## CBSE TEST PAPER-02 CLASS - XI BIOLOGY (Biological Classification)

## **General Instruction:**

- All questions are compulsory.
- Question No. 1 to 3 carry one marks each. Question No. 4 to 6 carry two marks each. Question No. 7 and 8 carry three marks each. Question No. 9 carry five marks.
- 1. Name the five kingdoms in which the organisms are grouped together?
- 2. Which organisms are known as "Jokers of plant kingdom".
- 3. In which class of fungi sexual reproduction does not occur?
- 4. Explain phylogenetic system of classification?
- 5. What is the basis of Whittaker's system of classification?
- 6. Find out what do the terms "algal bloom"& "red tides" signify?
- 7. Distinguish between bacteria & cyanobacteria?
- 8. Describe the salient features of protists?
- 9. Explain the various methods of asexual & sexual reproduction in fungi?

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1. Monera, Protista, Fungi, Plantae & Animalia.

2. Mycoplasma

3. Deuteromycetes

4. phylogenetic system of classification is based on evolutionary relationships of organisms.

It reflects true relationship between organisms. It is neither static nor dynamic. Its sources are fossils records that are never complete due to difficulty in formation, exposure, discovery & study.

5. Whittaker based his classification on following three criteria :-

i) Structure of cell i-e. prokaryotic Vs. Eukaryotic organization.

ii) Unicellular Vs. multi cellular organisms

iii) Different modes of nutrition – parasitic, autotrophic or heterotrophic.

6. i) Algal bloom refers to the excessive growth of algae in water body due to enrichment of excessive nutrients in it.

ii) The red dinoflagellates undergo rapid multiplication eg. Gonyaulux which make the sea appear red. It is called red tide.

7.

BACTERIA	CYANOBACTERIA
i) cells are comparatively smaller	i) Cells are comparatively larger.
ii) They have lesser structural elaboration	ii) They exhibit high degree of morphological complexity & structural elaboration.
iii) Most bacteria have flagella	iii) Do not have flagella.
iv) Are autotrophic & heterotrophic both	iv) Are autotrophic.
v) Possess bacteriochlorophyll	v) Possess chlorophyll.
vi) Reserve food is glycogen	vi) reserve food is starch like cyanophycean starch

8. i) They are single celled colonial filamentous eukaryotes.





ii) They grow in humid & moist environment.

iii) Some are photosynthetic some are not.

iv) Some forms are like plants & some like animals.

v) Contain membrane bound organelles.

vi) Protozoan's are unicellular heterotrophic

vii) Examples- protozoan's, slime moulds, Euglenoid, diatoms, dinoflagellate

9. 1) ASEXUAL REPRODUCTION:- Special types of reproductive cells are formed in asexual reproduction in fungi. They are known as spores.

a) Zoospores :- Zoospores are motile eg. phycomycetes. They may have one or more flagella. On germination zoospores produces new mycelium.

b) Oidia :- Some oval or spherical spores are found in mucor. They are formed by small segment of hyphae.ek

c) Conidia:- conidia are formed in some fungi as a means of asexual reproduction. They are borne on conidiospores eg. penicillium.

d) Chlamydospores :- Thick walled resting spores are produced in some fungi. They may be terminal or intercalary.

2) SEXUAL REPRODUCTION:- There are three kinds of sexual reproduction in fungi:-

i) Isogamy:- It is the fusion of morphologically similar gametes.

ii) Anisogamy:- It is the fusion of two morphologically & physiologically dissimilar gametes.

iii) Oogamy:- It is the fusion of female egg with that of male antherozoids. These gametes are produced in oogonium & anthridium respectively.

iv) Also have Dikaryogamy, in which karyogamy is altered .