertility.
It requires a need of replenishment of the soil nutrients consumed by crops to compensate the nutrient loss and make the soil ready for next harvest. It is done using the method of crop rotation and use of manure and fertilizers.

5 Marks 5 x 5 = 25

21) Enumerate the advantage of hydroponics.

Answer : **Advantages of hydroponics:**

1. Conservation of water and nutrients.
2. Controlled plant growth.
3. In deserts and Arctic regions hydroponics can be an effective alternative method.
4. Hydroponics is the method of growing plants without soil, using mineral nutrient solutions in water.
5. Hydroponics is successfully employed for the commercial production of seedless cucumber and tomato.

22) Give an account of different types of fish ponds used for rearing fishes.

Answer : Fish farm requires different types of pond for the various developmental stages of fish growth, they are

a) Breeding pond:

Healthy and sexually mature male and female fishes are collected and introduced in this pond for breeding. The eggs released by the female are fertilized by the sperm and fertilized eggs float in water as frothy mass.

b) Hatching pits:

The fertilized eggs are transferred to hatching pits for hatching.

c) Nursery ponds:

The hatchlings are transferred from hatching pits after 2 to 7 days. The hatchlings grow into fry and are cultured in these ponds for about 60 days with proper feeding till they reach 2 - 2.5 cm in length.

d) Rearing ponds:

Rearing ponds are used to culture the fry. The fish fry are transferred from nursery pond to rearing ponds and are maintained for about three months till they reach 10 to 15 cm in length. In these rearing ponds, the fry develops into fingerlings.

e) Stocking pond:

The stocking pond is also called as culture pond or production pond. These ponds are used to rear fingerlings upto the markable size. Before releasing the fingerlings the pond is manured with organic manure and inorganic fertilizers.

23) Classify the different breeds of the cattle with suitable examples.

Answer : Cattles are classified into three types

i) Dairy breeds

ii) Draught (or) Draft breeds

iii) Dual purpose breeds and Buffalo breeds

i) Dairy breeds:

1. Dairy animals are domesticated for obtaining milk.
2. They can be indigenous or Exotic breeds.
3. Indigenous breeds are native of India. They are well built with strong limbs, prominent hump and loose skin.
4. Milk production depends on the duration of the lactation period, these animals show excellent resistant to diseases.
5. Ex: Sahiwal, Red sindhi, Deoni and Gir.
6. Exotic breeds are imported from foreign countries, these foreign breeds are selected for long lactation periods.
7. Ex: Jersy, Brown swiss and Holstein - Friesian

8 The Indian breeds and foreign breeds can be cross bred to produce animals with both desired qualities.

ii) Draught (or) Draft breeds:

1. They are used for agricultural work, such as tilling, irrigation and carting.
2. Bullocks are good draft animals while the cows are poor milk yielders.
3. Ex: Amritmahal, Kangayam, Umblachery, Malvi

iii) Dual purpose breeds and Buffalo breeds:

Dual purpose breeds:

In India these breeds are favoured by farmers as the cows are fairly good milk yielders and bullocks are good for draught work. They include Haryana, Ongole, Kankrej and Tharparkar.

Buffalo breeds:

Buffaloes are the main milk producers in India. Murrah, Mehsana and Surti are Indigenous buffalo breeds which are good milk yielders.

24) Explain any five types Fish culture practices.

Answer : Pond culture: Rearing of fishes in pond water.

Dam culture: culture of fishes in artificial man made constructed reservoirs.

Lake culture: Rearing of fishes in lakes which are natural standing water bodies.

Mono culture: Culture of single type of fish in a water body. It is also called mono species culture.

Polyculture: Culture of more than one type of fish in a water body. It is also called composite fish culture.

25) Describe the types of fish culture practices.

Answer : Types of fish culture practices:

a) Extensive fish culture: Culture of fishes in large areas with low stocking density and natural feeding.

b) Intensive fish culture: Culture of fishes in small areas with high stocking density and providing artificial feed to increase production.

c) Poncl culture: Rearing of fishes in pond water.

d) Riverine fish culture: Rearing of fishes in lotic water.

e) Dam culture (Culture in Reservoir): Culture of fishes in artificial man made constructed reservoirs.

f) Lake culture (Culture in Lake): Rearing of fishes in lakes which are natural standing water bodies.

g) Monoculture: Culture of single type of fish in a water body. It is also called mono species culture.

h) Polyculture: Culture of more than one type of fish in a water body. It is also called composite fish culture.

i) Integrated fish farming: It is the culture of fishes along with agricultural crops or animal husbandry farming. Rearing of fish along with paddy. poultry cattle, pig and ducks.