

**OPERATION THEATRE**  
**TECHNIQUES**  
**PART - I**

## **MICROBIOLOGY**

1. Introduction to micro-organisms
2. Classification of Bacteria
3. Structure and reproduction of bacteria
4. Characteristic of Rickettsiae
5. Transmission and diseases caused by Rickettsiae
6. Prevention and control of Rickettsiae
7. Characteristic of Chlamydiae
8. Transmission and diseases caused by Chlamydiae
9. Treatment, prevention and control
10. Characteristics of Spirochetes
11. Transmission, prevention and control
12. Diseases caused by Spirochetes
13. Composition and structure of Virus
14. Classification of Virus
15. Mode of Transmission and common diseases caused by Virus
16. Prevention and control
17. Characteristics of Protozoa
18. Biology and diseases caused by Protozoa
19. Prevention and control
20. Characteristics and reproduction of Fungi
21. Diseases caused by Fungi with reference to O.T.
22. Control and prevention
23. Sterilization and disinfection
24. Introduction to chemotherapy
25. Characteristics and use of chemotherapeutic agents in O.T.
26. Introduction to Immunity and Immunology
27. Acquired Immunity and resistance factors
28. Methods of environmental cleanliness in O.T.
29. How to keep instruments, equipments and other things bacteria free

## **STERILIZATION AND SUPPLIES**

1. Introduction to sterilization
2. Sterilization and Disinfections
3. General Principles of sterilization
4. Types of Sterilizations
5. Methods of Heat Sterilization and equipment.
6. Autoclave, main parts and working principle.
7. Chemical Sterilization and the chemical used in it.
8. Sterilization by radiation.
9. Detergents, types and uses.
10. Gas Sterilization and its uses.
11. Scrubbing and its methods
12. Draping and its methods.

13. Lighting and ventilation requirements.
14. Humidity and heating requirements.
15. Blood Transfusion:- Blood storage, grouping, cross matching etc.
16. Infusion.

## O. T. EQUIPMENT

1. Introduction to electro-medical equipment used in O.T.
2. O.T. light, uses, types, lamps etc
3. Shadow less lighting – features, types
4. Direct, semi direct, indirect lighting.
5. Grounding system – parts and structure.
6. Monitoring equipment such as cardiac monitors.
7. Defibrillators
8. Surgical diathermy – structure, block diagram, types.
9. Safety Precautions
10. General equipment maintenance requirements
11. Anesthesia machine – parts, block diagram etc.
12. Sterilizers, types and characteristics