

# QB365 Question Bank Software Study Materials

## Zoology - Microbes in Human Welfare 50 Important 1 Marks Questions With Answers (Book Back and Creative)

12th Standard

Biology

Total Marks : 50

Multiple Choice Question

50 x 1 = 50

- 1) Which of the following microorganism is used for production of citric acid in industries?  
(a) Lactobacillus bulgaris (b) Penicillium citrinum **(c) Aspergillus niger** (d) Rhizopus nigricans
- 2) Which of the following pair is correctly matched for the product produced by them?  
(a) Acetobacter aceti - Antibiotics (b) Methanobacterium - Lactic acid (c) Penicilium notatum - Acetic acid  
**(d) Saccharomyces cerevisiae - Ethanol**
- 3) The most common substrate used in distilleries for the production of ethanol is \_\_\_\_\_  
(a) Soyameal (b) Groundgram **(c) Molasses** (d) Corn meal
- 4) Cyclosporin – A is an immunosuppressive drug produced from \_\_\_\_\_  
(a) Aspergillus niger (b) Manascus purpureus (c) Penicillium notatum **(d) Trichoderma polysporum**
- 5) CO<sub>2</sub> is not released during  
(a) Alcoholic fermentation **(b) Lactate fermentation** (c) Aerobic respiration in animals (d) Aerobic respiration in plants
- 6) The purpose of biological treatment of waste water is to \_\_\_\_\_  
**(a) Reduce BOD** (b) Increase BOD (c) Reduce sedimentation (d) Increase sedimentation
- 7) The gases produced in anaerobic sludge digesters are  
(a) Methane, oxygen and hydrogen sulphide (b) Hydrogen sulphide, methane and sulphur dioxide  
(c) Hydrogen sulphide, nitrogen and methane **(d) Methane, hydrogen sulphide and CO<sub>2</sub>.**
- 8) Cry toxins obtained from Bacillus thuringiensis are effective against for \_\_\_\_\_  
(a) Mosquitoes (b) Flies (c) Nematodes **(d) Bollworms**
- 9) Which of the following bacteria is used extensively as a bio-pesticide?  
**(a) Bacillus thurigiensis** (b) Bacillus subtilis (c) Lactobacillus acidophilus (d) Streptococcus lactis
- 10) The enzyme \_\_\_\_\_ is got from Aspergillus.  
(a) Rennet (b) Zymase **(c) Amylase** (d) Lipase
- 11) Lactobacillus helps to produce \_\_\_\_\_  
**(a) Citric acid** (b) Milk (c) Acetic acid (d) Butyric acid
- 12) Aspergillus niger helps to produce \_\_\_\_\_  
(a) Citric acid (b) Acetic acid (c) Turmeric acid **(d) Lactic acid**
- 13) Genetically engineered \_\_\_\_\_ are used as clot buster in cardiac related issues  
(a) Staphylococcus (b) Yeast (c) Penicillium **(d) Streptococci**
- 14) \_\_\_\_\_ is not used as a biofertilizer

- (a) **Bacillus thuringiensis** (b) Rhizobium (c) Nostoc (d) Anabaena

15) \_\_\_\_\_ is used for recycling of PET plastics

- (a) Dechloromonas aromatica (b) Phanerochaete chrysosporium (c) **Ideonella sakaiensis** (d) Nitrosomonas

16) The cry toxin affects \_\_\_\_\_ system of insect pests

- (a) Nervous system (b) Respiratory system (c) **Digestive system** (d) Reproductive system

17) \_\_\_\_\_ is a prokaryotic organism helping to improve fertility of the soil

- (a) Glomus (b) Azolla (c) legume (d) **Tolypothrix**

18) Identify the free living nitrogen fixing bacteria \_\_\_\_\_

- (a) **Azotobacter** (b) Rhizobium (c) Glomus (d) Ideonella sakaiensis

19) \_\_\_\_\_ is not a biocontrol agent

- (a) Trichoderma (b) Dragonfly (c) **Glomus** (d) Buculovirus

20) Read the following four statements (A to D):

- a) Colostrums is recommended for the newborn because it is rich in antigen.  
 b) Chikungunya is caused by a gram negative bacterium.  
 c) Tissue culture has proved useful in obtaining virus-free plants.  
 d) Beer is manufactured by distillation of fermented grape juice

How many of the above statements are wrong?

- (a) **Three** (b) Four (c) One (d) Two

21) Which of the following are likely to be present in deep-sea water?

- (a) **Archaeobacteria** (b) Eubacteria (c) Blue-green algae (d) Saprophytic fungi

22) What gases are produced in anaerobic sludge digesters?

- (a) Methane and CO<sub>2</sub> only (b) **Methane, hydrogen sulphide and CO<sub>2</sub>** (c) Methane, hydrogen sulphide and O<sub>2</sub>  
 (d) Hydrogen sulphide and CO<sub>2</sub>

23) Match, the following list of microbes and their importance:

a) Saccharomyces cerevisiae	(i) Production of immunosuppressive agents
b) Monascus purpureus	(ii) Ripening of Swiss cheese
c) Trichoderma polysporum	(iii) Commercial production of ethonol
d) ropionibacterium shermanii	(iv) Production of blood - cholesterol lowering agents.

- (a) (iv) (iii) (ii) (i) (b) (iv) (ii) (i) (iii) (c) (iii) (i) (iv) (ii) (d) **(iii) (iv) (i) (ii)**

24) Which of the following is wrongly matched in the given table?

(a)

Microbe	Product	Application
Trichoderma polysporum	Cyclosporin A	Immunosuppressive drug

(b)

Microbe	Product	Application
Monascus purpureus	Statins	Lowering of blood cholesterol

(c)

Microbe	Product	Application
Streptococcus	Sterptockinase	Removal of clot from blood vessel

(d)

Microbe	Product	Application
<b>Clostridium butylicum</b>	<b>Lipase</b>	<b>Removal of oil stains</b>

25) Match Column - I with Column - II and select the correct options using the codes given below:

Column I	Column II
A. Citric acid	1. Trichoderma
B. Cyclosporin A	2. Clostridium
C. Statins	3. Aspergillus
D. Butyric acid	4. Monascus

- (a) A:3, B:1, C:4, D:2    (b) A:1, B:4, C:2, D:3    (c) A:3, B:4, C:1, D:2    **(d) A:3, B:1, C:2, D:4**
- 26) The leavering of the dough during fermentation is due to \_\_\_\_\_
- (a) Formation of ethyl alcohol    **(b) Formation of CO<sub>2</sub>**    (c) Formation of oxygen    (d) Action of zymase enzyme
- 27) Name the person who was the first to use the term antibiotic
- (a) Selman Waksman**    (b) Alexander Flemming    (c) Earnest Chain    (d) Howard Florey
- 28) Chlortetracycline was isolated from the culture \_\_\_\_\_
- (a) Streptomyces aureofaciens**    (b) Streptomyces griseus    (c) Streptococcus lactis    (d) Aspergillus niger
- 29) Pick the bacterial species which is not used in ethanol formation
- (a) Zymomonas mobilis    (b) Sarcina ventriculi    (c) Saccharomyces cerevisiae    **(d) Streptomyces aureofaciens**
- 30) Human insulin is being commercially produced from a transgenic species of \_\_\_\_\_
- (a) Escherichia**    (b) Mycobacterium    (c) Streptococcus    (d) Penicillin
- 31) Select the correct statement from the following
- (a) Primary treatment of sewage involves biological oxidation**    (b) Excreta of cattle is commonly called Gobur
- (c) Delta endotoxin of Bacillus thuringiensis is encoded by pen-genes
- (d) Trichoderma is a free-living bacteria very common in root ecosystem
- 32) Oil stains in laundry can be removed using \_\_\_\_\_
- (a) Peptidase    (b) Protease    (c) Amylase    **(d) Lipase**
- 33) The flavour in the yogurt is due to \_\_\_\_\_
- (a) Formaldehyde    (b) Lactate    **(c) Acetaldehyde**    (d) Casein
- 34) Assertion (A): Streptomycin is an antibiotic.  
Reason (R): Antibiotic are microbial chemicals inhibits the growth of pathogenic microbe.
- (a) A is right R is wrong.    **(b) R explains A.**    (c) A and R are wrong.    (d) A and R are right. R cannot explain A
- 35) Which of the following plant species is the most suitable oilseed for biodiesel production?
- (a) Ground nut    (b) Areca nut    **(c) Jatropha curcas**    (d) Phyllanthus anarus
- 36) Corn  $\xrightarrow{A}$  Fermentable sugars  $\xrightarrow{B}$  Ethanol. Find out A and B for above statement.
- (a) A - Agaricus, B - Sarcina    (b) A - Zymomonas, B - Vinegar    (c) A - Rhizopus, B - Aspergillus
- (d) A - Aspergillus, B - Yeast**
- 37) Waksman got Nobel Prize for his discovery of
- (a) Penicillin    (b) Neomycin    (c) Chloromycetin    **(d) Streptomycin**
- 38) A compound produced by an organism that inhibits the growth of another micro-organism is called
- (a) Antiseptic    **(b) Antibiotic**    (c) Anticoagulant    (d) Antibodies
- 39) Immobilisation protects an enzyme against
- (a) High temperature    (b) Low temperature    (c) Amylases    **(d) Proteases**
- 40) Immobilized yeast is
- (a) Preserved for future use    (b) Little active in fermentation    **(c) 20 times more efficient**    (d) Food yeast
- 41) Tissue plasminogen activator is

- (a) A vitamin (b) An electric device **(c) An enzyme** (d) A chemical that stimulates tissue differentiation
- 42) Biogas Production is  
(a) Single step aerobic Process (b) Two step aerobic process (c) Three step aerobic process  
**(d) Three step anaerobic process**
- 43) Which is correct?  
(a) Legumes fix nitrogen through bacteria in their leaves. **(b) Legumes fix nitrogen through bacteria in their roots**  
(c) Legumes fix nitrogen independent of bacteria (d) Legumes do not fix nitrogen.
- 44) Mycorrhiza is a symbiotic association between  
(a) Bacteria and fungi (b) Algae and fungi **(c) Fungi and roots of higher plants**  
(d) blue green algae and roots of higher plants
- 45) Pheromone traps have  
(a) Sterile males (b) Male pheromones **(c) Female pheromones** (d) Sterile females
- 46) The earliest pesticide was  
**(a) Margosa** (b) pyrethrum (c) Nicotine (d) DDT
- 47) Yeast is used in preparation of  
(a) Acetic acid (b) Curd **(c) Ethyl alcohol** (d) Cheese
- 48) Terramycin is got from  
(a) Streptomyces griseus (b) S. venezuelae (c) S. aureofaciens **(d) S. ramosus**
- 49) Glucose fermentation by yeast yields  
**(a) Ethanol + CO<sub>2</sub>** (b) Ethanol + H<sub>2</sub>O (c) Methanol + CO<sub>2</sub> (d) H<sub>2</sub>O + CO<sub>2</sub>
- 50) BGA is chiefly used as fertilizer in  
(a) Wheat **(b) Paddy** (c) Mustard (d) Gram