

First Professional B.S.M.S Degree Supplementary Examinations January 2024
(SIDUG) – Nunnuyiriyal (Microbiology)
(2021 Scheme)

Time: 3 hrs

Max. Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers
- Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

1. Multiple Choice Questions**(20x1=20)**

The Answers to MCQ questions (Q.No.i to Q.No.xx) shall be written continuously on the first two writing sheets (ie Page No. 3 & 4) only

- A cluster of polar flagella is called
a) Lophotrichous b) Amphitrichous c) Monotrichous d) Petritrichous
- During exponential growth, the growth rate is
a) Number of generations per unit time b) Reciprocal of generation time
c) Both (a) and (b) d) None of these
- Who introduced the Hierarchical system of classification
a) Witakar b) Carolous Linnaeus
c) Thomsan d) Anton Van Leewenhoek
- Joseph Lister first introduced the use of antiseptics in hospitals, what is the name of the chemical he used for the antiseptis process
a) Ethyl alcohol b) Carbolic acid
c) Hydrogen peroxide d) Chlorohexidine
- Which of the following is not a characteristic of a chemotherapeutic agent
a) Low toxicity for host cells
b) High toxicity for the parasites
c) Less penetrating power
d) Does not affect the host's natural defense mechanism
- Athlete's foot infection is also known as.....
a) Tinea barbae b) Tinea pedis c) Tinea unguium d) Tinea capitis
- Ochratoxin is produced by
a) Tricothecium b) Tricoderma
c) Aspergillus and Penicillium d) Claviceps purpurea
- The resistance to infection that an individual possesses genetic and constitutional make up is _____
a) Acquired immunity b) Passive immunity
c) Innate immunity d) Active immunity
- The smallest unit of an antigen responsible for antigenicity is known as _____.
a) Hapten b) Epitope c) Paratope d) Aduvant
- Complement (c) ordinarily binds to
a) Antigen b) Antibodies
c) Antigen- Antibody complexes d) None of the above

(PTO)

- xi. The first immunodeficiency disease to be discovered is
 a) Common variable immunodeficiency
 b) X- linked agammaglobulinemia
 c) Transient hypogammaglobinaemia of infancy
 d) Chronic mucocutaneous candidiasis
- xii. Which typing is used for further classification of *S.pyogenes* belonging to Lancefield's Group A
 a) Griffith typing
 b) Molecular typing
 c) DNA fingerprinting
 d) Phenotypic- bacteriophage typing
- xiii. Selective media for gonococci
 a) Lowenstein-Jensen medium
 b) DCA medium
 c) Thayer - Martin medium
 d) Blood agar
- xiv. Travellers diarrhoeal disease due to
 a) EPEC
 b) ETEC
 c) EHEC
 d) EIEC
- xv. Typical drumstick appearance of Bacilli is generally seen in
 a) *C. perfringens*
 b) *C. botulinum*
 c) *C. histolyticum*
 d) *C. tetani*
- xvi. Area of lysis on a bacterial lawn culture produced by a phage is known as
 a) Pock
 b) Plaque
 c) Pox
 d) All of these
- xvii. Chicken pox caused by
 a) Epstein barr virus
 b) Human papillomavirus
 c) Varicella zoster virus
 d) Variola virus
- xviii. The Gradual Sequential change in antigenic structure occurring regularly at frequent intervals is known as _____.
 a) Elution
 b) Antigenic Shift
 c) Antigenic Drift
 d) Hemadsorption
- xix. Which strain of virus is preferred for active immunization in measles
 a) H₁N₅
 b) Edmonston – Zagreb
 c) Jeryl – Lynn
 d) Schwartz – Moraten
- xx. Marburg virus comes under which family
 a) Rotaviridae
 b) Filoviridae
 c) Retroviridae
 d) Picornaviridae

Short Answer Questions

(8x5=40)

2. Explain about the bacterial growth curve.
3. Describe about bacterial genetics for development of drug resistance.
4. Describe about the autoimmune diseases.
5. Write a brief note on clinical manifestation of plaque.
6. What are the various invivo and invitro virulence tests performed for *Corynebacterium diphtheriae* infection.
7. Write about syphilis disease with detail on its diagnosis.
8. Explain about the clinical symptoms of Epstein- Barr virus infection.
9. Write a brief note on management of biomedical wastes.

Long Answer Questions

(4x10=40)

10. Define Sterilization. Classify moist heat sterilization and also explain the principle and function of Autoclave.
11. Describe about the clinical symptoms of Cholera and its diagnostic methods in detail.
12. Write about Rabies and detailed course of its pathogenesis, laboratory diagnosis and control.
13. Write an essay on UTI and also detailed course of its characteristics with laboratory diagnosis.
