



RAN - 1903000203020071



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**S. Y. B. Sc. (Sem. - III) Examination**

**March - 2023**

**MLT-05 : Environmental and Food Microbiology**

**સૂચના : / Instructions**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
Fill up strictly the details of signs on your answer book

Name of the Examination:

S. Y. B. Sc. (Sem. - III)

Name of the Subject :

MLT-05 : Environmental and Food Microbiology

Subject Code No.: 1903000203020071

Seat No.:

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Student's Signature

(2) All questions are compulsory.

***O.M.R. Sheet ભરવા અંગેની અગત્યની સૂચનાઓ આપેલ  
O.M.R. Sheetની પાછળ છાપેલ છે.***

***Important instructions to fillup O.M.R. Sheet  
are given on back side of the provided O.M.R. Sheet.***

**SET - A**

- Q. 1.** \_\_\_\_\_ is based on the principle that the particles move towards the lower temperature region when subjected to a strong temperature gradient.
- A. Thermal precipitation                      B. Electrostatic precipitation  
C. Centrifugation                              D. Ultracentrifugation
- Q. 2.** In Bead Bubbler device, glass beads of size about \_\_\_\_\_ size in diameter are kept around the glass bubbler.
- A. 1 mm    B. 3 mm  
C. 5 mm    D. 7 mm
- Q. 3.** Droplets expelled during coughing consists of:
- A. Saliva and microorganisms  
B. Saliva, mucus and microorganisms  
C. Only saliva  
D. Only microorganisms
- Q. 4.** Who developed a multistage sieve device?
- A. Bourdillon                                      B. Anderson  
C. Hiltner    D. Koch
- Q. 5.** Which of the following can survive severe conditions of high altitudes?
- A. Bacterial spore                                B. Dinoflagellates  
C. Mold    D. Yeast
- Q. 6.** \_\_\_\_\_ consists of a glass folin aeration tube with a perforated bulb with six holes at one end.
- A. Lemon sampler                                B. Bead bubbler device  
C. Sieve device                                      D. Slit device





- Q. 20.** Probiotic is:
- A. Good bacteria  
B. Harmful bacteria  
C. Commensals  
D. Obligate Anaerobic bacteria
- Q. 21.** The cause of ergotism is:
- A. *Campylobacter jejuni*  
B. *Aspergillus niger*  
C. *Staphylococcus aureus*  
D. *Claviceps purpurea*
- Q. 22.** Which one among the following is responsible for formation of root nodules in leguminous plants?
- A. *Rhizobium*  
B. *Clostridium*  
C. *Azotobacter*  
D. *Aspergillus*
- Q. 23.** Mycorrhiza is symbiotic association between:
- A. Fungus and bacteria  
B. Fungus and plant root  
C. Fungus and rock  
D. Fungus and algae
- Q. 24.** The plant roots release \_\_\_\_\_ that stimulate rhizobial colonization of the root surfaces.
- A. Flavonoid  
B. Eugenol  
C. Citric acid  
D. Coumarins
- Q. 25.** Which bacterium is used as source of biopesticide?
- A. *Escherichia coli*  
B. *Pseudomonas aeruginosa*  
C. *Claviceps purpureas*  
D. *Bacillus thuringiensis*
- Q. 26.** Select the INCORRECT statement from the below:
- A. BGA is used as biofertilizer.  
B. Biofertilizers are cost effective as well as eco-friendly.  
C. Biofertilizers does not have a favourable influence on soil health.  
D. Biofertilizers are safe to crops and users both.





- Q. 41.** The level of an indicator bacteria in contaminated water should have some direct relationship with:
- A. Degree of fecal pollution.                      B. Industrial pollution.  
C. Radioactive waste.                                D. Degree of oil spills.
- Q. 42.** Tertiary treatment of wastewater is particularly important to remove:
- A. Carbon, Nitrogen                                B. Sulphate, Carbon  
C. Nitrogen, Phosphorus                        D. Phosphorus, Sulphate
- Q. 43.** Sewage is:
- A. Industrial waste                                B. Domestic waste  
C. Brewery waste                                 D. Biomedical waste
- Q. 44.** In the final step of wastewater treatment process, water is disinfected by:
- A. Chlorination                                    B. Eutrophication  
C. Sulfonation                                    D. Flocculation
- Q. 45.** In tertiary treatment process of wastewater, phosphorus is removed by:
- A. Lime    B. Alum  
C. Ferric chloride                                D. All of the above
- Q. 46.** Indicator used for presence-absence test is:
- A. Malachite green                                B. Methyl red  
C. Bromocresol purple                        D. Methyl orange
- Q. 47.** The magnitude of BOD of wastewater is related to:
- A. Bacterial count                                B. Amount of organic matter  
C. Amount of inorganic matter                D. All of the above



**SPACE FOR ROUGH WORK**