



**PAP-003-001525**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. V) (CBCS) Examination**

October / November - 2018

**MB - 501 : Applied Microbiology**

*(Old Syllabus)*

**Faculty Code : 003**

**Subject Code : 001525**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

- Instructions :** (1) All questions are compulsory.  
(2) Draw figure wherever necessary.  
(3) The right side figure indicates marks of the question.

1 Answer in short : **20**

- (1) Name the process in environment which continuously add more soil to the surface of the earth.
- (2) \_\_\_\_\_ is the space between the particles.
- (3) Which is the example of Ammensalism ?
- (4) Give example of symbiotic nitrogen bacteria.
- (5) Name two organisms causing food poisoning.
- (6) Central AGMARK laboratory is located at \_\_\_\_\_.
- (7) Give two examples of functional food.
- (8) What is Rancidity ?
- (9) What is HTST ?
- (10) What is MBRT ?
- (11) Which organisms are helpful during cheese manufacturing ?
- (12) Which sugar is present in milk ?
- (13) Name types of sand filters.

- (14) What is BOD and COD ?
- (15) Septic tank is used in which of the waste water treatment ?
- (16) Give two examples of water disinfecting agents.
- (17) Give two examples of Pesticides.
- (18) Name two major air pollutants.
- (19) Name the organism used in production of Bioplastic.
- (20) Define Bioleaching.

- 2** (a) Write in short : (any **three**) **6**
- (1) Enlist bacteria and fungi in soil.
  - (2) Write two methods of food preservation.
  - (3) What is 'Estuary'?
  - (4) What is COD and BOD ?
  - (5) What is MEOR?
  - (6) Define : Rhizosphere.
- (b) Write in brief : (any **three**) **9**
- (1) What is co-metabolism ?
  - (2) What is spoilage of food ?
  - (3) Which are fermented dairy products?
  - (4) Define Water Pollution.
  - (5) Define Biofuels.
  - (6) Explain Biomagnification of Pesticide.
- (c) Write short note on : (any **two**) **10**
- (1) Carbon Cycle
  - (2) Food borne infections
  - (3) Microbial analysis of milk
  - (4) Waste water treatment
  - (5) Air pollution.

- 3** (a) Write in short : (any **three**) **6**
- (1) What is Winogradsky's column ?
  - (2) What is SCP ?
  - (3) What is UHT milk ?
  - (4) Enlist processes carried out by municipal waste water treatment.
  - (5) Define Bioleaching.
  - (6) What are xenobiotic compounds
- (b) Write in brief : (any **three**) **9**
- (1) What is soil profile?
  - (2) Define Commensalism.
  - (3) Write types of spoilage in milk.
  - (4) What is Trickling filter?
  - (5) Define Biosurfactants.
  - (6) Enlist the physical and chemical conditions prevailing in Aquatic environment.
- (c) Write short note on : (any **two**) **10**
- (1) N<sub>2</sub>-Cycle
  - (2) MBRT
  - (3) Water purification methods
  - (4) Solid waste management
  - (5) Biotechnology as an interdisciplinary science.
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