OPEN STUDENT FOUNDATION

CH: Microbes in human welfare Total Marks: 30

STD 12TH Biology PRACTICE SHEET 16

Section A

• Choose correct answer from the given options. [Each carries 1 Mark]

[10]

Date: 05/03/24

Time: 1 hr

- 1. Which one of the following statements is NOT True?
 - (A) The amount of some toxic substances of industrial waste water increases in the organisms at successive trophic levels.
 - (B) The micro-organisms involved in biodegradation of organic matter in a sewage polluted water body consume a lot of oxygen causing the death of aquatic organisms.
 - (C) Algal blooms caused by excess of organic matter in water improve water quality and promote fisheries.
 - (D) Water hyacinth grows abundantly in eutrophic water bodies and leads to an imbalance in the ecosystem dynamics of the water body.
- 2. Match the following.

Column I	Column II		
(a) Aspergillus niger	(i) acetic acid		
(b) Acetobacter aceti	(ii) lactic acid		
(c) Clostridium butyric	um	(iii) citric acid	
(d) lactobacillus		(iv) butyric acid	

(A) (a-iv), (b-ii), (c-i), (d-iii)

(B) (a-iii), (b-i), (c-iv), (d-ii)

(C) (a-i), (b-ii), (c-iii), (d-iv)

(D) (a-ii), (b-iii), (c-i), (d-iv)

3. Match the following.

Column I	Column II			
(a) Clostridium butyricum	(i) cyclosporin-A			
(b) Trichoderma polysporium	(ii) butyric acid			
(c) Monascus purpurus	(iii) citric acid			
(d) Aspergillus niger	(iv) cholesterol lowering agent.			

- (A) a-iii, b-iv, c-ii, d-i (B) a-ii, b-i, c-iv, d-iii (C) a-i, b-ii, c-iv, d-iii (D) a-iv, b-iii, c-ii, d-i
- 4. Which microbe is responsible for the production of cyclosporin-A?
 - (A) Trichoderma polysporium

(B) Clostridium butyricum

(C) Aspergillus niger

- (D) Streptococcus cerevisiae
- 5. For the treatment of plant disease _____ is used as biocontrol agent.
 - (A) Lactobacillus
- (B) Trichoderma
- (C) Chlorella
- (D) Anabaena

- **6.** Choose correct option which represents biocontrol agent.
 - (A) Nostoc, Azospirillum, Nucleopolyhedrovirus
 - (B) Bacillus thuringiensis, tobacco mosaic virus, aphids
 - (C) Trichoderma, baculovirus, Bacillus thuringiensis
 - (D) Ocillatoria, Rhizobium, Trichoderma
- 7. Match the following

.

Column I	Column II
(a) saccharomyses cerevisiae	(i) immunosuppressive agent
(b) Monascus purpurus	(ii) swiss cheese ripening
(c) Trichoderma polysporium	(iii) industrial ethanol production
(d) Propionibacterium sharmanii	(iv) cholesterol lowering agent

- (A) $(a \rightarrow iii)$ $(b \rightarrow i)$ $(c \rightarrow iv)$ $(d \rightarrow ii)$
- (B) $(a \rightarrow iii)$ $(b \rightarrow iv)$ $(c \rightarrow i)$ $(d \rightarrow ii)$
- (C) $(a \rightarrow iv)$ $(b \rightarrow iii)$ $(c \rightarrow ii)$ $(d \rightarrow i)$
- (D) $(a \rightarrow iv)$ $(b \rightarrow ii)$ $(c \rightarrow i)$ $(d \rightarrow iii)$
- **8.** Which gas is formed in anaerobic sludge digester?
 - (A) Methane and Carbondioxide

- (B) Methane, hydrogen sulphide and Carbondioxide
- (C) Methane, hydrogen sulphide, Carbondioxide
- (D) Hydrogen sulphide and Carbondioxide
- **9.** Which one is incorrect in a given table?

	Microbes	Product	Usage	
(A)	A) Monascus purpurus Statins		Lower down cholesterol level in the blood	
(B)	(B) Streptococcus Streptokinase		Clot bluster	
<u>(C)</u>	C) Clostridium butyricum Lipase		Remove oil stains from the laundry	
(D)	Trichoderma polysporium	Cyclosporin A	In organ transplant patients	

- 10. Good producer of citric acid is
 - (A) Saccharomyses
- (B) Aspergillus
- (C) Pseudomomas
- (D) Clostridium

Section B

Write the answer of the following questions. [Each carries 1 Mark]

[5]

- 1. Give full name of BOD
- 2. Give composition of biogas.
- 3. What is the use of cyclosporin A?
- 4. In Packed fruit juices, which enzymes are added?
- 5. Which fungi genus found in mycorrhiza?

Section C

Write the answer of the following questions. [Each carries 3 Marks]

[3]

6. Microbes are used for industrial production on a large scale: explain with examples.

Section D

• Write the answer of the following questions. [Each carries 4 Marks]

[12]

- 7. What is sewage? Describe secondary treatment (biological treatment) in Sewage Treatment plant.
- **8.** How microbes are useful as Biocontrol agents? Explain.
- 9. Microbes can be used to decrease the use of chemical fertilisers and pesticides. Explain how this can be accomplished.

OPEN STUDENT FOUNDATION

CH: Microbes in human welfare Total Marks: 30

STD 12TH Biology PRACTICE SHEET 16

Date: 05/03/24 Time: 1 hr

Section [A] : 1 Mark MCQ						
No	Ans	Chap	Sec	Que	Universal_Queld	
1.	С	Chap 8	S6	30	QP23P13B1214_P2C8S6Q30	
2.	В	Chap 8	S6	32	QP23P13B1214_P2C8S6Q32	
3.	В	Chap 8	S6	33	QP23P13B1214_P2C8S6Q33	
4.	А	Chap 8	S6	31	QP23P13B1214_P2C8S6Q31	
5.	В	Chap 8	S6	35	QP23P13B1214_P2C8S6Q35	
6.	С	Chap 8	S6	37	QP23P13B1214_P2C8S6Q37	
7.	В	Chap 8	S6	41	QP23P13B1214_P2C8S6Q41	
8.	В	Chap 8	S6	43	QP23P13B1214_P2C8S6Q43	
9.	С	Chap 8	S6	44	QP23P13B1214_P2C8S6Q44	
10.	В	Chap 8	S6	42	QP23P13B1214_P2C8S6Q42	

Section [B] : 1 Marks Questions					
No	Ans	Chap	Sec	Que	Universal_Queld
1.	-	Chap 8	S2	13	QP23P13B1214_P2C8S2Q13
2.	-	Chap 8	S2	15	QP23P13B1214_P2C8S2Q15
3.	-	Chap 8	S2	11	QP23P13B1214_P2C8S2Q11
4.	-	Chap 8	S2	9	QP23P13B1214_P2C8S2Q9
5.	-	Chap 8	S2	27	QP23P13B1214_P2C8S2Q27

Section [C] : 3 Marks Questions					
No Ans Chap Sec Que Universal_Queld					
6.	-	Chap 8	S1	11	QP23P13B1214_P2C8S1Q11

	Section [D] : 4 Marks Questions					
No	Ans	Chap	Sec	Que	Universal_Queld	
7.	-	Chap 8	S1	18	QP23P13B1214_P2C8S1Q18	
8.	-	Chap 8	S1	21R	QP23P13B1214_P2C8S1Q21R	
9.	-	Chap 8	S1	23	QP23P13B1214_P2C8S1Q23	