

MICROBIOLOGY
INTERNAL QUESTION BANK
CHOOSE THE CORRECT ANSWERS

1. Which of this bacterium is resistant to penicillin as it lacks a cell wall?

- (a) Spirochetes
- (b) Cyanobacteria
- (c) Mycoplasmas**
- (d) Eubacteria

2. What is a cluster of polar flagella called?

- (a) Petritrichous
- (b) Monotrichous
- (c) Amphitrichous
- (d) Lophotrichous**

3. Which of these is a coccus occurring in single or pairs?

- (a) Diplococci**
- (b) Streptococci
- (c) Tetracocci
- (d) None of the above

4. Flagella in bacteria enable them to

- (a) reproduce
- (b) locomote**
- (c) Thrive in nutrient agar
- (d) Adhere to tissue surfaces

5. This about cell wall of gram-positive bacteria is true

- (a) cell wall comprises of many layers
- (b) the cell wall is thicker than the associated gram-negative bacteria
- (c) Cell wall comprises of teichoic acids
- (d) All of the above**

6. This fungi division includes 'Club fungi'

- (a) Zygomycota
- (b) Deuteromycota
- (c) Basidiomycota**
- (d) Ascomycota

7. The fungi which derive their food directly from dead organic matter are known as

- (a) Predators
- (b) Decomposers**
- (c) Mutualists
- (d) Parasitic fungi

8. What does 'Perfect stage' of a fungus indicate?

- (a) indicates that it can reproduce asexually
- (b) indicates that it is perfectly healthy
- (c) indicates that it is able to form perfect sexual spores**
- (d) All of the above

9. Death angel/death cap (amanita) and Jack O Lantern mushroom are all examples of

(a) Poisonous mushrooms

- (b) Edible mushrooms
- (c) None of the above
- (d) Both (a) and (b)

10. Unicellular eukaryotes are grouped in

(a) Monera

(b) Protista

(c) Archaea

(d) Fungi

11. Which class does the malarial parasite belong to?

(a) dinophyceae

(b) sarcodina

(c) ciliata

(d) sporozoan

12. "Amoebiasis" or amoebic dysentery is caused by_____.

(a) Trypanosoma histolytica

(b) Entamoeba histolytica

(c) Entamoeba gingivalis

(d) Plasmodium vivax

13. Which of the following shows zygotic meiosis?

(a) Chlamydomonas

(b) Marchantia

(c) Funaria

(d) Fucus

14. Which of the following has non-flagellated isogamous gametes?

(a) Spirogyra

(b) Chlamydomonas

(c) Volvox

(d) Fucus

15. Blue-green algae are included in

- (a) Prokaryotes
- (b) Protista
- (c) Fungi
- (d) Bryophytes

16. Which of the following structure contains a polar nodule on both ends

- (a) **heterocyst**
- (b) hormogonia
- (c) akinetes
- (d) None of the above

17. Heterocyst of Nostoc are

- (a) **intercalary**
- (b) terminal
- (c) both terminal and intercalary
- (d) none

18. Sexual reproduction is absent in

- (a) Volvox
- (b) **Nostoc**
- (c) Aspergillus
- (d) Ulothrix

19. Which of the following antimicrobial drugs is synthetic?

- (a) **sulfanilamide**
- (b) penicillin
- (c) actinomycin
- (d) neomycin

20. Which of the following has yielded compounds with the most antimicrobial activity?

- (a) water
- (b) air
- (c) volcanoes
- (d) **soil**

FILL IN THE BLANKS

1) Which is not an appropriate target for antifungal drugs? **Cholesterol**

2) Which of the microorganisms thrive under extreme environmental conditions like high temperature and acidic pH, lack of oxygen, and high salt concentration? **Archaeabacteria**

3) The two categories of hyper thermophilic organisms that live in strongly acidic (pH2) environments are known as **Eubacteria and Archeae**

4) In Extreme Saline Conditions which of the Following is found? **Archaeabacteria**

5) A virus is made up of **protein and nucleic acid**

6) The protein coat of viruses that enclose the genetic material is called **Capsid**

7) HIV is a **Lentivirus**

8) The rotavirus is an important cause of **Gastroenteritis in children**

9) What is the genetic structure of rotavirus?

ds RNA virus in segments

10) There are 57 serotypes of adenovirus currently recognised. Which has the most important clinical impact?

Respiratory tract infections

11). What disease do herpes viruses not cause?

Infantile paralysis

12) Which can be used as host cells for culturing animal viruses?

Chicken eggs

13) Which part of the chicken's egg is used for the cultivation of poxviruses?

Chorioallantoic membrane

14) Which serious ailment does the Poliovirus cause all over the world?

poliomyelitis

15) The region where the polio virus multiplies in the body is

intestinal cells

16) Which of the following coronaviruses has caused thousands of deaths around the world as an 'emergent' virus?

SARS

17) MERS has four special characteristics and here we have one exception - which is it?

Spread by faecal oral route

18) A fully formed infectious viral particle is called _____.

Virion

19) The shape of the TMV is _____.

Rod-shaped

20) Bacteriophages that induce bacterial cell lysis are called _____.

Viroids

LONG QUESTION AND ANSWERS

1) Explain the general and structural characteristics and its industrial importance of Bacteria?

2) Mention the economic importance of Algae and cyanobacteria?

3) Write the General characteristics of fungi?

4) Explain about Lytic and Lysogenic cycle of Bacteriophage?

5) Mention the applications of viruses in Biotechnology?