DPP
DAILY PRACTICE PROBLEMS

Class : XIth Date :	**Solutions**	Subject : BIOLOGY DPP No. : 9

Topic :- Biological Classification

1 **(c)**
The term 'holozoic nutrition' refers to the type of nutrition in which organisms feed by engulfing or ingesting complex organic food material, which is subsequently digested and absorbed. This type of nutrition is seen in *Amoeba*, *Paramecium*, chordates, etc.

2 **(a)**
A closed fruit or ascocarp is called the **cleistothecium**. The cleistothecium of *Penicillium* repesents parent haplophase, dikaryophase and future haplophase.

3 **(a)**
Transduction involves the picking up of DNA by bacteriopage from one bacterial cell and carrying in to another where the DNA fragment may get incorporated into the bacterial host's genome.

4 **(a)**
Contractile vacuoles and food vacuoles are absent in the class-Sporozoa.

5 **(c)**
The mutually beneficial or symbiotic association of a fungus with the root of a higher plants is known as mycorrhiza. The fungus is dependent upon the higher plants for shelter and food

6 **(b)**
A lichen is structurally organised entity consisting of a permanent association of a fungus and an alga. The fungal component of a lichen is called mycobiont and the algal component is called phycobiont

7 **(b)**
Fungi is a group of eukaryotic, achlorophyllous, non-photosynthetic heterotrophic organisms of diverse forms, size and mode of reproduction. Fungicause a number of plant and animal diseases, *e.g*., black rust of wheat, red rot of sugarcane, late blight of potato, etc.

8 **(a)**

Curing of tea leaves is brought about by the activity of bacteria. It is essentially an oxidation dry fermentation process, during which water is driven, the green colour is lost and the leaves assume a tougher texture and undergo chemical changes.

9   **(b)**
Aristotle was the earliest to attempt a more scientific basis for classification. He used simple morphological characters to classify plants into trees, shrubs and herbs. He also divided animals into two groups, those which had red blood and those that did not

10   **(c)**
Life cycle of plants has two distinct phase, the haploid gametophyte and diploid sporophyte generations that alternates with each other

11   **(a)**
Bacterial flagellum us made up of protein called **flagellin**. These protein molecules are globular and are arranged in 3-8 spiral rows.

12   **(b)**
All are correct except IV and V
Some unicellular fungi like yeast, are used to make bread and beer, *Ustilago* is responsible for smut disease
Puccinia graminis tritici is responsible for black rust of wheat

13   **(b)**
In lichens, the fungal partner provides protection, anchorage and absorption for the alga.

14   **(d)**
Amoeba is not a photoautotrophic animal instead it takes food from their surroundings. *Amoeba* is an omnivorous animals because it takes algae, bacteria and other similar microorganisms. It takes food with the help of pseudopodia. Food particles are taken by endocytosis process, *i.e.*, holozoic nutrition.

15   **(a)**
The bacterial flagellum is long, filamentous and protoplasmic appendage, arise in the cell envelope. In the bacterial flagella, instead of 9+2 arrangement of tubulin there is simply a single filament of globular protein called **flagellin.**

16   **(a)**
Viruses did not find a place in classification since they are not truly living

17   **(b)**

The denitrifying bacteria reduce the nitrates and the ammonium salts to free nitrogen which escapes into the atmosphere. *e.g., Bacillus denitrificans*. This process decreases fertility of the soil.

18 **(d)**
Anthrax is an acute disease caused by the bacterium *Bacillus anthracis*

19 **(a)**
The name virus that means venous or poisonous fluid was given by Pasteur. DJ Ivanowsky (1892) recognised certain microbes as causal organism of the mosaic disease of tobacco

20 **(b)**
Protozoans lack cell wall. Cell wall is the characteristic feature of plant cells. Slime moulds are diploid, *e.g., Physarum*. Dinoflagellates are motile, *e.g., Noctiluca, Peridinium*, etc. The body of *Euglena* is covered with pellicle.

Q.	1	2	3	4	5	6	7	8	9	10
A.	c	a	a	a	c	b	b	a	b	c
Q.	11	12	13	14	15	16	17	18	19	20
A.	a	b	b	d	a	a	b	d	a	b