

| | <p style="text-align: center;">BCM SCHOOL BASANT AVENUE , DUGRI LUDHIANA</p> <p style="text-align: center;">ASSIGNMENT</p> <p style="text-align: center;">CH- MICROBES IN HUMAN WELFARE</p> | 15 m | | | | | | | | | | |
|------------------------------------|---|---------------------|---------|------------------------------|---------------------------|-------------------------------|---|------------------------------------|-----------------------------------|---------------------------|------------------------------|---|
| 1 | <p>The vitamin whose content increases following the conversion of milk into curd by lactic acid bacteria is</p> <p>(a) Vitamin C (b) Vitamin D (c) Vitamin B₁₂ (d) Vitamin E</p> | 1 | | | | | | | | | | |
| 2 | <p>Methanogenic bacteria are not found in</p> <p>(a) Rumen of cattle (b) Gobar gas plant</p> <p>(c) Bottom of water-logged paddy fields (d) Activated sludge</p> | 1 | | | | | | | | | | |
| 3 | <p>Match the following list of bacteria and their commercially important products.</p> <table><thead><tr><th>Bacterium</th><th>Product</th></tr></thead><tbody><tr><td>(i) <i>Aspergillus niger</i></td><td>(A) Lactic acid</td></tr><tr><td>(ii) <i>Acetobacter aceti</i></td><td>(B) Butyric acid</td></tr><tr><td>(iii) <i>Clostridium butylicum</i></td><td>(C) Acetic acid</td></tr><tr><td>(iv) <i>Lactobacillus</i></td><td>(D) Citric acid</td></tr></tbody></table> <p>Choose the correct match:</p> <p>(a) i–B, ii–C, iii–D, iv–A (b) i–B, ii–D, iii–C, iv–A</p> <p>(c) i–D, ii–C, iii–B, iv–A (d) i–D, ii–A, iii–C, iv–B</p> | Bacterium | Product | (i) <i>Aspergillus niger</i> | (A) Lactic acid | (ii) <i>Acetobacter aceti</i> | (B) Butyric acid | (iii) <i>Clostridium butylicum</i> | (C) Acetic acid | (iv) <i>Lactobacillus</i> | (D) Citric acid | 1 |
| Bacterium | Product | | | | | | | | | | | |
| (i) <i>Aspergillus niger</i> | (A) Lactic acid | | | | | | | | | | | |
| (ii) <i>Acetobacter aceti</i> | (B) Butyric acid | | | | | | | | | | | |
| (iii) <i>Clostridium butylicum</i> | (C) Acetic acid | | | | | | | | | | | |
| (iv) <i>Lactobacillus</i> | (D) Citric acid | | | | | | | | | | | |
| 4 | <p>Match the following list of bio active substances and their roles:</p> <table><thead><tr><th>Bioactive Substance</th><th>Role</th></tr></thead><tbody><tr><td>(i) Statin</td><td>(A) Removal of oil stains</td></tr><tr><td>(ii) Cyclosporin A</td><td>(B) Removal of clots from blood vessels</td></tr><tr><td>(iii) Streptokinase</td><td>(C) Lowering of blood cholesterol</td></tr><tr><td>(iv) Lipase</td><td>(D) Immuno-suppressive agent</td></tr></tbody></table> <p>Choose the correct match:</p> <p>(a) i–B, ii–C, iii–A, iv–D (b) i–D, ii–B, iii–A, iv–C</p> <p>(c) i–D, ii–A, iii–B, iv–C (d) i–C, ii–D, iii–B, iv–A</p> | Bioactive Substance | Role | (i) Statin | (A) Removal of oil stains | (ii) Cyclosporin A | (B) Removal of clots from blood vessels | (iii) Streptokinase | (C) Lowering of blood cholesterol | (iv) Lipase | (D) Immuno-suppressive agent | 1 |
| Bioactive Substance | Role | | | | | | | | | | | |
| (i) Statin | (A) Removal of oil stains | | | | | | | | | | | |
| (ii) Cyclosporin A | (B) Removal of clots from blood vessels | | | | | | | | | | | |
| (iii) Streptokinase | (C) Lowering of blood cholesterol | | | | | | | | | | | |
| (iv) Lipase | (D) Immuno-suppressive agent | | | | | | | | | | | |
| 5 | <p>BOD of waste water is estimated by measuring the amount of</p> <p>(a) Total organic matter (b) Biodegradable organic matter</p> <p>(c) Oxygen evolution (d) Oxygen consumption</p> | 1 | | | | | | | | | | |
| 6 | <p>What would happen if oxygen availability to activated sludge flocs is reduced?</p> <p>(a) It will slow down the rate of degradation of organic matter.</p> <p>(b) The center of flocs will become anoxic, which would cause death of bacteria and eventually breakage of flocs.</p> <p>(c) Flocs would increase in size as anaerobic bacteria would grow around flocs.</p> <p>(d) Protozoa would grow in large numbers.</p> | 1 | | | | | | | | | | |
| 7 | <p>What would happen if our intestine harbours microbial flora exactly similar to that found in the rumen of cattle?</p> | 1 | | | | | | | | | | |
| 8 | <p>What for Nucleopolyhydro viruses are being used now-a-days?</p> | 1 | | | | | | | | | | |
| 9 | <p>How do mycorrhizal fungi help the plants harbouring them?</p> | 1 | | | | | | | | | | |
| 10 | <p>Why are cyanobacteria considered useful in paddy fields?</p> | 1 | | | | | | | | | | |
| 11 | <p>What roles do enzymes play in detergents that we use for washing clothes?</p> | 1 | | | | | | | | | | |
| 12 | <p>What is a broad spectrum antibiotic?</p> | 1 | | | | | | | | | | |
| 13 | <p>Why is aerobic degradation more important than anaerobic degradation for the treatment of large volumes of waste waters rich in organic matter? Discuss.</p> | 3 | | | | | | | | | | |