

BIOLOGY

BOOKS - MODERN PUBLICATION

MICROBES IN HUMAN WELFARE

Exercise

1. Greater the BOD of sewage water, its polluting ability is:

A.	lower

B. higher

C. not effective

D. None of the above

Answer: C



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2. lady bird beetle and dragon flies are useful to get rid of:

B. Aphids		
C. Mosquitoes		
D. Both (b) and (c)		
Answer: D		
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3. Wine and beer are produced:		
A. Without distillation		

A. Butterfly caterpillar

- B. with distillation
- C. by distillation of fermented broth
- D. from ethanol

Answer: A



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4. Which of the following acts competitively inhibiting enzyme responsible for synthesis of cholesterol:

A. Stains

B. Cyclosporins

C. Streptokinase

D. Lipases

Answer: B



- **5.** Associated symbiosis is shown by:
 - A. Rhizobium

- B. Erankia
- C. Azospirillium
- D. Both (a) and (b)

Answer: D



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6. Which of the following is not a free living bacterium?

A. Anabaena

- B. Azotobacter
- C. Azospirillium
- D. Cynabobacteria

Answer: B



- **7.** Thurioside is a:
 - A. Chemical Pesticide
 - B. Proteinaceous toxin of bacterial origin

- C. BOTfertilizer
- D. BOTherbicide

Answer: B



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8. Rotenone is:

- A. BOTnisecticide
- B. junvenile hormone
- C. BOTherbicide

D. commonly used BOTfertilizer

Answer: A



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9. Ectomycorrhiza is found:

A. on the roots of maize

B. on the roots of groundnut

C. on the roots of rice

D. on the roots of like pine and oak

Answer: D



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10. Which one of the following is free living nitrogen fixing cyanobacterium?

- A. Nitrosomoonas
- B. Rhizobium
- C. Stigonema
- D. Nitrobacter

Answer: C



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11. Biopesticides are:

A. The chemical which are used to destroy the pests

- B. The living organisms or their products which are used for the pest control
- C. The organism which destroy the crops

D. None of the above

Answer: B



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12. Major sources of biofertilizers are:

A. selected symBOTtic micro-organisms

B. only nitrogen fixing bacteria

C. only nitrogen fixing cyanobacteria

D. bacteria, cyanobacteria and fungi

Answer: D



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13. Mycorrhiza is a:

A. symBOTtic association of fungi with algae

B. symBOTtic association of fungi with gymnosperms

C. symBOTtic association of fungi with angiosperms

D. symBOTtic association of fungi with the roots of certain seed-bactering plants

Answer: D



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14. The vitamin whose content increases following the conversion of milk into curd by lactic acid bacteria is

- A. vitamin C
- B. vitamin D
- C. vitamin B₁₂
- D. vitamin E

Answer: C



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15. The primary treatment of waste water involves the removal of :

- A. dissolved impurities
- B. stable particles
- C. toxic substances
- D. harmful bacteria

Answer: B



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16. BOD of waste water is estimated by measuring the amount of :

- A. total organic matter
- B. BOTdegradable organic matter
- C. oxygen evolution
- D. oxygen consumption

Answer: D



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17. Which one of the following alcoholic drinks is produced without distillation?

A. Wine	
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B. Whisky

C. Rum

D. Brandy

Answer: A



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18. The residue left after methane production from cattle dung is :

- A. burnt
- B. buried in landfills
- C. used as manure
- D. used in civil construction

Answer: C



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19. Farmers have reported over $50\,\%$ higher yields of rice by using the biofertilizer:

- A. Mycorrhiza
- B. Azolla pinnata
- C. Cynabobacteria
- D. Legume-Rhizobium symBOTsis

Answer: C



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20. Biological control component is central to advanced agricultural production. Which of

the following is used as a third generation pesticide?

A. Insect hormone analogues

B. Insect repellants

C. Phermones

D. Pathogens

Answer: A



21. Which one of the following is non-symbiotic biofertilizer

- A. VAM
- B. Azobacter
- C. Anabena
- D. Rhizobium

Answer: B



- 22. A biofertilizer is:
 - A. farmyard manure consisting of mixture of cattle dung and crop residues
 - B. green manure in which a quick growing crop is cultivated and ploughed under
 - C. a cyanobacterium like Anabena sp. Living in cavities of Azolla leaves
 - D. symBOTtic bacteria like Azotobacter which fix atmosphere nitrogen

Answer: C



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23. Which organisms serves as a biofertilizer?

A. Azolla

B. E.coli

C. Spirogyra

D. Cassia

Answer: A

- **24.** Azotobacter and Bacillus polymyxa are:
 - A. Decomposers
 - B. Non-symBOTtic nitrogen fixers
 - C. SymBOTtic nitrogen fixers
 - D. Pathogenic bacteria

Answer: B



25. The phenomenon of using a predator for controlling a pest is:

- A. BOTlogical control
- B. Genetic engineering
- C. Artificial control
- D. Confusion techinc

Answer: A



26. Crop rotation is carried out for:

A. Increasing acidity of soil

B. Decreasing fertility of soil

C. Increasing fertility of soil

D. All of the above

Answer: C



27. Nitrogen fixation is

- A. Nitogen Ammonia
- **B. Nitrogen Nitrates**
- C. Nitogen Amino acids
- D. Both (a) and (b)

Answer: D



28. Leghaemoglobin occurs in:

A. Coralloid root

B. BGA

C. Around bacteriods

D. Mycorrhiza

Answer: C



- A. Wheat
- B. Paddy
- C. Mustard
- D. Gram

Answer: B



30. Which element plays an important role in nitrogen fixation ?

- A. Mn
- B. Mo
- C. Zn
- D. Cu

Answer: B



31. The neem is used as a natural insecticide because:

A. The extract of neem contains

azadirachtin which acts as an

antifeedant compund

B. It is significantly most effective than

other pesticides

C. It is rapidly degradable in nature

D. Its cost of production is not high

Answer: A

32. Which one of the following helps in absorption of phosphorus from soil by plants?

A. Glomus

B. Rhizobium

C. Frankia

D. Anabena

Answer: A

33. Secondary sewage treatment is mainly a:

A. Physical process

B. Mechanical process

C. Chemical process

D. BOTlogical process

Answer: D



34. Which of the following is mainly produced by the activity of anaerobic bacteria on sewage?

- A. Laughing gas
- B. Propane
- C. Mustard gas
- D. Marsh gas

Answer: D



35. An organism used as a biofertilizer for raising soyabean crop is:

A. Azotobacter

B. Azospirillum

C. Rhizobium

D. Nostoc

Answer: C



36. The most common substrate used in distilleries for the production of ethanol is:

- A. Corn meal
- B. Soya meal
- C. Ground gram
- D. Molasses

Answer: D



37. Ethanol is commercially produced through a particular species of:

A. Saccharomyces

B. Clostridium

C. Trichoderma

D. Aspergillus

Answer: A



38. A prokaryotic autotrophic nitrogen fixing symbiont is found in:

- A. Alnus
- B. Cycas
- C. Cicer
- D. Pisum

Answer: B



39. Which one of the following is not a biofertilizer?

A. Agrobacterium

B. Rhizobium

C. Nostoc

D. Mycorrhiza

Answer: A



40. Continuous addition of sugars in 'fed batch' fermentation is done to:

- A. Produce methane
- B. Obtain antiBOTtics
- C. Purify enzymes
- D. Degrade sewage

Answer: B



41. The 'clot buster' produced by Streptococcus and modified by genetic engineering is:

A. streptokinase

B. pencillin

C. strepsils

D. cyclosporin A

Answer: A



42. During sewage treatment, biogases are produced which include:

A. methane, oxygen, hydrogen sulphide

B. hydrogen sulphide,methane,sulphur dioxide

C. hydrogen sulphide, nitrogen, methane

D. methane,hydrogen sulphide,carbon dioxide

Answer: D



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43. A good producer of citric acid is

A. Pseudomonas

B. Clostridium

C. Saccharomyces

D. Aspergillus

Answer: D



44. What gases are produced in anaerobic sludges digesters?

A. Methane and CO₂ only

B. Methane, hydrogen sulphide and CO_2

C. Methane, hydrogen sulphide and O_2

D. Hydrogen sulphide and CO_2

Answer: B



45. Which organisms convert milk into curd?



46. Name the microorganisms that cause ripening of Roquefort cheese.



47. Name the mould that produces antibiotic penicillin.



48. Who were awarded noble prize in 1945 for penicillin discovery?



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49. Which microbe produce citric acid?



50. Which bacteria produce acetic acid?



51. Which bacteria produce butyric acid?



52. Name the bacteria that produce lactic acid



53. Name a fungus that produces bioactive molecule cyclosporin A which is used as an immuno suppressive agents in organtransplant patient.



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54. Name the yeast that produce statin which lowers down the blood cholesterol.



55. Name the bacteria that secrete streptokinase?



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56. What term is used for masses bacteria associated with fungal filaments to form mesh like structure?



57. What term is used for a group of bacteria that produce a large amount of methane along with CO_2 and H_2 ?



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58. What are the symbiotic bacteria in the root nodules of the liguminous plants?



59. What are the pathogens that attack insects



?

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60. ___is used for commercial production of ethanol.



61. The excreta of cattle are rich in
bacteria
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62. Bt stands for
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63. BGA chiefly used as
Watch Video Solution

64. The majority of baculoviruses used as biological control agents are in the genus .



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65. ____are chemical produced by some microbes and can kill the other microbes.



66. _____ is the main constituent of gobar gas.



67. ____is a traditional drink in Southern India and is the fermented product of palm sap.



68. Streptobacillus converts milk into curd.



69. Azotobacter is a symbiotic bacterium.



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70. The mass of loosely arranged undifferent cells developed from explants in tissue culture are called embryoid.



71. The enzyme reverse transcriptase is used to obtain recombinant DNA.



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72. Bt cotton is a disease resistant transgenic plants.



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73. Yogurt is a type of cheese.



74. Streptococcus lactic is responsible for curdling of milk.



75. When milk curdles, the solid part is called curd and the liquid part is yoghurt.



76. The most important use of citric acid is in form of vinegar.



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77. Enzymes lipases are used in manufacturing detergents called biological washing powder.



78. Biological organism demand (BOD) is a parameter used to measure the amount of organic matter present in waste water.



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79. Chemical pesticides also kill the host which may lead to pest insurgence where number of pests increases after treatment.



80. Answer the questions (restrict each answer within 200 words).

Write notes on of the following:

Biopiracy



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81. Write Shortnotes on: Microbes in household products



82. WRITE NOTES ON THE FOLLOWING BRIEFLY

IN TWO TO THREE SENTENCES EACH.

Microbes in antibiotic preparation



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83. WRITE NOTES ON THE FOLLOWING BRIEFLY

IN TWO TO THREE SENTENCES EACH.

Microbes in alcoholic beverages



84. Write Shortnotes on: Microbes in human welfare



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85. WRITE NOTES ON THE FOLLOWING BRIEFLY

IN TWO TO THREE SENTENCES EACH.

BOTreactor



86. Write Shortnotes on: Microbes in industrial products



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87. Write note on:

Microbes in sewage treatment.



88. Write Shortnotes on: Microbes in biogas production



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89. WRITE SHORT NOTES ON THE FOLLOWING BRIEFLY IN TWO TO THREE SENTENCES . BIOFERTILIZER



90. WRITE NOTES ON THE FOLLOWING BRIEFLY

IN TWO TO THREE SENTENCES EACH.

BOTcontrol agent



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91. WRITE NOTES ON THE FOLLOWING BRIEFLY

IN TWO TO THREE SENTENCES EACH.

Biofertilizers



92. DISTINGUISH BETWEEN : Primary and secondary sewage treatment



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93. DISTINGUISH BETWEEN: Biofertilizer and biocontrol agent



94. Differentiate between Alcoholic

fermentation and Lactic acid fermentation.



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95. DISTINGUISH BETWEEN.

Chemical fertilizers and BOTfertilizers.



96. DISTINGUISH BETWEEN.

Bakery and Brewery.

