

Infection & Inflammation Module

3rd Year MBBS

**Prepared by:**

**Dr. Khalida Kousar**

**Department of Pathology**

## Table of Contents

[BKMC Vision & Mission](#_TOC_250005)

Teaching Hours Allocations

[Learning Objectives](#_TOC_250002)

Theme-1 (Pain and Fatigue)

Theme (Pain and Fatigue)

Theme (Trauma and repair)

Theme (Fever and Infection)

Theme (Fever and Infection)

Theme (Fever and Infection)

Practical Works

Week 1 Practicals

Week 2 Practicals

Week 3 Practicals

Week 4 Practicals

Week 5 Practicals

Week 6 Practicals

CLINICAL SUBJECTS

**Learning Resources** Error! Bookmark not defined

Time tables…………………………………………………………………………………………………………………………………………………………….

[Assessment Plan – 3rd Year MBBS](#_TOC_250001)

[Assessment Blueprints](#_TOC_250000)

**MISSION STATEMENT**

BACHA KHAN MEDICAL COLLEGE IS COMMITTED TO TRAIN STUDENTS TO BECOME KNOWLEDGEABLE, SKILLFUL AND EMPATHETIC TO MEET THE NEEDS OF SOCIETY WITH EMPHASIS ON RESEARCH PROFESSIONALISM AND HEALTH ADVOCACY.

**VISION STATEMENT**

BECOME A PROMINENT REGIONAL HEALTH CARE CENTER FOCUSED ON IMPROVING INDIVIDUAL AND COMMUNITY HEALTH AND ACHIEVING NATIONAL AND INTERNATIONAL STANDARDS OF EXCELLENCE.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | |  |  | |  |  | | |  | |  | |  | |  | | |  | |  | |  | |  | |  | |  |  |
|  |  | | |  |  | |  |  | | |  | |  | |  | |  | | |  | |  | |  | |  | |  | |  |  |
|  | **3rd Professional MBBS, 2023** | | | | | | | | | | | | | | | | | | | | | | | | | | **Total Hours** | |
|  |  | **S.No** | **Subjects** | | | **1st Week** | | | **2nd Week** | | | **3rd Week** | | | | **4th Week** | | | **5th Week** | | | | **6th Week** | | | |
|  |  | **LGF** | | **P/SGD** | **LGF** | **P/SGD** | | **LGF** | | **P/SGD** | | **LGF** | | **P/SGD** | **LGF** | | **P/SGD** | | **LGF** | | **P/SGD** | |
|  | **Infection & Inflammation** | 1 | **ENT** | | | 1 | |  | 1 |  | | 2 | |  | |  | |  |  | |  | |  | |  | | **4** | |
|  | 2 | **EYE** | | |  | |  |  |  | | 3 | |  | |  | |  |  | |  | |  | |  | | **3** | |
|  | 3 | **Medicine** | | |  | |  | 1 |  | |  | |  | |  | |  |  | |  | |  | |  | | **1** | |
|  | 4 | **Surgery** | | | 1 | |  | 1 |  | |  | |  | | 1 | |  |  | |  | |  | |  | | **3** | |
|  | 5 | **Peads** | | |  | |  | 1 |  | |  | |  | |  | | 2 |  | |  | | 1 | |  | | **4** | |
|  | 6 | **Gynae** | | |  | |  |  |  | | 1 | |  | | 1 | |  |  | |  | |  | |  | | **2** | |
|  | 7 | **Pathology** | | | 6 | | 6 | 5 | 8 | | 7 | | 8 | | 4 | | 2 | 5 | | 6 | | 10 | | 8 | | **75** | |
|  | 8 | **Pharma** | | | 5 | | 6 | 2 | 4 | |  | |  | | 4 | |  | 4 | | 6 | | 3 | | 8 | | **42** | |
|  | 9 | **C. Medicine** | | |  | |  | 1 |  | |  | |  | | 2 | | 2 | 3 | | 2 | | 2 | | 2 | | **14** | |
|  | 10 | **F. Medicine** | | | 1 | |  | 2 | 4 | | 2 | | 8 | |  | |  |  | |  | | 1 | |  | | **18** | |
|  | 11 | **Research** | | | 1 | |  | 1 |  | |  | |  | |  | |  | 3 | |  | |  | |  | | **5** | |
|  | 12 | **PRIME** | | |  | |  |  |  | |  | |  | |  | | 2 |  | |  | |  | |  | | **2** | |
|  | 13 | **Mentoring** | | |  | |  |  |  | |  | |  | |  | |  |  | |  | | 1 | |  | | **1** | |
|  |  | **TOTAL** | | | | | | | | | | | | | | | | | | | | | | | | | **174** | |

# Learning Objectives

**At the end of this module, the 3rd year students would be able to:**

1. Describe the process of acute & chronic inflammation with their outcomes
2. Relate different aspects of healing and repair
3. Differentiate common pathogenic bacteria based on morphology, pathogenesis & lab diagnosis.
4. Relate bacterial pathogenic factors to clinical manifestations of common infectious diseases.
5. Describe the pharmacological details of anti-inflammatory drugs
6. Apply/relate the pharmacokinetics & pharmacodynamics of chemotherapeutic agents to their use in infectious diseases
7. Construct / Write prescriptions for various inflammatory and infectious diseases
8. Describe medico legal aspects of HIV patient.
9. Describe mechanism of wound causation.
10. Describe medico legal aspects of parameters used for personal identification inreal life situation
11. Apply parameters of a person’s identification in a simulated environment
12. Describe the epidemiology of common infectious diseases.
13. Explain the preventive and control measures for infectious diseases.
14. Explain the control & preventive measures for nosocomial infections.
15. Describe the risks associated with hospital waste and its management.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Theme-1 (Pain and Fatigue)** | | | | | | | | |
| **Subject** | **Topic** | | **Hours** | **Learning objectives** | | | | |
| **Pharmacology** | Overview to inflammatory drugs | anti- | 1 | -Classify anti-inflammatory drugs  -Describe the role of DMARDs inflammatory agents | and | glucocorticoids | as | anti- |
| NSAIDs  (Non-selective cox inhibitors: Aspirin & other commonly  used NSAIDs) | |  | -Classify NSAIDS  -Differentiate between non-selective COXinhibitors and selective COX-2 inhibitors based on | | | | |
| mechanism of action. | | | | |
| -Name the prototype non-selective COX inhibitor. | | | | |
| -Describe the pharmacokinetics of Aspirin | | | | |
| -Describe the mechanism of action of aspirin as | | | | |
| anti-platelet, analgesic, antipyretic and anti- | | | | |
| inflammatory agent. | | | | |
| -Give the dose of Aspirin as anti-platelet, | | | | |
| analgesic/antipyretic and as anti-inflammatory | | | | |
| drug. | | | | |
| -Describe clinical uses of NSAIDs. | | | | |
| -Describe the adverse effects of NSAIDs.  -Describe the drug treatment of Aspirin poisoning | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | -Describe the pharmacokinetics with emphasis on |
| dosage, duration of action and elimination of |
| Diclofenac, Ibuprofen, Indomethacin, Mefanamic |
| acid and Piroxicam in contrast to Aspirin |
| -Relate pharmacokinetics and pharmacodynamics of NSAIDs to their  clinical applications |
| Selective COX-2 inhibitors | 1 | -Describe the mechanism of action of selective |
| COX-2 inhibitors. |
| -Describe the clinical uses of selective COX-2 |
| inhibitors |
| -Describe the adverse effects of selective COX-2 |
| inhibitors |
| -Describe the merits and demerits of selective  COX-2 inhibitors and non-selective COXinhibitors. |
| Paracetamol (Acetaminophen) |  | -Describe the pharmacokinetics of Paracetamol  -Describe the mechanism of action of Paracetamol.  -Describe the clinical uses of Paracetamol.  -Describe the adverse effects of Paracetamol.  -Give therapeutic and fatal doses of Paracetamol.  -Describe the drug treatment of Paracetamolpoisoning |

|  |  |  |  |
| --- | --- | --- | --- |
| **Pathology** | Cells of Inflammation | 1 | -Describe different cells of inflammation  -Describe the functions of various cells ofinflammation  - Enumerate different causes of leukopenia and  leucocytosis(each neutrophil, lymphocyte, monocyte, eosinophil, basophil seperately) |
| Overview to Acute  Inflammation and vascular phase | 1 | -Define acute inflammation  -Describe causes of acute inflammation  -Describe the vascular events of acuteinflammation |
| Recognition ofmicrobes | 1 | -Describe various molecular patterns and appropriate receptors used by the inflammatorycells to identify microbes  -Relate the recognition of microbes to the  initiation of inflammation |
| Cellular phase of acute  inflammation | 1 | -Describe the sequence of events and cellular  changes involved in cellular phase of acuteinflammation |
| Plasma DerivedMediators | 1 | -Enumerate plasma derived mediators  -Enlist the functions of each mediator  -Describe the different cascades involved in thegeneration of mediators |
| Cell Derived  Mediators | -Enumerate cell derived mediators  -Enlist the functions of each mediator |

|  |  |  |  |
| --- | --- | --- | --- |
| **Theme (Pain and Fatigue)** | | | |
| **Subjects** | **Topics** | **Hours** | **Los** |
| Pharmacology | Anti-histamines | 1 | -Classify anti-histamines  -Differentiate between first and second generationanti-histamines  -Describe the pharmacologic effects of H1-receptor antagonists.  -Describe the clinical uses of H1-receptorantagonists.  -Enlist the adverse effects of H1-receptorantagonists.  -Describe the drug interactions of H1-receptorantagonists. |
| Serotonin agonistand antagonist | 1 | - Enlist serotonin agonists   * Classify serotonin antagonists * Describe the mechanism of action of serotonin * Describe the organ system effects of serotonin. * Describe the clinical uses of serotonin agonistsand antagonists * Describe the pharmacological basis ofondansetron in chemotherapy induced vomiting |

|  |  |  |  |
| --- | --- | --- | --- |
| Pathology | Morphological patterns, outcomes,defects of inflammation | 1 | -Enumerate the different morphological patternsof inflammation  -Describe the histological changes in each pattern  - Enlist the outcomes of inflammation  -Enumerate the various defects of inflammation  -Describe the consequences of the defects ofinflammation |
| Overview to chronic inflammation | 1 | -Define chronic inflammation  -Differentiate chronic from acute inflammation  -Describe the causes and morphological featuresof chronic inflammation |
| Granulomatous inflammation | 1 | Define granulomatous inflammation |
| -Describe the morphological features and  mediators involved in granulomatousinflammation |
| Cells and mediators of chronic inflammation | 1 | -Enlist the cells of chronic inflammation  -Enumerate the mediators of chronicinflammation  -Describe the function of the mediators  -Relate the functions of mediators to themorphological changes seen in chronic  inflammation |
| Systemic effects of inflammation | 1 | -Enumerate the systemic effects of inflammation  -Describe the pathophysiology of the systemiceffects of inflammation |

|  |  |  |  |
| --- | --- | --- | --- |
| Forensic Medicine | Antidotes | 1 | Define and classify antidotes  Describe the mechanism of action of differentantidotes |
| Steps of management in a case of poisoning | 1 | Describe general steps of management in a caseof poisoning |
| Community Medicine | Infectious disease epidemiology | 1 | * Define incubation period * Explain the principles of disease eradication and control * Define serial intervals * Define infectivity period |
| Infection control | 2 | * Define the basic definition related to infectious disease epidemiology * Review the role of susceptible host for successful parasitism, modes of transmission and the host defense system * List and explain the various classifications of communicable diseases with special reference to the scope and purpose of the International classification of Disease (ICD -10). * Enlist the common infectious diseases affecting the population of Pakistan as perNational institute of Health Pakistan. * Explain the effect of climate change and seasonal variation on specific diseases globally and in Pakistan. * Explain the role of personal hygiene &PPE in infection control. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | * Disease careers * Reservoirs of infection * Disinfection * Communicable disease control measure (aimed at agent, host, others, administrative measures and vector control measures | 1 | * Define disease careers * Explain the reservoirs of infection * Differentiate between sterilization and disinfection * Explain the types and procedures of disinfection * Discuss Communicable disease control measure (aimed at agent, host, others, administrative measures and vector control measures |

|  |  |  |  |
| --- | --- | --- | --- |
| **Theme (Trauma and repair)** | | | |
| **Subjects** | **Topics** | **Hours** | **LOs** |
| Pathology | Prostaglandins | 1 | * Enlist various prostaglandins- * Describe the mechanism of action ofProstaglandins. * Describe the organ system effects ofProstaglandins. * Describe the clinical uses of Prostaglandins. |
| Overview to tissuehealing and repair | 1 | -Differentiate between regeneration and repair  -Describe various steps involved in the process oftissue healing and repair |
| Tissue regeneration | -Define regeneration  -Enlist organs capable of regeneration  -Describe the process and mediators involved in regeneration |
| Cell Cycle and itsrole in repair | -Define cell cycle  -Describe the initiation, various phases andproteins involved in the cell cycle  -Discuss cells capable of entering the cell cycle  -Describe proliferative capabilities of various cells |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Repair by scarring | 1 | -Describe the various steps involved in process ofrepair by scarring  -Describe the various mediators involved in thesteps of scarring |
| Growth factors and receptors | 1 | -enumerate various growth factors and theirreceptors  -Describe the most common pathways by whichgrowth factors affect tissue repair and  regeneration |
| ECM | -Classify various components of ECM  -Describe the role and importance of ECM in tissue repair |
| Factors affecting wound healing/abnormalscarring | 1 | -Enlist the various factors that influence woundhealing  -Describe the mechanism by which these factorsaffect wound healing  -Describe the abnormalities of repair and their consequences |
| Forensic Medicine | Overview to medico-legal aspects of trauma  (Wound causation) | 1 | Describe mechanism of wound causation |
| Toxicity by  analgesics | 1 | Describe the medico legal aspects of toxicity byaspirin and paracetamol |

|  |  |  |  |
| --- | --- | --- | --- |
| Community Medicine | Nosocomial infection & its control | 1 | * Describe the prevalence of the nosocomial infections globally andSpecifically in Pakistan. * Identify the cause of nosocomial infections in Pakistan. * Enlist common nosocomial infections. * Describe the importance of different modes of transmission for causation ofthe nosocomial infections. * Explain the control & preventive measures for nosocomial infections |

|  |  |  |  |
| --- | --- | --- | --- |
| **Theme (Fever and Infection)** | | | |
| **Subjects** | **Topics** | **Hours** | **Los** |
| **Pharmacology** | Introduction to  Chemotherapy | 2 | 1. Define basic terms like chemotherapy, antibiotic, antimicrobial, MIC, MBC, chemoprophylaxis, empirical therapy and post-antibiotic effect, bacteriostatic and bactericidal antimicrobials. 2. Explain advantages of drug combinations. 3. Describe various mechanisms of bacterial resistance against antibiotics. 4. Differentiate between concentration and time dependent killing with examples. 5. Classify antimicrobials on the basis ofmechanism of action (MOA) |
| Penicillins | 2 | 1. Classify beta-lactam antibiotics 2. Enlist narrow and broad spectrumPenicillins. 3. Enlist anti-pseudomonal, anti- staphylococcal/ beta lactamase resistantPenicillin. 4. Enlist long- and short-acting Penicillins 5. Describe anti-bacterial spectrum ofPenicillins. 6. Describe pharmacokinetics in respect of emphasis on route of administration and   excretion of Penicillins |
|  |  | 1. Describe mechanism of action ofPenicillins 2. Describe clinical uses of Penecillins 3. Describe adverse effects of Penicillins, |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | 1. Describe contraindications of Penicillins. 2. Describe principal mechanism of bacterialresistance to Penicillins 3. Describe drug interactions of Penicillins 4. Apply formula for interconversion of milligrams and units of Penicillin G. 5. Relate pharmacokinetics and pharmacodynamics of Penicillin with their   clinical applications / uses. |
| Cephalosporins | 1 | 1. Classify Cephalosporins 2. Describe anti-bacterial spectrum ofCephalosporins. 3. Describe pharmacokinetics of Cephalosporins with special emphasis onroute of administration and excretion. 4. Describe clinical uses of Cephalosporins 5. Describe the adverse effects ofCephalosporins. 6. Describe drug interactions of Cephalosporins with Ethanol. 7. Describe the principal bacterialmechanism of resistance to Cephalosporins. 8. Relate pharmacokinetics and pharmacodynamics of Cephalosporin   withtheir clinical applications / uses. |
| Beta lactamaseinhibitors | 1 | 1. Enlist beta-lactamase inhibitors 2. Explain the rationale for using beta lactamase inhibitors in combination withβ-lactam antibiotics. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Monobactams &Carbapanem, | 1 | 1. Describe the antibacterial spectrum of Monobactams and Carbapanem 2. Describe the clinical uses of Monobactams and Carbapanem |
| Vancomycin | 1 | 1. Describe the MOA of Vancomycin. 2. Describe clinical uses of Vancomycin 3. Describe the use of vancomycin in MRSA (Methicillin-resistant Staph aureus). 4. Describe adverse effects of Vancomycin 5. Describe “Red man/Red neck” syndrome. |
| Fosfomycin Bacitracin &  Cycloserine | 1 | 1. Enlist clinical uses of Fosfomycin,Bacitracin & Cycloserine |
| Protein synthesisinhibitors: | 1 | Classify bacterial protein synthesis inhibitors |
| Tetracyclines | 1 | * Classify Tetracyclines. * Describe anti-bacterial spectrum of Tetracyclines. * Describe the pharmacokinetics of Tetracycline with special emphasis onabsorption of Tetracyclines. * Describe mechanism of action ofTetracyclines. * Describe the principal mechanism ofresistance to Tetracyclines. * Describe clinical uses of Tetracyclines. * Describe adverse effects of Tetracyclines * Describe Black Bone disease. |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | * Describe the teratogenic effects ofTetracyclines. * Describe drug interactions ofTetracyclines. * Describe the adverse effect related to theuse of outdated (expired) Tetracycline products. * Relate pharmacokinetics and * pharmacodynamics of Tetracycline with their clinical applications / uses. |
| **Pathology** | Bacteria: Pyrogenic Bacteria | 1 | -Define boil and furuncle  -Enlist organisms responsible for pyrogenicinfections  -Describe important properties, pathophysiology, lab diagnosis of GPC &GNC |
| Bacteria: Rickettsia | 1 | -Define Rickettsia  -Describe the important properties, pathophysiology, lab diagnosis of diseases  caused by Rickettsia |
| Spore forming GProds | 1 | -Enumerate spore forming GP rods  - Describe the important properties,  pathophysiology, clinical features and labdiagnosis of spore forming GP rods |
| Non Spore formingGP rods | Enumerate non spore forming GP rods |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | - Describe the important properties, pathophysiology, clinical features and lab diagnosis of non-spore forming GP rods |
| Chlamydia | 1 | Describe the important properties, pathophysiology, clinical features and lab diagnosis of chlamydia. |
| Miscellaneous: Sepsis and Septic Shock | 1 | -Define sepsis and septic shock  -Enlist organisms capable of causing sepsis andinducing septic shock  -Describe the pathophysiology and clinical features of septic shock |
| Zoonotic Infections | 1 | -Enlist organisms causing zoonotic infections  -Describe the important properties, pathophysiology, clinical features and lab diagnosis of different zoonotic diseases |
| General outlines of  identification | 2 | Describe methods and parameters of  identification |
| Fetal age  determination | Write important physical developmental  stages of fetus for age estimation |
| Age determination by skeletal study | Write important skeletal points of age  estimation |
| Age estimation by  dental study | Write important dental points for age  estimation |
| Ages of medico legal  significance | Enlist important ages of legal significance |

|  |  |  |  |
| --- | --- | --- | --- |
| **Theme (Fever and Infection)** | | | |
| **Subjects** | **Topics** | **Hours** | **Los** |
| Pharmacology | Aminoglycosides | 1 | * Enlist Aminoglycosides. * Describe anti-bacterial spectrum ofAminoglycosides. * Describe the pharmacokinetics of Aminoglycosides with special emphasis on route of administration, concentration- dependent killing and post-antibiotic effect. * Describe mechanism of action ofAminoglycosides. * Describe the principal mechanism ofresistance to Aminoglycosides. * Describe clinical uses of * Aminoglycosides. * Describe adverse effects ofAminoglycosides. * Describe the drug interactions ofAminoglycosides. * Relate pharmacokinetics and pharmacodynamics of Aminoglycosides with their clinicalapplications / uses. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Macrolides & other related drugs | 2 | * Enlist Macrolides. * Describe anti-microbial spectrum ofMacrolides * Describe pharmacokinetics of Macrolides * Describe the mechanism of action ofMacrolides * Describe the principal mechanism ofresistance to Macrolides * Describe clinical uses of Macrolides * Describe adverse effects of Macrolides. * Describe drug interactions of Macrolides * Differentiate the salient features of Erythromycin, Clarithromycin and Azithromycin in respect of dosing andclinical use. * Relate pharmacokinetics and pharmacodynamics of Macrolides with their clinical applications / uses. |
| Linezolid | 1 | * Describe mechanism of action ofLinezolid * Describe clinical uses of Linezolid with special emphasis on methicillin- resistant staphylococci and vancomycin-resistant enterococci |
| Clindamycin | * Describe mechanism of action ofClindamycin. * Enumerate clinical uses of Clindamycin. * Describe antibiotic-associated(pseudomembranous) colitis. |
| Streptogramins | * Enumerate Streptogramins. * Describe clinical use of Quinupristin- * Dalfopristin in VRE (Vancomycin-resistant enterococci). |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Chloramphenicol | 1 | * Describe anti-microbial spectrum ofChloramphenicol * Describe mechanism of action ofChloramphenicol * Enlist clinical uses of Chloramphenicol * Describe the reason for obsoleting thesystemic use of Chloramphenicol * Enlist adverse effects of Chloramphenicol |
|  | Quinolones | 1 | * Describe Gray baby syndrome. * Classify Quinolones. * Describe the pharmacokinetics of Fluroquinolones with special emphasis onhalf- life of Moxifloxacin * Enlist respiratory Quinolones. * Describe anti-microbial spectrum ofFluoroquinolones. * Describe mechanism of action ofFluoroquinolones. * Describe the principal mechanism ofresistance to Fluroquinolones, * Describe clinical uses of Fluroquinolones * Describe adverse effects ofFluroquinolones * Describe drug interactions ofFluroquinolones * Relate pharmacokinetics and pharmacodynamics of Fluoroquinolones with their clinical applications / use. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Sulfonamides and Trimethoprim | 2 | * Classify Sulfonamides * Describe anti-microbial spectrum ofSulfonamides * Describe mechanism of action ofSulfonamides and Trimethoprim * Describe mechanism of resistance toSulfonamides * Describe clinical uses of Sulfonamidesand Trimethoprim * Describe adverse effects of Sulfonamidesand Trimethoprim * Describe the advantages of combining sulfamethoxazole with trimethoprim (Co- Trimoxazole) * Describe the drug interaction of * Sulphonamides with Phenytoin. |
|  | Parasites: HydatidCyst | 1 | * Describe the life cycle and important properties of Echinococcus * Relate the pathogenesis to the clinical featuresand lab work up of Echinococcus * Identify cysts of Echinococcus in the lab |
| Leishmania | * Describe the life cycle, and important properties of Leishmania * Relate the pathogenesis to the clinical featuresand lab work up of Leishmania |

|  |  |  |  |
| --- | --- | --- | --- |
| Pathology | Toxoplasma | 2 | * Describe the life cycle and important properties of Toxoplasma * Relate the pathogenesis to the clinical features and lab work up of Toxoplasma |
| Malaria | * Describe the life cycle and important properties of Malarial parasite * Relate the pathogenesis to the clinical features and lab work up of Malaria |
| Tenia | * Describe the life cycle, important properties, of Tenia saginata and solium * Relate pathogenesis to the clinical features andlab work up of Tenia   saginata and solium |
| Forensic Medicine | Sex determination | 2 | Describe parameters of sex determination |
| Race determination | Describe parameters of race determination |
| Examination ofhair | Describe medico legal aspects of hair |
| Forensic  odontology | Write the application of odontology in forensicmedicine |
| Forensic  Anthropometry | Describe medico legal aspects of forensicanthropometry |

|  |  |  |  |
| --- | --- | --- | --- |
| Community Medicine | Epidemiology and control of vector borne diseases   * Malaria * Dengue and other Viral haemorrhagic fevers and Arboviral infections * Plague * Filariasis | 2 | * Describe the epidemiological determinants, frequency and distribution of Malaria * Compare the prevalence/incidence of malaria in different provinces of Pakistan. * Explain the preventive and controlmeasures of Malaria * Describe the scope/function of Malaria control program. * Explain the types, risk factors, complications and control measures of viral hemorrhagic fevers including Dengue fever |
| Epidemiology & control of Leishmaniasis | 1 | * Describe the epidemiological determinants, frequency and distribution of Leishmaniasis * Explain the preventive and controlmeasures of Leishmaniasis |
| zoonotic and direct contagious diseases   * Rabies * Anthrax * Plague * Brucellosis * Tetanus * Scabies | 2 | * Explain the pre and post exposure prophylaxis of Rabies * Explain the epidemiology, types of Anthrax and its preventive measures * Discuss the history, types and prevention of Plague * Explain the etiology, risk factors, clinical features and prevention of Brucellosis * Explain the preventive measures of Scabies * Discuss the etiology, risk factors, clinical features and prophylaxis of pre and post exposure of Tetanus |

|  |  |  |  |
| --- | --- | --- | --- |
|  | * Leprosy * Trachoma |  | * Explain the etiology, risk factors, stages and preventive measures of Leprosy * Explain the etiology, risk factors, complications and preventive   measures of Trachoma |
| Family medicine | Malaria & Hepatitis control program teams | 1 | * Explain the etiology, clinical features, types, investigations and   management of Malaria in family practice |
| * Describe the red-flags in a patient with Malaria for referral to specialty   care |
| * Identify at risk patients of hepatitis and Malaria and offer them   screening |

|  |  |  |  |
| --- | --- | --- | --- |
| **Theme (Fever and Infection)** | | | |
| **Subjects** | **Topics** | **Hours** | **Los** |
| Pharmacology | Antimalarials | 3 | * Describe terms like chemoprophylaxis, causal prophylaxis, terminal prophylaxisand radical cure with examples of drugs. * Classify antimalarial drugs. * Enlist drugs used for chemoprophylaxis ofmalaria. |
| * Enlist drugs used for radical cure ofmalaria. * Describe the pharmacokinetics of Chloroquine with special emphasis onvolume of distribution and dosing * Describe mechanism of action of Chloroquine, Quinine, Mefloquine, Halofantrine, Primaquine, Pyrimethamine and Artemisinins. * Describe adverse effects of antimalarialdrugs * Describe Cinchonism and Blackwaterfever. * Enlist the antimalarial drugs relativelysafe in pregnancy. * Describe the antimalarial drugs contraindicated in G6PD deficiency. * Relate pharmacokinetics and pharmacodynamicsof antimalarial drugs with their clinical applications / use. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Antifungal drugs | 2 | * Classify Antifungal drugs. * Describe the pharmacokinetics of Amphotericin B and Ketoconazole * Describe the advantages of liposomalpreparation of Amphotericin B * Describe mechanism of action of Azoles, Amphotericin B, Griseofulvin, Turbinafine, and Nystatin. * Describe clinical uses of Azoles, Amphotericin B, Griseofulvin, Turbinafine, and Nystatin. * Describe adverse effects of Azoles, Amphotericin B, Griseofulvin, Turbinafine, and Nystatin. * Describe drug interactions of Ketoconazole and Amphotericin B |
| Antivirals | 1 | * Classify antiviral drugs |
| Anti-herpes | 1 | * Enlist anti- Herpes drugs * Describe the pharmacokinetics of Acyclovir * Describe mechanism of action ofAcyclovir * Describe clinical uses of Acyclovir. * Describe adverse effects of Acyclovir Describe the role of Ganciclovir in CMV retinitis. |
| Anti-HIV drugs | 3 | * Classify anti-HIV drugs. |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | * Describe the role of entry inhibitors, integrase inhibitors, protease inhibitors,NRTIs and NNRTIs in HIV treatment * Describe adverse effects of Zidovudine and Indinavir * Describe the rationale of HAART therapy. |
| Pathology | Viruses: Corona | 1 | Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Corona Virus |
| Viruses: HIV | Describe the structure, important properties,  pathogenesis and clinical features along with labwork up of HIV |
| Viruses: Herpesviruses | 1 | Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Herpesviruses |
| Viruses: TumorViruses | Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Tumor viruses |
| Viruses: MMR | Describe the structure, important properties, pathogenesis and clinical features along with lab work up of MMR viruses |
| Fungi: Aspergillus | 1 | Describe the structure, important properties, pathogenesis and clinical  features along with labwork up of Aspergillus |
| Fungi: Candida | Describe the structure, important properties, pathogenesis and clinical  features along with lab work up of Candida |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Tenia |  | Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Tenia |
| Forensic Medicine | Medico legal issues related to  HIV patient | 1 | Describe legal issues related to HIV patient |
| Dactylography | Describe medico legal aspects of dactylography |
| DNA finger printing | * Define DNA finger printing * Write its application in forensic practice * Write methods of collection of samples anddispatch to laboratory |
| Tattoos, scarmarks, Superimposition | * Describe medico legal aspects of tattoo marks,Describe medico legal aspects of scar tissue, * Describe medico legal aspects of superimposition |

|  |  |  |  |
| --- | --- | --- | --- |
|  | and facial  reconstruction |  | Describe medico legal aspects of facialreconstruction |
| Polygraph | Describe medico legal aspects of polygraph |
| Narcoanalysis | Describe medico legal aspects of  narcoanalysis |
| Family Medicine | TORCH infections | 1 | Define TORCH infection |
| Describe the steps of investigations for TORCH infections |
| Describe the preventive strategies for TORCH infections and their  complications |

|  |  |  |  |
| --- | --- | --- | --- |
| Community Medicine | Epidemiology & control of airborne diseases | 1 | * Describe the epidemiological determinants, frequency and distribution of measles, mumps, chickenpox, rubella, Diphtheria, Pertissus and meningitis |
| * Explain the preventive and control   measures of measles, mumps & rubella with reference to Pakistani context. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Epidemiology & control of Corona virus infection | 1 | * Describe the epidemiological determinants, frequency and distributionof corona * Compare the prevalence/incidence of corona in different parts of the world. * Describe the preventive and control measures of corona Describe the role of Pakistani government   in corona control program. |
|  | Epidemiology and prevention of water borne diseases:   * Cholera * Typhoid * Acute Diarrhea and Dysentery * Polio * Hepatitis A and E * Food | 2 | * Enumerate common water borne diseases * Explain the epidemiology and prevention measures of these diseases * describe the current situation of these diseases on Pakistan and worldwide |

|  |  |  |  |
| --- | --- | --- | --- |
|  | poisoning   * Amebiasis and Giardiasis * Brucellosis * Leptospirosis * Worm infestations |  |  |

# Practical Work

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week 1 Practicals** | | | | |
| **Pathology** | Cell of  inflammation | 1.5 | | Identify Cells of inflammation in themicroscope |
| Acute Appendicitis | 1.5 | | Identify the histopathological changes  in acute appendicitis |
| **Forensic**  **Medicine** | Gastric Lavage | 1.5 | | Demonstrate the steps of gastriclavage |
| **Week 2 Practicals** | | | | |
| **Pathology** | Chronic  cholecystitis | 1.5 | | -Identify the morphological changes occurring in chronic  cholecystitis |
| Granuloma | 1.5 | | - Identify the various cells and their arrangement in a  granuloma |
| **Week 3 Practicals** | | | | |
| **Pathology** | Granulation Tissue | | 1.5 | -Identify the histological features of  granulation tissue |
| **Week 4 Practicals** | | | | |
|  | Catalase test | | 1.5 | -Perform and interpret the result of catalase test by tube and slide method |
| Coagulase test | | -Perform and interpret the result of  coagulase test by tube method |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pathology** | Oxidase test |  | | -Perform and interpret the result ofcoagulase test |
| Culture media | -Identify blood agar, Mannitol saltagar, Chocolate media, Cary Blair transport media in the lab  -Identify different types of haemolysis on blood agar |
| **Pharmacology** |  |  | | Prescription Writing |
| Acute  Tonsillitis | 1.5 | | Construct a prescription for a patient  with acute tonsillitis. |
| **Forensic Medicine** | Sex determination  through bones | 1.5 | | Identify human sex through bones |
| Hair, Fibre | Identify human hair throughmicroscopy  Differentiate between hair and fibre |
| **Week 5 Practicals** | | | | |
| **Pharmacology** |  | | Prescription Writing | |
| Malaria | 1.5 | | Construct a prescription for a patient  with Malaria |
| **Week 6 Practicals** | | | | |
| **Pathology** | Hydatid Cyst | 1.5 | | Identify cysts and ova of  Echinococcus in the lab |
| Leishmania | Identify leishmania in slides of bonemarrow/ skin biopsies |
| Malaria | Identify Malarial parasite trophozoites and gametocytes under  microscope |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Taenia  saginata/solium |  | Identify ova of Taenia in the lab |
| Community medicine | Communicable  diseases models | 3 | Identify the models related to the communicable diseases |
|  |  | Explain the complication, preventive measures and the  identification signs of concerned disease |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CLINICAL SUBJECTS** | | | | | | | |
| **S#** | **MEDCINE** | **SURGER Y** | **PAEDS** | **Obs/Gyn** | **ENT** | **EYE** | **PRIME** |
| 1 | PUO 1 | Surgical infections 1 | PUO  (better to teach either by Medicine or Paeds if majority content is same/ joint session can be taken)  1 | Puerperal pyrexia  1 | Acute & chronic Phyrangitis 1 | Acute and chronic dacrocystit is 1 | Reactionto illness  1 |
| 2 |  | Anesthesi a & pain relief | Child with Rash  1 | Post- operative wound sepsis  1 | Acute & chronic  Rhinitis 1 | Episcleritis 1 | Attributes of professionalism- empathy  1 |
| 3 |  | Acute abdomen 1 |  |  | Acute & chronic  Sinusitis 2 | Infective conjuncti Vitis  1 | Steps of research process  1 |
| 4 |  |  |  |  | Acute and chronic tonsillitis  1 |  | Identifying study question  2 |
|  |  |  |  |  |  |  | Literature review 2 |

**Learning Resources**

|  |  |  |
| --- | --- | --- |
| **S.No** | **Subjects** | **Textbooks** |
| **1.** | **Community Medicine** | 1. Community Medicine by Parikh 2. Community Medicine by M Illyas 3. Basic Statistics for the Health Sciences by Jan W Kuzma |
| **2.** | **Forensic Medicine** | 1. Nasib R. Awan. Principles and practice of Forensic Medicine 1st ed. 2002. 2. Parikh, C.K. Parikh’s Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology. 7th ed.2005. 3.Knight B. Simpson’s Forensic Medicine. 11th ed.1993. 3. Knight and Pekka. Principles of forensic medicine. 3rd ed. 2004 4. Krishan VIJ. Text book of forensic medicine and toxicology (principles and practice). 4th ed. 2007 5. Dikshit P.C. Text book of forensic medicine and toxicology. 1st ed. 2010 6. Polson. Polson’s Essential of Forensic Medicine. 4th edition. 2010. 7. Rao. Atlas of Forensic Medicine (latest edition). 8. Rao.Practical Forensic Medicine 3rd ed ,2007. 9. Knight: Jimpson’s Forensic Medicine 10th 1991,11th ed.1993 10. Taylor’s Principles and Practice of Medical Jurisprudence. 15th ed.1999 |
| **3.** | **Pathology** | 1. Robbins & Cotran, Pathologic Basis of Disease, 9th edition. 2. Rapid Review Pathology, 4th edition by Edward F. Goljan MD |
| **4.** | **PHARMACOLOGY** | 1. Lippincott Illustrated Pharmacology 2. Basic and Clinical Pharmacology by Katzung |

**MEDICAL TEACHING INSTITUTION**

**BACHA KHAN MEDICAL COLLEGE MARDAN**

**Lecture/Practical Time Table for 3rd Year MBBS Student (Session 2023—2024)**

**Inflammation & Infections Module, Week 1, Venue: Lecture Hall No: 03**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Day/Date** | **08:00—09:00am** | **09:00—10:00am** | **10:00—11:00am** | **11:00am—01:00pm** | | **01:00pm—01:30pm** | **01:30pm—3:30pm** | **5:00pm—7:00pm** | |
| **Theme: Pain & Fatigue** | | | | | | | | | |
|  | **LGF** | **LGF** | **LGF** | **Hospital Work** | | **Prayer Break** | **Pathology Assessment**  **Foundations 2 Module** | | **Evening Hospital Work** |
| **Monday**  27-02-2023 | **Introduction To**  **Inflamation& Infection Module**  **Dr.Haleema Sadia** | **Pathology**  Cells of Inflammation  **Dr. Komal Iqbal** | **Pathology**  Overview to Acute Inflammation and vascular phase  **Dr. Nazish Farooq** |
| **Tuesday**  28-02-2023 | **Pathology**  Recognition of microbes  **Dr. Khalida** | **ENT**  Acute and chronic tonsillitis  **Dr. Mudassir** | **Pharmacology**  Overview to anti-inflammatory drugs &(DMARDs)  **Dr. Halima Saadia** | **Pharmacology Assessment**  **Foundations 2 Module** | |
| **Wednesday**  01-03-2023 | **Pharmacology**  NSAIDs  (Non-selective cox inhibitors: Aspirin & other commonly used NSAIDs)  **Dr. Halima Saadia** | **Pharmacology**  Selective cox-inhibitors & paracetamol  **Dr.Halima Saadia** | **SURGERY**  Anesthesia & pain relief  **Dr. Salman Malik** | **Pharma:P1, Batch A1+A2+A3**  Dr. Waqas+ Dr. Fazli Rabbi+ Dr. Tauseef  **Patho:P1/P2, Batch B1+B2+B3**  Dr. Jawad+ Dr. Aisha+ Dr. Mashal |  | |
| **Thursday**  02-03-2023 | **Forensic Medicine**  Poison & related laws  **Dr. Khalid Khan** | **Pathology**  Plasma Derived  Mediators  **Dr. Zahir Shah** | **Pathology**  Cellular phase of acute inflammation  **Dr. Komal Iqbal** | **Pharma:P1Batch** B1+B2+B3  Dr. Waqas+ Dr. Fazli Rabbi+ Dr. Tauseef  **Patho:P1/P2Batch** A1+A2+A3  Dr. Zahir Shah+Dr. Zainab+Dr. Jawad |
| **Friday**  03-03-2023 | **Research**  Steps of Research process  **Dr. Naeem** | **Pathology**  Cell Derived Mediators  **Dr. Zarmina** | **Pharmacology**  Anti-histamines  **Dr. Halima Saadia** | **11:00am—12:00pm** | **12:00—02:00pm**  **Friday Prayers** | | |
| **Hospital Work** |

**Abbreviations: Pharma P1 (Practical):** Acute tonsillitis Prescription Writing **PathoP1/P2 (Practical):** Identify Cells of inflammation in the microscope / Acute Appendicitis

**MEDICAL TEACHING INSTITUTION**

**BACHA KHAN MEDICAL COLLEGE MARDAN**

**Lecture/Practical Time Table for 3rd Year MBBS Student (Session 2023—2024)**

**Inflammation & Infections Module, Week 2, Venue: Lecture Hall No 3**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Day/Date** | **08:00—09:00am** | **09:00—10:00am** | **10:00—11:00am** | **11:00am—01:00pm** | **01:00pm—01:30pm** | **01:30pm—3:30pm** | **5:00pm—7:00pm** |
| **Theme: Pain & fatigue** | | | | | | | |
|  | **LGF** | **LGF** | **LGF** | **Hospital Work** | **Prayer Break** | **Patho:P2, Batch** B1+B2+B3  Dr. Jawad. Dr. Mashal. Dr. Aisha  **Forensic Medicine**  **P1 Batch** A1+A2+A3  Dr. Abdullah. Dr. Zaheer. Dr. Shahid Iqbal | **Evening Hospital Work** |
| **Monday**  06-03-2023 | **Pathology** Morphological patterns, outcomes, defects of inflammation  **Dr. Mohtasim Billah** | **Community Medicine**  Hospital and Biomedical waste management  **Dr. Huma** | **Pharmacology** Role of glucocorticoids in inflammation  **Dr. Somia Afzal** |
| **Tuesday**  07-03-2023 | **ENT**  Acute & chronic rhinitis  **Dr. Mubashir** | **Pathology**  Overview to chronic inflammation  **Dr. Aisha Gohar** | **Forensic Medicine**  Diagnosis of poisoning in living and dead  **Dr. Abdullah** | **Patho:P2, Batch** A1+A2+A3  Dr. Jawad. Dr. Mashal. Dr. Aisha  **Forensic Medicine**  **P1 Batch** B1+B2+B3  Dr. Abdullah. Dr. Zaheer. Dr. Shahid Iqbal |
| **Wednesday**  08-03-2023 | **Forensic**  **Medicine**  Legal duties of RMP**/**Antidotes  **Dr. abdullah** | **SURGERY**  Surgical infections  **Dr. Tamjeed Gul** | **Pathology**  Granulomatous inflammation  **Dr. Zarmina** | **Patho:P3, Batch** B1+B2+B3  Dr. Mashal. Dr. Aisha. Dr. Zainab  **Pharma:SDL1,Batch** A1+A2+A3  Dr. Waqas. Dr. Fazli Rabbi. Dr. Tauseef |
| **Thursday**  09-03-2023 | **Research**  Identifying Study Questions  **Dr. Naeem Khattak** | **Pharmacology**  **SGD**  Arachidonic acid pathways  **Dr. Fazle Rabbi** | **Pathology**  Cells and mediators of chronic inflammation  **Dr. Komal Iqbal** | **Patho:P3, Batch**  A1+A2+A3  Dr. Mashal. Dr. Aisha. Dr. Zainab  **Pharma:SDL1,Batch** B1+B2+B3  Dr. Waqas. Dr. Fazli Rabbi. Dr. Tauseef |
| **Friday**  10-03-2023 | **Medicine**  PUO  **Dr. Nabi Rahman** | **Pathology**  Systemic effects of inflammation  **Dr. Zahir Shah** | **PAEDS**  Child with Rash  **Dr. M. Qasim Khan** | **11:00am—12:00pm** | **12:00—02:00pm**  **Friday Prayers** | |
| **Hospital Work** |

**Abbreviations:**

**PathoP2: Chronic cholecystitis Practical Patho P3:GranulomaPractical**

**Forensic Medicine P1: Gastric Lavage Pharma SDL1: Pharmacological management of Aspirin & Poisoning Pharma SGD:** Arachidonic acid pathways

** MEDICAL TEACHING INSTITUTION**

**BACHA KHAN MEDICAL COLLEGE MARDAN**

**Lecture/Practical Time Table for 3rd Year MBBS Student (Session 2023—2024)**

**Inflammation & Infections Module, Week 3, Venue: Lecture Hall No 3**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Day/Date** | **08:00—09:00am** | **09:00—10:00am** | **10:00—11:00am** | **11:00am—01:00pm** | **01:00pm—01:30pm** | **01:30pm—3:30pm** | **5:00pm—7:00pm** |
| **Theme: Trauma& repair** | | | | | | | |
|  | **LGF** | **LGF** | **LGF** | **Hospital Work** | **Prayer Break** | **Forensic:P2, Batch**  A1+A2+A3  Dr. Abdullah. Dr. Zaheer. Dr. Shahid Iqbal  **Patho:P4, Batch**  B1+B2+B3  Dr. Jawad. Dr. Mashal. Dr. Aisha | **Evening Hospital Work** |
| **Monday**  13-03-2023 | **Pathology** Overview to tissue healing and repair  **Dr. Jawad** | **Pathology**  Tissue regeneration  **Dr. Komal** | **Obs/Gyn**  Puerperal pyrexia  **Dr. Naila** |
| **Tuesday**  14-03-2023 | **EYE**  Acute and chronic Dacrocystitis  **Dr. Bilal** | **Pathology**  Cell Cycle and its role in repair  **Dr. Mashal** | **ENT**  Acute & chronic sinusitis  **Dr. Haider Zaman** | **Forensic:P2,Batch**  B1+B2+B3  Dr. Abdullah. Dr. Zaheer. Dr. Shahid Iqbal  **Patho:P4,Batch**  A1+A2+A3  Dr. Jawad. Dr. Mashal. Dr. Aisha |
| **Wednesday**  15-03-2023 | **Forensic Medicine**  Forensic Aspect of Trauma-Overview to medico-legal aspects of trauma-Wound causation  **Dr. Khalid** | **Pathology**  Repair by scarring/abnormal scarring  **Dr. Zarmina** | **EYE**  Infective conjunctivitis  **Dr. Hamza** | **Forensic:P3, Batch**  A1+A2+A3  Dr. Abdullah. Dr. Zaheer. Dr. Shahid Iqbal  **Patho:P5, Batch**  B1+B2+B3  Dr. Zainab. Dr. Mashal. Dr. Aisha |
| **Thursday**  16-03-2023 | **Pathology**  Growth factors and receptors  **Dr. Sadia** | **Forensic Medicine**  Autopsy of a suspected infected dead body / Exumation  **Dr. Zaheer** | **Pathology**  Extra cellular Matrix  **Dr. Nazish Farooq** | **Forensic: P3,Batch**  B1+B2+B3  Dr. Abdullah. Dr. Zaheer. Dr. Shahid Iqbal  **Patho:P5, Batch**  A1+A2+A3  Dr. Zainab. Dr. Mashal. Dr. Aisha |
| **Friday**  17-03-2023 | **ENT**  Acute & chronic Phyrangitis  **Dr. Sana Ullah** | **EYE**  Episcleritis  **Dr. Bilal** | **Pathology**  Factors affecting wound healing  **Dr. Komal** | **11:00am—12:00pm** | **12:00—02:00pm**  **Friday Prayers** | |
| **Hospital Work** |

**Abbreviations:**

**PathoP4: Granulation TissuePractical Patho P5:Oxidase Test Forensic P2:Sex Determination through Bones Forensic P3: Identify & Differentiate Hairs, Fiber**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Day/Date** | **08:00—09:00am** | **09:00—10:00am** | **10:00—11:00am** | **11:00am—01:00pm** | **01:00pm—01:30pm** | **01:30pm—3:30pm** | **5:00pm—7:00pm** |
| **Theme:Fever & Infection** | | | | | | | |
|  | **LGF** | **LGF** | **LGF** | **Hospital Work** | **Prayer Break** | **Prime**  **Medical Education**  Attributes of Professionalism  **Dr. Imtiaz ud Din** | **Evening Hospital Work** |
| **Monday**  20-03-2023 | **Pathology**  Bacteria:  Pyrogenic Bacteria  **Dr. Zahir Shah** | **SURGERY**  Acute abdomen  **Dr. Abbas Ali** | **Pharmacology** Introduction to Chemotherapy  **Dr. S.M Jadoon** |
| **Tuesday**  21-03-2023 | **Pharmacology**  Penicillin  **Dr. S. M Jadoon** | **Pharmacology**  Cephalosporin  **Dr. S.M Jadoon** | **Pathology**  Bacteria:  Rickettsia  **Dr. Aisha Gohar** | **PEADS**  PUO  **Dr. Kiramat** |
| **Wednesday**  22-03-2023 | **Community Medicine**  Nosocomial infection & its control  **Dr. Fatima** | **Pathology**  Viruses:  Corona  **Dr. Zarmina** | **Pharmacology**  Cell wall inhibitors (Miscellaneous – Monobactam, Carbapanem, vancomycin, daptomycin, Fosfomycin, Bacitracin)  **Dr. S.M Jadoon** | **Community Medicine P1, Batch A1, A2, A3**  Dr. Ishtiaq + Dr. Miraj  **Patho:P6, Batch B1,B2,B3**  Dr. Zainab + Dr. Aisha +Dr. Jawad |
| **Thursday**  23-03-2023 | **PAKISTAN DAY** | | |  |  | |
| **Friday**  24-03-2023 | **Obs/Gyn**  Post-operative wound sepsis  **Dr. Hemasa Gul** | **Pathology**  Viruses:  HIV  **Dr. Mashal Riaz** | **Community** Medicine  Infection control  **Dr. Huma** | **11:00am-12:00pm** | **12:00—02:00pm**  **Friday Prayers** | |
| **Hospital Work** |

**MEDICAL TEACHING INSTITUTION**

**BACHA KHAN MEDICAL COLLEGE MARDAN**

**Lecture/Practical Time Table for 3rd Year MBBS Student (Session 2023—2024)**

**Inflammation & Infections Module, Week 4, Venue: Lecture Hall No**

**Abbreviations:**

**Community Medicine P1: Communicable Diseases models PathoP6: Culture Media**

**MEDICAL TEACHING INSTITUTION**

**BACHA KHAN MEDICAL COLLEGE MARDAN**

**Lecture/Practical Time Table for 3rd Year MBBS Student (Session 2023—2024)**

**Inflammation & Infections Module, Week 5, Venue: Lecture Hall No 3**

**Revised Time Table (Ramadan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Day/Date** | **08:00—08:45am** | **08:45—09:30am** | **09:30—10:15am** | **10:15am**  **12:30Pm** | **12:30pm**  **01:00pm** | **01:00pm—02:00pm** |
|  | **LGF** | **LGF** | **LGF** | **Hospital Work** | **Prayer Break** | **Community Medicine P1,Batch B1,B2,B3**  Dr. Ishtiaq + Dr. Miraj  **Patho:P6,Batch A1,A2,A3**  Dr. Jawad. Dr. Mashal. Dr. Aisha |
| **Monday**  27-03-2023 | **Community Medicine**  Epidemiology & control of Corona  **Dr. Huma** | **Pathology**  Viruses:  Herpesviruses  **Dr. Khalida Kousar** | **Community Medicine**  Epidemiology & control of HIV/AIDs  **Dr. Fatima** |
| **Tuesday**  28-03-2023 | **Research**  Identifying Study Question  **Dr. Naeem** | **Pathology**  Viruses:  Tumor Viruses  **Dr. Zainab** | **Pathology**  Viruses:  Rabies  **Dr. Nazish** | **Pharma:SGD1,Batch**  **A1,A2,A3**  Dr. Waqas. Dr. Fazli Rabbi. Dr. Tauseef  **Patho:P7,Batch B1,B2,B3**  Dr. Jawad. Dr. Mashal. Dr. Aisha |
| **Wednesday**  **29-03-2023** | **Pharmacology**  Aminoglycosides  Fluoroquinolones  **Dr. S.M Jadoon** | **Pathology**  Viruses:MMR  **Dr. Mashal** | **Research**  Literature Review  **Dr. Naeem** | **Pharma:SGD1,Batch**  **B1,B2,B3**  Dr. Waqas. Dr. Fazli Rabbi. Dr. Tauseef  **Patho:P7,Batch**  **A1,A2,A3**  Dr. Mashal. Dr. Aisha, Dr. Zainab |
| **Thursday**  30-03-2023 | **Pharmacology**  Macrolides & other related drugs (Linzolid&Telithromycin)  **Dr. S.M Jadoon** | **Pharmacology**  Chloramphenicol  **Dr. S.M Jadoon** | **Community Medicine** Mycology and its public health importance  **Dr. Fatma** | **Pharmacology LGF**  Antivirals - (Anti-herpes & CMV) & Anti HIV drugs  **Dr. Tauseef** |
| **Friday**  31-03-2023 | **Pharmacology**  Antifungal drugs  **Dr. Halima Sadia** | **Pathology**  Tenia LGF  **Dr. Sadia** | **Research**  Literature Review  **Dr. Naeem** | **10:15am—12:00pm** | **12:00—02:00pm**  **Friday Prayers** | |
| **Hospital Work** |

**Abbreviations:**

**Community Medicine P1: Communicable Diseases models**

**PathoP6: Culture Media Pharma SGD1: Mechanisms of developing of Antibacterial Drug Resistance PathoP7: Malaria Practical**

**MEDICAL TEACHING INSTITUTION**

**BACHA KHAN MEDICAL COLLEGE MARDAN**

**Lecture/Practical Time Table for 3rd Year MBBS Student (Session 2023—2024)**

**Inflammation & Infections Module, Week 6, Venue: Lecture Hall No 3**

**Revised Time Table for Ramadan**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Day/Date** | **08:00—08:45am** | **08:45—09:30am** | **09:30—10:15am** | **10:15am-12:30pm** | **12:30pm-**  **01:00pm** | **01:00Pm—02:00pm** |
|  | **LGF** | **LGF** | **LGF** | **Hospital Work** | **Prayer Break** | **Community Medicine LGF**  Epidemiology & Control of MMR/ Rabies  **Dr. Fatma** |
| **Monday**  03-04-2023 | **Forensic Medicine**  Medico legal aspects of HIV patient / Putrefaction &Adipocere  **Dr. Abdullah** | **Pharmacology**  Sulfonamides and Trimethoprim  **Dr. S.M Jadoon** | **Pathology**  Fungi:Aspergillus  **Dr. Khalida** |
| **Tuesday**  04-04-2023 | **Pathology** Parasites:  Hydatid Cyst  **Dr. Ayesha** | **Pharmacology** Anthelminthic  **Dr. Halima Sadia** | **Pathology**  Leishmania  **Dr. Khalida** | **Pharma:P2, Batch**  A1-A2-A3  Dr. Waqas. Dr. Fazli Rabbi. Dr. Tauseef  **Patho:P8, Batch**  B1-B2-B3  Dr. Jawad. Dr. Mashal. Dr. Aisha |
| **Wednesday**  05-04-2023 | **Pharmacology**  Antimalarial  **Dr. Halima Sadia** | **Pathology**  Toxoplasma  **Dr. Mashal** | **Pathology**  Malaria  **Dr. Nazish Farooq** | **Pharma:P2,Batch**  B1-B2-B3  Dr. Waqas. Dr. Fazli Rabbi. Dr. Tauseef  **Patho:P8,Batch**  A1-A2-A3  Dr. Jawad. Dr. Mashal. Dr. Aisha |
| **Thursday**  06-04-2023 | **Pathology**  Tenia SGF  **Dr. Manzoor** | **Community Medicine**  Epidemiology & control of Leishmaniasis  **Dr. Huma** | **Pathology**  Miscellaneous:  Sepsis and Septic Shock  **Dr. Mashal** | **Pharma:SGD1, Batch**  A1-A2-A3  Dr. Waqas. Dr. Fazli Rabbi. Dr. Tauseef  **Patho:P9, Batch**  B1-B2-B3  Dr. Aisha, Dr. Zainab, Dr, Mashal |
| **Friday**  07-04-2023 | **Pathology**  Zoonotic Infections  **Dr. Manzoor** | **Community** Medicine  Epidemiology & control of Malaria)  **Dr. Fatma** | **Pathology**  Spore forming,Non Spore forming GP rods  **Dr. Zahir Shah** | **10:15am**  **12:00 pm** | **12:00—02:00pm**  **Friday Prayers** | |
| **Hospital**  **Work** |

**Abbreviations: Pharma P2: Malaria Prescription Writing Pharma SGD1: Drugs Used in the management of Septic & Anaphylactic Shock PathoP8: Hydatid Cyst Patho P9: Leishmania**

**MEDICAL TEACHING INSTITUTION**

**BACHA KHAN MEDICAL COLLEGE MARDAN**

**Lecture/Practical Time Table for 3rd Year MBBS Student (Session 2023—2024)**

**Inflammation & Infections Module, Week 6, Venue: Lecture Hall No 3**

**Revised Time Table for Ramadan**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Day/Date** | **08:00—08:45am** | **08:45—09:30am** | **09:30—10:15am** | **10:15am-12:30pm** | **12:30pm-**  **01:00pm** | **01:00Pm—02:00pm** |
|  | **LGF** | **LGF** | **LGF** | **Hospital Work** | **Prayer Break** | **Pharma:SGD1, Batch**  B1-B2-B3  Dr. Waqas. Dr. Fazli Rabbi. Dr. Tauseef  **Patho:P9, Batch**  A1-A2-A3  Dr. Aisha, Dr. Zainab, Dr, Mashal |
| **Monday**  10-04-2023 | **PAEDS**  Child with Rash  **Dr. M. Qasim Khan** | **Pathology**  Chlamydia  **Dr. Zahir Shah** | **Mentoring**  **All Faculty** |

**Abbreviations:**

**Pharma SGD1: Drugs Used in the management of Septic & Anaphylactic Shock**

**Patho P9: Leishmania**

# Assessment Plan – 3rd Year MBBS

### The year-3 will be assessed in 3 blocks

1. Block-1 (Foundation 2 and Infection and Inflammation modules) will be assessed in paper-G

### Block-2 (Multisystem, blood and MSK modules) will be assessed in paper-H

1. Block-3 (CVS and Respiratory module) will be assessed in paper-I

### Each written paper consists of 120 MCQs and

1. Internal assessment will be added to final marks in KMU as shown in below table.

### In OSPE, each station will be allotted 6 marks, and a total of 120 (+10% marks of internal assessment) marks are allocated for each OSPE/OSCE examination.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year 3 Professional Exam in System-based Curriculum** | | | | | | |
| **Theory paper** | **Modules** | **Theory marks** | **Internal assessment theory (10%)** | **OSPE/OSPE** | **Internal assessment OSPE/OSPE (10%)** | **TOTAL MARKS** |
| Paper G | Foundation-II | 120 | 14 | 120 | 14 | 268 |
| Inf.&Inflamm. |
| Paper H | Multisystem Blood | 120 | 13 | 120 | 14 | 267 |
| MSK-II |
| Paper I | CVS-II | 120 | 13 | 120 | 12 | 265 |
| Respiratory-II |
| **TOTAL MARKS** | | 360 | 40 | 360 | 40 | 800 |

\*Research viva of 20 marks will be conducted in paper-L. However, the rest of 15 marks will be decided by the concerned department internally for the contribution of the students in research project/thesis.

# Assessment Blueprints

**Table 2: Paper G (Foundation II and Infection & Inflammation)**

|  |  |
| --- | --- |
| **Subjects** | **Total MCQs** |
| Infection & Inflammation | 54 |
| Foundation - II | 66 |
| **Total** | **120** |

**Table 3: Paper G OSCEs**

|  |  |
| --- | --- |
| **Subject** | **Total OSCE stations** |
| Infection & Inflammation | 10 |
| Foundation – II | 10 |
| **Total** | **20** |

A minimum of 20 stations will be used in final exams. Total marks will be 120 (6 marks for each station).