

Topic :- Biological classification

- 1 **(d)**
Monerans include prokaryotic bacteria and cyanobacteria which lack nuclear membrane and membrane bound cell organelles but have DNA and RNA.
- 2 **(c)**
The main types of locomotory organs in Protozoa are pseudopodia (*e.g., Amoeba*), flagella (*e.g., Euglena, Trypanosoma*) and cilia (*e.g., Paramecium*), while parapodium are found in polychaete annelid worms.
- 3 **(b)**
Slime moulds are commonly found on dead and decaying leaves, twigs, logs of wood and the other decaying vegetable matter
- 4 **(c)**
Viruses inhabiting in bacteria.
Bacteriophages is a virus that infects and replicates within bacteria. Bacteriophages are composed of proteins that encapsulate a DNA or RNA genome and may have relatively simple or elaborated structure
- 5 **(d)**
Fungi shows sexual reproduction by oospores, ascospores and basidiospores. The various spores are produced in distinct structures called fruiting bodies
- 6 **(d)**
Black rust of wheat is caused by *Puccinia graminis tritici*
- 7 **(a)**
Dinoflagellates.
Some dinoflagellates, such as *Gymnodinium* and *Gonyaulax* grows in large number in the seas and make the water look red and causes the red tides
- 8 **(d)**
Puccinia graminis tritici belongs to class-Basidiomycetes. It causes black rust of wheat.

- 9 **(a)**
When the flagella are found on whole body of the bacterium, they are called **peritrichous**,
e.g., Salmonella.
- 10 **(b)**
In fungi, at the time of sexual reproduction, the cytoplasm of two sex cells fuses with each other. The nuclei of two sex cells come close to each other but do not fuse. Thus, the resulting cell becomes binucleate or dikaryon. The phenomenon is sometimes termed as dikaryotisation
- 11 **(a)**
Bacteria are prokaryotic microscopic, unicellular cell wall bearing organisms, which contain bacteriochlorophyll. Majority of the bacteria multiply by transverse **binary fission**, in which a single cell is divided into two equal sized cells by developing a cell wall.
- 12 **(b)**
Episome is an extrachromosomal hereditary material of bacteria incorporated into the bacterial chromosomes or nucleoid. Hereditary DNA of bacterial cell is known as nucleoid.
- 13 **(c)**
Wound tumour virus is a double stranded RNA (dsRNA) containing plant infecting virus. Reovirus also contains double stranded RNA molecule.
- 14 **(b)**
Frankia cannot fix nitrogen in the free living state.
- 15 **(a)**
Soft-rot disease of sweet potato is caused by *Rhizopus stolonifer*. This is a very destructive disease. It is prevalent in almost all sweet potato growing states of India, such as Uttar Pradesh, Bihar, Orissa, West Bengal, Tamil Nadu and Kerala.
- 16 **(c)**
Bacterial chromosomes are circular DNA molecules.
- 17 **(c)**
Hyphae.
The body of a fungus (except yeast) is made up of number of elongated, tubular filaments known as hyphae. The mass of network of hyphae is called mycelium

- 18 **(d)**
Viruses are known as a connecting link between non-living and living beings. These are thought to be non-living as they do not show any sign of life outside the host and are able to be crystallized but they show the characters of living beings as they are able to multiply (only inside the host), can cause disease in host and undergo mutation.
- 19 **(c)**
Methanogens occurs in marshy areas where they convert formic acid and carbon dioxide into methane with the help of hydrogen. This capability is commercially exploited in the production of methane (biogas) from the dung of cows and buffaloes
- 20 **(a)**
Contractile vacuole in *Amoeba* is concerned with osmoregulation, *i.e.*, removal of excess of water. It is present in the endoplasm of *Amoeba* in the posterior part (near the trailing end) and seen as a clear single rounded and pulsating vacuole, which is enclosed by unit membrane.

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

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