

**COURSE TITLE: MICROBIOLOGY & CLINICAL PRACTICE**

<b>STUDY HOURS:</b>	<b>60+160</b>	<b>MARKS</b>	
<b>PAPER:</b>	<b>01</b>	<b>THEORY</b>	<b>120</b>
<b>Term :</b>	<b>4<sup>th</sup></b>	<b>PRACTICAL:</b>	<b>30</b>
		<b>TIME :</b>	<b>03HRS</b>

**CONTENTS**

**STUDY HOURS**  
**(THEORY+PRACTICAL)**  
**60+80**

**A. MICROBIOLOGY**

- A1. Introduction to micro-organisms
- A2. Classification of Bacteria
- A3. Structure and reproduction of bacteria
- A4. Characteristic of Rickettsiae
- A5. Prevention and control of Rickettsiae
- A6. Prevention and control of Rickettsiae
- A7. Characteristic of Chlamydiae
- A8. Transmission and diseases caused by Chlamydiae
- A9. Treatment, prevention and control
- A10. Characteristics of Spirochete
- A11. Transmission, prevention and control
- A12. Diseases caused by Spirochetes
- A13. Composition and structure of Virus
- A14. Classification of Virus
- A15. Mode of Transmission and common diseases caused by Virus
- A16. Prevention and control
- A17. Characteristics of Protozoa
- A18. Biology and diseases caused by Protozoa
- A19. Prevention and control
- A20. Characteristics and reproduction of Fungi
- A21. Diseases caused by Fungi with reference to O.T.
- A22. Control and prevention
- A23. Sterilization and disinfect ion
- A24. Introduction to chemotherapy
- A25. Characteristics and use of chemotherapeutic agents in O.T.
- A26. Introduction to Immunity and Immunology
- A27. Acquired Immunity and resistance factors
- A28. Methods of environmental cleanliness in O.T.
- A29. How to keep instruments, equipments and other things bacteria free

**B. PRACTICAL IN DIFFERENT SURGICAL WARDS**

**80**

- B1. Receiving of patient
- B2. admission procedure
- B3. Investigation
- B4. preparation of patient for surgical procedur
- B5. Post of Opreative care

- B6. NG tube application
- B7. Catarization
- B8. Principal of wound dressing
- B9. Removal of Sutring

### **RECOMMEND BOOKS**

- 1 Operative techniques by Dr.s.Das-japee
- 2 Surgery by Dr kumar (Japee)
- 3 Book of surgical instruments

### **REFERENCE BOOKS**

- 1 A manual on Clinical surgery including special investigation
- 2 General surgery Board Review Series by Traves D.Crabtree

**COURSE TITLE: STERILIZATION, SUPPLIES & EQUIPMENT AND CLINICAL PRACTICE**

**STUDY HOURS: 60+160**  
**PAPER: 02**  
**TERM: 4<sup>th</sup>**

**MARKS**  
**THEORY 120**  
**PRACTICAL: 30**  
**TIME: 03HRS**

**COURSE CONTENTS      STUDY HOURS**  
**(Theory +Practical)**

- A.      STERILIZATION AND SUPPLIES      30+40**
- A1. Introduction to sterilization
  - A2. Sterilization and Disinfections
  - A3. General Principles of sterilization
  - A4. Types of Sterilizations
  - A5. Methods of Heat Sterilization and equipment.
  - A6. Autoclave, main parts and working principle.
  - A7. Chemical Sterilization and the chemical used in it.
  - A8. Sterilization by radiation.
  - A9. Detergents, types and uses.
  - A10. Gas Sterilization and its uses.
  - A11. Scrubbing and its methods.
  - A12. Draping and its methods.
  - A13. Lighting and ventilation requirements.
  - A14. Humidity and heating requirements.
  - A15. Blood Transfusion: -Blood storage, grouping cross matching etc.
  - A16. Infusion.
- B.      O.T. EQUIPMENT      30+40**
- B1. Introduction to electro-medical equipment used in O.T.
  - B2. O.T. Light, uses, types, lamps etc
  - B3. Shadow less lighting-features, types
  - B4. Direct, semi direct, indirect lighting,
  - B5. Grounding system-parts and structure.
  - B6. Monitoring equipment such as cardiac monitors.
  - B7. Defibrillator
  - B8. Surgical diathermy-structure, block diagram, types.
  - B9. Safety Precautions
  - B10. General equipment maintenance requirements
  - B11. Anesthesia machine-parts, block diagram etc.
  - B12. Sterilizers, types and characteristics
- C. PRACTICAL IN DIFFERENTS SURGICAL OT      80**
- C1. Receiving of patient
  - C2. Preparation of surgical trolley
  - C3. Preparation of patient for surgical procedur

- C4. Post of Opreative care
- C5. NG tube application
- C6. Catarization
- C7. Principal of wound & dressing
- C8. Principal of Stitches
- C9. Removal of Sutring

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