

www.FirstRanker.com

www.FirstRanker.com

Subject Title: Microbiology & Immunology Prepared by: M Madhavi

Year: II Semester: IV Updated on: 23.03.

Unit - I: Fundamentals of Microbiology

Essay Answer Type

- Describe briefly about structure and general characters of bacteria.
- 2. Write about scanning and transmission electron microscope and its applications.
- 3. Describe briefly about structure and general characters of viruses.
- 4. Discuss in detail about the outline classification of microorganisms.
- 5. Explain construction of bright field microscope, its parts and applications.
- 6. Describe the structure and general characters of micro-algae.
- 7. Explain about disease causing pathogens.

Short Answer Type

- 1. Robert Koch
- 2. General characters of fungi
- 3. Antonie van Leeuwenhoek
- MANN Files Ranker Colf 4. Phase contrast microscope
- Mycobacterium 5.
- Louis Pasteur 6.
- 7. Dark field microscope
- 8. Alexander Fleming
- 9. Fluorescent microscope
- 10. Winogradsky
- 11. Edward Jenner

Unit - II: Culture and Identification Microorganism

Essay Answer Type

- 1. Define sterilization and explain about different sterilization methods.
- 2. Explain about bacterial growth curve and factors affecting bacterial growth.

Page 1 of 3



www.FirstRanker.com

www.FirstRanker.com

- 3. Write about plaque assay method for identification of viruses.
- 4. Discuss briefly about bacterial staining methods.
- 5. Describe in detail about algal media.
- 6. Write about different types of bacteriological media.
- 7. Explain the staining method of fungi identification.

Short Answer Type

- 1. Autoclave
- 2. PDA
- 3. Laminar air flow
- 4. Czapek dox agar
- 5. Hot air oven
- 6. Filter sterilization
- 7. Stationary phase
- 8. Sabouraud dextrose agar
- 9. Bacterial growth curve

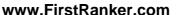
Unit - III: Basics of Immunology

Essay Answer Type

- 1. What is innate immunity? Explain various barriers of innate immunity.
- 2. Explain briefly about adaptive immunity.
- 3. Write about primary lymphoid organs.
- 4. Discuss various cells of immune system.
- 5. Explain briefly about secondary lymphoid organs.
- 6. What is antigenicity and explain factors affecting antigenicity

Short Answer Type

- 1. Natural killer cells
- 2. Phagocytosis
- 3. Epitopes
- 4. Types of adjuvants
- 5. Haptens







- 6. Bone marrow
- 7. Macrophages
- 8. Passive immunity
- 9. Interferons
- 10. Biochemical barriers
- 11. Lymph node

Unit - IV: Humoral and Cell Mediated Immunity

Essay Answer Type

- Discuss in detail about structure of immunoglobulins, types and its functions.
- 2. How monoclonal antibodies are produced? Mention applications of monoclonal antibodies.
- 3. What is major histocompatibility complex? Explain its role in organ transplantation.
- 4. Write short notes on
 - i) T-cell receptors ii) Antigen presenting cells iii) Cytokines
- 5. What is hypersensitivity? Discuss about types of hypersensitivity reactions.
- 6. What is autoimmunity? Describe the mechanism of autoimmunity and autoimmune diseases. inal antibodies

 Juman Leucocyte Antigen (HLA)

 Systemic Lupus Erythematosus

 Rheumatoid arthritis

 Hypersensitivity IV

 ernary complex

Short Answer Type

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.