

**Class: 12**  
**Subject: Biology**  
**Topic: Microbes in Human Welfare**  
**No. of Questions: 20**  
**Duration: 60 Min**  
**Maximum Marks: 60**

1. During anaerobic digestion of organic waste, such as in producing biogas, which one of the following is left undegraded?

- A. Hemicellulose
- B. Cellulose
- C. Lipids
- D. Lignin

Ans. D

Solution:

Lignin does not degraded in production of biogas.

2. Biogas is pathogen free because

- A. anaerobic digestion removes pathogens and bacteria
- B. it is toxic to pathogens
- C. during decomposition, it produces antibiotics
- D. cattle dung is pathogen free

Ans. A

Solution:

Biogas is pathogen free because anaerobic digestion inactivates pathogens and parasites and is quite effective in reducing the incidence of water borne diseases.

3. Which one of the following is correct?

- A. Herbicides kill plant mostly by blocking PS-II (photolysis of water) and occasionally phloem transport
- B. Insecticides kill insects mostly through impairment of nerve conduction and sometimes through respiratory arrest
- C. Both (a) and (b)
- D. None of the above

Ans. C

Solution:

Herbicides kill weeds and unwanted plants in cultivated land. Insecticides are those chemicals that destroy or kill insects. Herbicides kill plant mostly by blocking PS-II and occasionally phloem transport.

Insecticides kill insects mostly through impairment of nerve conduction and sometimes through respiratory arrest.

4. In September 2001, which of the following was used as a bioweapon agent in America?

- A. Botulinum
- B. Anthrax (*Bacillus anthracis*)
- C. Polio virus
- D. AIDS virus

Ans. B

Solution:

Anthrax is a fatal human disease caused by the bacterium *Bacillus anthracis*. This was used as a bioweapon agent in America in September 2001.

5. Green manures are prepared from

- A. *Saccharum officinarum*
- B. *Zea mays*
- C. *Crotalaria juncea*
- D. *Sorghum vulgare*

Ans. C

Solution:

Green manure includes leguminous crops like *Crotalaria juncea* (sunhemp), *Sesbania aculeata* (daincha), *Cyamopsis tetragonoloba* (cluster bean), etc.

6. Which one of the following is a petroleum plant?

- A. *Euphorbia*
- B. Potato
- C. Sugarcane
- D. Maize

Ans. A

Solution:

Those plants whose latex contains long chain of hydrocarbons are called petropants, e.g., *Euphorbia lathyris*, *Euphorbia caudicifolia*, *Calotropis procera*, *Pittosporum resiniferum*, etc.

7. Insecticides usually act upon

- A. digestive system
- B. nervous system
- C. circulatory system
- D. muscular system

Ans. B

Solution:

The chemical, which kills or inhibits the growth of insects is called **insecticide**. These chemicals control insects by acting upon the respiratory system or nervous system.

8. Zebu cattle is

- A. Water Buffalo
- B. Indian Buffalo
- C. Cow
- D. Sheep

Ans. C

Solution:

Zebu (*Bos primigenius indicus* or *Bos indicus*), sometimes known as humped cattle, indicus cattle, or brahmin cattle are just a type of domestic cattle originating in South Asia (the Indian subcontinent). They are characterised by a fatty hump on their shoulders, drooping ears and a large dewlap

9. Exotic breeds

- A. Require specific environment
- B. Hardy
- C. Sturdy
- D. Take less food

Ans. A

10. Silkworm involved in production of mulberry silk is

- A. *Bombyx mori*
- B. *Antheraea mylitta*
- C. *Antheraea roylei*
- D. *Antheraea assama*

Ans. A

11. First unbeaking in chicken is done on

- A. 6th day
- B. 15th day
- C. 21st day
- D. 28th day

Ans. C

12. If more than single species of fish is cultured at a time, then it is called

- A. Monoculture
- B. Aquaculture
- C. Polyculture
- D. Mori culture

Ans. C

13. Clams and Oysters are components of

- A. Shell fishery
- B. Crustacean fishery
- C. Inland fishery
- D. Estuarine fishery

Ans. A

14. Best source for dietary protein for a vegetarian is

- A. Soy Bean
- B. Gram
- C. Groundnut
- D. Milk

Ans. A

Solution:

The soy protein has a high biological value and contains all the essential amino acids. Per 100 gm of soyabean contains 36.5gm of protein

15. Sericteries are modified

- A. Salivary glands
- B. Gastric glands
- C. Endocrine glands
- D. Intestinal glands

Ans. A

16. A viral disease of poultry is

- A. Coryza
- B. New Castle disease
- C. Pasteurellosis
- D. Salmonellosis

Ans. B

17. Fish meal is

- A. Meal for fish
- B. Food fish
- C. Waste fish
- D. None of the above

Ans. C

Solution:

Fishmeal is a nutrient-rich feed ingredient used primarily in diets for domestic animals and sometimes used as a high-quality organic fertilizer. It is a high protein supplement made by either cooking, pressing, drying and grinding of fish or fish waste to which no other matter has been added. It is a solid product from which most of the water is removed and some or all of the oil is removed

18. Breeding in Fowl is done between

- A. Six-month old hen and cock
- B. One-year-old hen and two-year-old cock
- C. Two-year-old hen and one-year-old cock
- D. Two-year-old hen and cock

Ans. C

19. Which one of the following is a disease resistant, high yielding breed of poultry developed in Karnataka?

- A. Aseel
- B. White leg horn
- C. Giriraja
- D. Plymouth rock

Ans. C

20. Leghorn and Minorca are breeds of chicken belonging to

- A. Britain
- B. America
- C. India
- D. Mediterranean

Ans. D