MICROBES IN HUMAN WELFARE

1. Match the following :
(HSE-MARCH-2024).(2)

A	B
Clostridium butylicum	Acetic acid
Aspergillus niger	Lactic acid
Acetobacter aceti	Butyric acid
Lactobacillus	Citric acid

2. Microbe known as both Baker's yeast as well as Brewer's yeast is _____
(HSE-JUNE-2023).(1)
3. Complete the table using appropriate terms (HSE-JUNE-2023).(2)

Microbe	Bacterium/Fungus	Product
Aspergillus niger	_____A_____	Citric acid
_____B_____	Bacterium	Acetic acid
Clostridium butylicum	_____C_____	Butyric acid
Lactobacillus	Bacterium	_____D_____

4. Which microbe is called baker's yeast ?
(A) Propionibacterium sharmanii
(B) Lacto bacillus
(C)Saccharomyces cerevisiae
(D) Aspergillus niger (HSE-March 2023)(1)
5. Two bioactive molecules are given :
(i) Cyclosporin-A
(ii) Streptokinase
(A) Name the microbe which produces these bioactive molecules.
(B) Write its use. (HSE-March 2023)(2)
6. Who discovered the first antibiotic Penicillin ? (HSE-July 2022)(1)
7. Write the use of following microbial product : (HSE-July 2022)(2)
(a) Pectinase and Protease
(b) Streptokinase
8. The first antibiotic discovered was _____. (HSE-March 2022)(1)
9. Match the following :(HSE-March 2022)(2)

(A)		(B)	
(i)	Trichoderma polysporum	(a)	Citric acid
(ii)	Monascus purpureus	(b)	Ethanol
(iii)	Saccharomyces cerevisiae	(c)	Cyclosporin A
(iv)	Aspergillus niger	(d)	Statin

10. (a) Expand the term AIDS. Mention the name of virus that causes AIDS.
(b) Name the widely used diagnostic test for AIDS.
(c) List out any four practices for the prevention of AIDS.
(HSE-March 2022)(5)
11. Name the free living fungus used as an effective biocontrol agent of several plant pathogen (HSE-August 2021)(1)
12. Biogas is a mixture of gases produced by the microbial activity and used as a fuel .Mention the name of bacteria used for production of biogas
(HSE-August 2021)(1)
13. Match the following(HSE-August 2021)(2)

A	B
1)Trichoderma polysporum	a)Streptokinase
2)Monascus purpureus	b)Ethanol
3)Streptococcus	c)Cyclosporin
4)Sacharomyces cervisiae	d)Statin

14. Organic pollutants in sewage water is measured as _____(HSE March-2021)(1)(a) GMO (b) MTP (c) BOD (d) HGP
15. Enzyme used in detergents for removing oily stains from laundry is _____.
(a) Lipase (b) Protease
(c) Amylase
(d) Pectinase (HSE March- 2021)(1)
16. Fill in the blanks to complete the table :

Micro-organism	Use of Micro-organism
(i) ……(a)……	Curding of Milk
(ii) *Bacillus thuringiensis*	……(b)……
(iii) *Aspergillus niger*	……(c)……
(iv) ……(d)……	Production of butyric acid

(HSE March- 2021)(2)

17. A free living nitrogen fixing bacteria in the soil. (HSE-July-2020)(1)

(a) Rhizobium (b) Azospirillum

(c) Nostoc(d) Anabaena

18. Match the following : (HSE-July-2020)(2)

(a) Acetic acid	(i)Trichoderma polysporum
(b) Citric acid	(ii) Acetobacter aceti
(c) Cyclosporine A	(iii) Lactobacillus
(d) Lactic acid	(iv) Aspergillus niger
	(v)Monascus purpureus

19. Microbe which help in the production of Biogas (HSE-March-2020)(1)

(a) *Aspergillusniger*

(b) TrichodermaPolysporum

(c) Saccharomyces cerevisiae

(d) Methanobacterium

20. Some examples of microbes in human welfare are given. Classify them under the headings given below.

[Egs : Rhizobium, Propionibacterium sharmanii, Azaspirillum, Lactic acid bacteria, Anabaena, Azotobacter, Aspergillus niger, Saccharomyces cerevisiae...] (HSE-March-2020)(2)

Microbes in Household Products	Microbes as Bio-fertilizers

21. Match the following(HSE-June-2019)(2)

A	B
(a) Citric Acid	I. *Acetobactor aceti*
(b) Acetic acid	II. *Clostridium butylicum*
(c) Lactic acid	III. *Aspergillus niger*
(d) Butyric acid	IV. *Lacto bacillus*
	V. *Trycoderma polysporum*
	VI. *Saccharomyces cerevisiae*

22. Bio-fertilisers are organisms that enrich the nutrient quality of the soil. How these biofertilisers enrich the soil nutrients ? Give two examples

(HSE-June-2019)(2)

23. Microbes are useful to human beings in diverse ways. If so, name the following : (HSE-March-2019)(2)

(a) Microbe known as "Baker's Yeast".

(b) Lactic acid producing bacterium.

(c)Fungus which helps in theproduction of bio-active molecule –cyclosporine A.

(d) Symbiotic nitrogen fixing bacterium.

24. In Sewage Treatment plant microbes play a significant role. Distinguish between primary and secondary treatment in sewage plant?

(HSE-June 2018)(2)

25. Complete the table with appropriate terms (HSE-March 2018)(2)

Organism	Scientific name	Bioactive Product
Fungus	A	Citric acid
B	Acetobacter aceti	Acetic acid
Fungus	Trichoderma polysporum	C
Yeast	D	Statin

26. Find the odd one out

a)Trichoderma polysporum

b)Clostidium butyliorm

c)Acetobacter aceti

d)Aspergillus niger

(HSE-model 2018)(1)

27.a)Name the yeast used for the commercial production of ethanol.

b)Name the yeast used for the production of statins

(HSE-model 2018)(2)

28. Complete the table by filling A,B,C and D using hints from the bracket

(HSE-JUNE-2017)(2)

(Gobar gas, biological control, anabaena, *Sacharomyces cerviciae* ,*Prpionibacterium sharmanii*)

Methanogen- .....A.....

Bread making-.....B.....

Biofertilizer:.....C.....

Trichoderma:.....D.....

29.What are the advantages of biofertilizers over chemical fertilizers? Give an example for biofertilizer?

(HSE-March-2017)(2)

30.Chose the correct answer from the bracket (HSE-June-2016) (1)

Cyclosporin A is produced by.....

(a)Aspergillus (b)Clostridium

(c)Trichoderma (d)Acetobacter

31.Select a bio-control agent from the given microbe (HSE-June-2016)(1)

a)Baculo virus b)Rhino virus

c)Picorna virus d)Adeno virus

32.“BOD is commonly calculated as an index of water pollution”

a)Do you agree with this statement? Why?

b)Expand BOD? (HSE-March 2016)(2)

33.In our state waste management is a problem. Government promote and give subsidy to biogas plants. Comment the functioning of biogas plants with the help of microbe.

(HSE-June 2014)(2)

34.BOD of some water sample is given below (HSE-June 2015)(2)

A- Sample-1 200mg/L

B- Sample-2 80mg/L

C- Sample-3 300mg/L

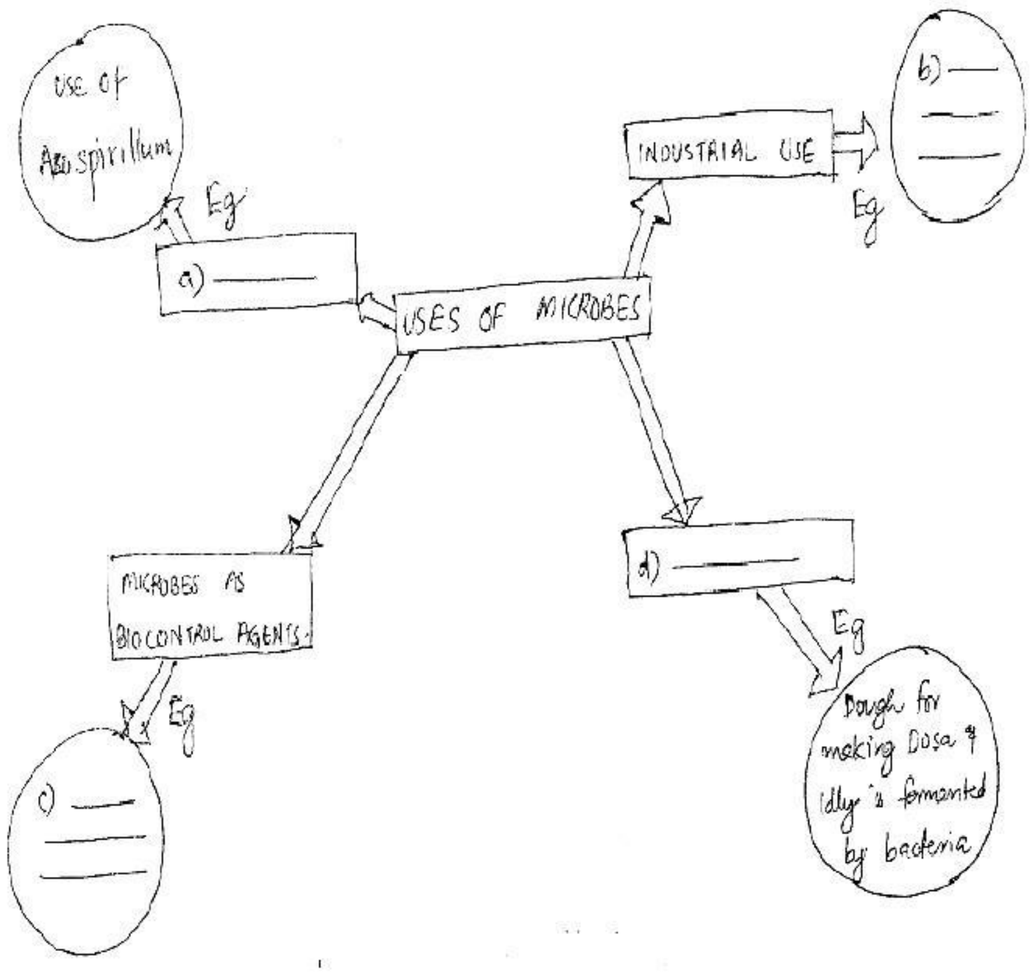
D- Sample-4 25mg/L

a)Which of above water sample is most polluted ?

b) what is meant by flocs/ what is its role in sewage treatment ?

35.Microbes can also be used as a source of energy. Substantiate with example? (HSE-March 2015)(2)

36.Complete the illustration appropriately ? (HSE-MAY 2013)(2)



37.Some bioactive molecule, their sources and their medical importance are given in the table below. Fill up the missing part (HSE-March 2013)(2)

Bioactive Molecule	Source	Medical Importance
___a___	Streptococcus	Removes clots from blood vessels
Cyclosporin-A	___b___	___c___
___d___	Monascus Purpureus	Blood Cholesterol lowering agent

38.Match the following (HSE-june-2012)(2)

(A) Methanogens (1) Aspergillus

(B) Flocs (2) Aerobic microbes

(C) Citric acid (3) Anerobic microbes

(D) Baker's yeast (4) Lactobacillus

(5) Saccharomyces

(6) Propionibacterium

39.Rearrange the coloumn B & C with respect to A (HSE-March-2012)(2)

A	B	C
Monascus pupureus	Streptokinase	Antibiotic
Streptococcus	Statin	Immunosuppressant
Pencillium notatum	Cylosporin-A	Clot buster
Trichoderma polysporum	Pencillin	Cholesterol lowering agent