

**Avinashilingam Institute for Home Science and Higher Education for Women  
(Deemed to be University) Coimbatore-6410 43**

**Master's Degree Examination-November 2018  
SEMESTER-III**

**Class: II PG  
Major: Zoology**

**Time: 3 Hrs  
Max. Marks: 60**

**17MZOC14 Microbiology  
Part-A  
Choose the correct answer**

**10x1/2=5**

- 1) Germ theory was proposed by  
(a) Robert Hooke (b) Leeuwenhoek (c) John Needham (d) Louis Pasteur
- 2) The five-kingdom system was developed by  
(a) Carolus Linnaeus (b) Whittaker (c) Ernst Haeckel (d) Edward Jenner
- 3) Which of the following is used as a solidifying agent for media?  
(a) Peptone (b) Yeast extract (c) Agar (d) Beef extract
- 4) The organism which grows best above 45°C are called  
(a) Mesophilic (b) Psychrophilic (c) Thermophilic (d) None
- 5) Botulism is caused by  
(a) *Clostridium botulinum* (b) *C. subtilis*  
(c) *C. tetanai* (d) All *Clostridium* species
- 6) A yellow color in the creamy layer of milk may be caused by  
(a) *Pseudomonas synxantha* (b) *P. syncyanea*  
(c) *S. marcescens* (d) both (a) and (b)
- 7) Which of the following microorganism is used for the production of citric acid?  
(a) *Saccharomyces cerevisiae* (b) *Lactobacillus bulgaricus*  
(c) *Streptococcus lactis* (d) *Aspergillus niger*
- 8) The use of microbes to break down synthetic waste products is called  
(a) Bioinformatics (b) Biotechnology (c) Bioremediation (d) Biolistics
- 9) Hansen's disease is also known as  
(a) Leprosy (b) Tetanus (c) Syphilis (d) Anthrax
- 10) Dengue fever incubation period ranges from  
(a) 1-12 days (b) 14-28 days (c) 3-14 days (d) 28-32 days

**Part B**

**5 x 6 = 30**

**Answer ALL questions**

**Each answer should not exceed 200 words or one page**

- 11) a) Write short note on five kingdom classification.  
Or  
b) Write a brief note on scope of microbiology.
- 12) a) Explain the cultivation of aerobic and anaerobic bacteria.  
Or  
b) Write note on physical methods on sterilization.
- 13) a) Give an account on causes of food spoilage.  
Or  
b) Write note on milk borne diseases and their causative agents.
- 14) a) Briefly describe the steps involved in the production of beer.  
Or  
b) Explain the advantage and disadvantage of membrane filter technique .
- 15) a) Give an account on Dermatophytosis  
Or  
b) Explain the causative agent and symptom of pneumonia.

**Part-c**

**5 x 7 = 35**

**Answer ALL questions**

**Each answer should not exceed 600 words or three pages**

- 16) a) Explain brief classification of fungi.  
Or  
b) Write an essay on structure of virus.
- 17) a) Describe the types and preparation of culture media.  
Or  
b) Discuss the factor affecting microbial growth.
- 18) a) Discuss the various methods of food preservation.  
Or  
b) Explain in brief the classification of microorganisms of milk.
- 19) a) Describe the types of fermenter with suitable diagram.  
Or  
b) Explain the bioremediation of effluents using microbes.
- 20) a) Write an essay on gonorrhoea and syphilis.  
Or  
b) Discuss the viral hepatitis.