

DEPARTMENT OF MEDICAL EDUCATION RMC /Allied Hospitals, Rawalpindi



4th year Learning Outcome

DEPARTMENT OF COMMUNITY MEDICINE

Торіс:	Introduction to the Subject
Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

At the end of session students will be able to:

- 1. Comprehend the significance of the subject.
- 2. Differentiate between Community Medicine, Public Health, Preventive Medicine and Clinical Medicine.
- 3. Explain the history and revolution of medicine.

Торіс:	Infectious disease definitions
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
Learning Outcomes:	

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At the end of session students will be able to:

- 1. Differentiate various terminologies used in epidemiology of infectious diseases.
- 2. Comprehend Concept of Disease control, elimination & eradication.

Торіс:	Dynamics of Disease Transmission
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02

Learning Outcomes:

At the end of session students will be able to:

- 1. Identify various modes of transmission of infectious diseases.
- 2. Enlist different kinds of carriers.
- 3. Apply the attained knowledge in epidemiology of infectious diseases

Name of Teacher:	Prof / AP / Demonstrator
Торіс:	Reproductive Health (Excluding Child Health)
No. of Lectures:	06

Learning Outcomes:

- 1. Comprehend the rationale of Reproductive health.
- 2. Explain the logic behind application of different preventive measures in various phases of life to improve the Maternal Health.
- 3. Relate the association between the Maternal Health status and the outcome of pregnancy.
- 4. Relate the factors that contribute to increase MMR with the interventions for its control.

Topic:	Environment (Water, air, Soil, noise, Radiation, Temperature, Green
	House effect) Excluding Water related Diseases
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	06





Learning Outcomes:

At the end of session students will be able to:

1. Comprehend the concept of different types of environment, physical, biological & especially psychosocial which is getting important in this complex socioeconomic situation

Торіс:	Medical Sociology (including Eugenics)
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
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Learning Outcomes:

At the end of session students will be able to:

- 1. Classify the genetic disorders.
- 2. Relate the normal structural & functional knowledge of genetics with the risk factors and prevention of common genetic disorders.
- 3. Explain the significance of early diagnosis and subsequent management of common genetic disorders

Торіс:	STD/AIDS
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
Learning Outcomes:	

At the end of session students will be able to:

- 1. Classify common sexually transmitted infections.
- 2. Describe the epidemiology of STIs and measures for the prevention of these diseases.

Topic:	Vector born diseases
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	03

Learning Outcomes:

At the end of session students will be able to:

- 1. Explain the basic knowledge of the arthropod borne diseases transmitted by the vectors, sign and symptoms of the diseases, lab diagnosis of the diseases.
- 2. Explain the prevention in the Individual and at mass level.

Торіс:	Hospital Administration
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
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Learning Outcomes:

At the end of session students will be able to:

1. Comprehend the significance and working of hospitals under administrative hierarchical system.

Торіс:	Hospital Waste Management
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	





- 1. Discuss importance of their segregation and colour coding for different types of waste.
- 2. Explain the purpose of segregation and waste destination

Торіс:	Disasters/Accidents
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
Learning Outcomes:	

At the end of session students will be able to:

- 1. Define disaster and Classify disasters.
- 2. Explain the measurement tools to measure the magnitude of the disasters, Grading the disasters i.e. rating according to number causalities.
- 3. Explain Disaster cycle.
- 4. Elaborate Disaster management program.

Торіс:	Obesity
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01

Learning Outcomes:

At the end of session students will be able to:

- 1. Classify obesity on the basis of BMI.
- 2. Relate Immediate and delayed Hazards of Obesity with different methods of prevention and control.
- 3. Explain different methods of assessment of obesity

Торіс:	Nutrition
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	05

Learning Outcomes:

At the end of session students will be able to:

- 1. Define the terminologies used in relation to food & nutrition.
- 2. Explain the importance of minerals and vitamins.
- 3. Construct the balanced diet.
- 4. Explain the factors affecting energy requirement.
- 5. Describe the nutritional problems related to public health with emphasis on PEM.
- 6. Explain the aims and methods of nutritional assessment in a community

Торіс:	Epidemiology
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	08
T I O i	

Learning Outcomes:

- 1. Differentiate between epidemiology & clinical medicine.
- 2. Differentiate between epidemiological transition and polarization.
- 3. Enlist the tools of measurements in epidemiology and explain their application in epidemiological studies.





- 4. Compare the utility and pros & cons of different study designs in epidemiology.
- 5. Describe and differentiate the types of Bias and the techniques for its minimization in different study designs.
- 6. Differentiate between the concept of association & causation in epidemiological studies.

Topic:	Biostatistics
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	04
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Learning Outcomes:

At the end of session students will be able to:

- 1. Enlist Sources of statistical data in Pakistan.
- 2. Explain the system of data collection particularly in Pakistan.
- 3. Interpret various types of data, its measurement and its presentation.
- 4. Differentiate b/w cumulative & relative frequency.
- 5. Explain the significance of various measures of central tendency, dispersion & normal distribution curve.

6. Topic:	Screening
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
Learning Outcomes:	

At the end of session students will be able to:

1. Explain the concept and significance of screening and iceberg phenomenon and evaluate a screening test

Topic:	Sampling
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

At the end of session students will be able to:

1. Explain the concept of sampling and classify its various types.

Торіс:	Health Care System
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02

Learning Outcomes:

- 1. Differentiate between health care and health care system.
- 2. Explain a medical team.
- 3. Differentiate various sectors of health system and its functioning.
- 4. Differentiate various levels of health care facility.

Торіс:	Immunology
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
Learning Outcomes:	





At the end of session students will be able to:

- 1. Define immunology.
- 2. Explain immune system, immunity and its types with examples.
- 3. Differentiate among various types of immunity.
- 4. Discuss pre-requisites of vaccination like cold chain, hazards, contra-indications & precautions etc.
- 5. Explain common vaccines and immunoglobulins including EPI vaccines with reference to their schedule, mode of administration, dosage, indications and contra-indications etc.

Торіс:	Immunology
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	04

Learning Outcomes:

At the end of session students will be able to:

- 1. Define immunology.
- 2. Explain immune system, immunity and its types with examples.
- 3. Differentiate among various types of immunity.
- 4. Discuss pre-requisites of vaccination like cold chain, hazards, contra-indications & precautions etc.
- 5. Explain common vaccines and immunoglobulins including EPI vaccines with reference to their schedule, mode of administration, dosage, indications and contra-indications etc.

Topic:	Occupational Health
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	04
Learning Outcomes:	

At the end of session students will be able to:

- 1. Enlist different hazardous occupations, different type of physical chemical and biological hazards and the diseases they produce.
- 2. Comprehend the Concept of ergonomics, Pneumoconiosis and occupational poisoning & its causes.
- 3. Explain different strategies for disease control and prevention in different occupations and exposures.
- 4. Enumerate hazards of industrialization.

Торіс:	Droplet Infections
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	04

Learning Outcomes:

- 1. Explain different modes of disease transmission, interaction of agent host and environment in the pre & pathogenesis phases.
- 2. Discuss different strategies for disease control and prevention for every specific disease and in different situations





Topic: Name of Teacher: No. of Lectures: Learning Outcomes:

NGOs Prof / AP / Demonstrator 01

At the end of session students will be able to:

- 1. Enlist important international health agencies.
- 2. Explain composition and functions of different International Health agencies.
- 3. Comprehend the concepts of international day's celebrations.

Торіс:	Demography/Migration
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	04

Learning Outcomes:

At the end of session students will be able to:

- 1. Explain the terms Demography, population composition, demographic processes like fertility, mortality and migration with examples.
- 2. Interpret population pyramids of given countries.
- 3. Explain Demographic, fertility and epidemiological transition.
- 4. Differentiate between Demographic trap & population momentum.
- 5. Define the terms giving examples, Sex ratio, dependency ratio, density of population, family size, fertility trends and their effect on population.

Торіс:	Snake Bite
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

At the end of session students will be able to:

1. Describe various types of snakes in Pakistan and explain the management of a case of Snake Bite.

Торіс:	School health services
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes	

Learning Outcomes:

At the end of session students will be able to:

1. Comprehend the significance of school health service and various facilities provided.

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Breast Feeding Prof / AP / Demonstrator 01

No. of Lectures: Learning Outcomes:

Name of Teacher:

At the end of session students will be able to:

1. Explain the significance of breast feeding and identify various benefits of breast feeding to mother as well as newborn.

2. Topic:	Family Planning
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02





Learning Outcomes:

At the end of session students will be able to:

1. Explain the significance of family planning and differentiate various Family planning methods giving pros & cons of each.

Торіс:	GIT (Hepatitis, Cholera, Polio, typhoid, diarrheal, food poisoning)
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	04
Learning Outcomes:	

At the end of session students will be able to:

- 1. Explain different modes of disease transmission, interaction of agent host and environment in the pre & pathogenesis phases.
- 2. Discuss different strategies for disease control and prevention for every specific disease and in different situations.

Topic:	National Health Programs
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

At the end of session students will be able to:

1. Enlist various National Health Programs giving their significance.

Topic:	Indicators of Health
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

At the end of session students will be able to:

- 1. Define and classify indicators.
- 2. Explain the important characteristics of good quality indicators.

Торіс:	Non Communicable Diseases (NCDs)
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
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Learning Outcomes:

At the end of session students will be able to:

- 1. Enlist common Non Communicable Diseases of Public Health importance.
- 2. Enlist common risk factors responsible for diseases.
- 3. Explain preventive measures for NCDs.

Торіс:	Smoking & Health
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
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Learning Outcomes:

At the end of session students will be able to:

1. Enlist the common diseases/hazards resulting due to smoking.



2. Explain important preventive measures for smoking behavior.

Торіс:	Sewerage System
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
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Learning Outcomes:

At the end of session students will be able to:

- 1. Enlist various Types of waste and the hazards related to them.
- 2. Explain Different methods of waste disposal.
- 3. Enlist Different diseases due to waste and discuss their prevention

Торіс:	HMIS
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
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Learning Outcomes:

At the end of session students will be able to:

- 1. Comprehend the significance of HMIS.
- 2. Enlist methods of medical record keeping.

Торіс:	Concept of Health & Disease
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	04
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Learning Outcomes:

At the end of session students will be able to:

- 1. Define heath and enlist its determinants and indicators.
- 2. Differentiate various Theories of disease causation.
- 3. Explain natural history of disease and concept of iceberg phenomena.
- 4. Interpret levels of prevention and intervention measures with applied examples.

Торіс:	Child Health
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01

Learning Outcomes:

At the end of session students will be able to:

- 1. Differentiate between Neonate, Infant and Child.Explain components of early/immediate neonatal care.
- 2. Identify at risk infants.
- 3. Explain phases and methods of assessment of growth & development of children.

Торіс:	Handicapped
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

At the end of session students will be able to:

1. Define and Classify Handicapped.





2. Explain rehabilitative measures for handicapped.

Topic:	Drug Abuse/Alcoholism
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
Learning Outcomes:	

At the end of session students will be able to:

- 1. Differentiate the terms, drug abuse, drug dependence, drugs addiction and drug tolerance.
- 2. Discuss the Preventive measures and the situation of the drugs addiction in Pakistan.

Торіс:	Health Education
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	03

Learning Outcomes:

At the end of session students will be able to:

- 1. Define health education.
- 2. Discuss phases of Health
- 3. Education.Relate the approaches & principles to the scope of health education in health promotion of the community.
- 4. Explain communication process

Торіс:	Sterilization /Disinfection
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
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Learning Outcomes:

At the end of session students will be able to:

- 1. Differentiate between sterilization and disinfection.
- 2. Explain common methods used in this regard.

Торіс:	Water related diseases
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes	

Learning Outcomes:

At the end of session students will be able to:

- 1. Enlist and classify water related diseases.
- 2. Explain common preventive measures for water related diseases.

Topic:	Dengue Fever
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

- 1. Differentiate between dengue fever, dengue hemorrhagic fever and dengue shock syndrome.
- 2. Describe epidemiology of Dengue fever.
- 3. Explain preventive measures for dengue fever.





Topic:Health Research MethodologyName of Teacher:Prof / AP / DemonstratorNo. of Lectures:02Learning Outcomes:

At the end of session students will be able to:

- 1. Explain various steps/components involved in research process.
- 2. Get acquainted with the research ethics.
- 3. Distinguish between research question and research objective.
- 4. Elaborate different data collection tools & techniques.
- 5. Explain the research methods in terms of research design, setting, inclusion & exclusion criteria etc.
- 6. Describe different methods to analyze the data.
- 7. Enlist common styles for medical writing and reference quoting.

Торіс:	Medical Parasitology
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
Learning Outcomes	

Learning Outcomes:

At the end of session students will be able to:

- 1. Enlist common parasites of public health importance.
- 2. Explain preventive measures in this regard.

Торіс:	Emporiatrics
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

At the end of session students will be able to:

- 1. Define and explain significance of Emporiatrics.
- 2. Enlist important diseases in this regard.

Topic:	Primary Health Care/MDGs
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02

Learning Outcomes:

- 1. Comprehend the changing concept of health.
- 2. Explain the health for all, Principles of Primary health care and components/elements.
- 3. Explain Millennium Development Goals.
- 4. Explain the concept of leadership and the role of leadership in PHC.
- 5. Differentiate between comprehensive and selective PHC.

Торіс:	Entomology
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	02
Learning Outcomes:	





At the end of session students will be able to:

- 1. Enlist common arthropods of public health importance.
- 2. Enlist common diseases spread by them.
- 3. Explain preventive measures in this regard.

Topic:	Health Planning/Management
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01

Learning Outcomes:

At the end of session students will be able to:

1. Explain Different stages of planning with examples, such as Situation analysis, Establishment of objectives and goals, Assessment of resources, Fixing Priorities, Plan outline, Programming and implementation, Monitoring and Evaluation.

Topic:	Zoonotic Diseases
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	03
Learning Outcomes	:

At the end of session students will be able to:

- 1. Comprehend about agent, host and environmental interaction, clinical features epidemiology, mode of transmission, incubation period of zoonotic diseases.
- 2. Explain prevention & control of the zoonotic diseases

Торіс:	Emerging/Re-emerging Infections
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
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Learning Outcomes:

At the end of session students will be able to:

- 1. Differentiate between emerging and re-emerging infections.
- 2. Enlist important diseases and preventive measures in this regard.

Торіс:	Geriatrics
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
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Learning Outcomes:

At the end of session students will be able to:

- 1. Explain the concept of geriatrics.
- 2. Enlist the Problems and diseases of the old age.
- 3. Explain the preventive measures at different levels of prevention.

Торіс:	Mental & Dental Health/Personal Hygiene
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	





- 1. Enlist Common mental health problems.
- 2. Relate the causes of mental health problems with the various strategies for prevention.
- 3. Enumerate Characteristics of a mentally healthy person.

Торіс:	Social Evils
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

At the end of session students will be able to:

- 1. Elaborate social evils of the society such as prostitution, delinquency, religious differences and food adulteration.
- 2. Explain the prevention from these evils.

Торіс:	Housing / Camp sanitation/Slums
Name of Teacher:	Prof / AP / Demonstrator
No. of Lectures:	01
Learning Outcomes:	

- 1. Comprehend public health significance of housing, camp sanitation and slums.
- 2. Enlist health problems and preventive measures in this regard.





DEPARTMENT OF ENT HOLY FAMILY HOSPITAL

Торіс:	Anatomy, Physiology, Clinical Examination
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

At the end of session students will be able to:

- 1. Explain external and internal anatomy of nose.
- 2. Define the following terms.
 - Osteomeatal complex.
 - Uncinale process
 - Choneahabullosa
 - Danger triangh.
- 3. Enlist various function of nose.
- 4. How would you examine the nose?

Торіс:	Fracture Nose with Complications, Hematoma, Septal Abscess
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture: One h	Iour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

- Define the terms fracture hematoma and abscess.
- Enlist causes of nasal bone fracture hematoma and abscess function
- How would you treat nasal bone fracture, septal hematoma and abscess?
- Enumerate the complication of nasal fracture, hematoma and abscess.
- How will you diagnose the above mentioned pathologies?

Торіс:	Epistaxis
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes





Interactive:

15minutes

Learning Outcomes:

At the end of session students will be able to:

- Define epistaxis.
- Classify epistaxis.
- Enlist causes of epistaxis.
- How will you investigate the patient presented with epistaxis?
- How will you manage a case of epistaxis on the basis of history, examination, investigation and treatment?

Topic: D	NS
Mode of Teaching: L	ecture
No. of Slides: 2	0-25
Interactive Portion: 2	5%
Assessment: 1	MCQ or SEQ
Duration of Lecture: (One hour
Lecture: 4	5minutes
Interactive: 1	5minutes

Learning Outcomes:

At the end of session students will be able to:

- Define DNS?
- Enlist common causes of DNS?
- Gives type of DNS?
- How will you take history and perform examination of a patient with DNS?
- Differentiate B/L SMR and Septoplasty.
- Enlist step of Septoplasty.
- Enlist postoperative complications of Septoplasty?

Торіс:	Nasal Polyp
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

- Define the Sino Nasal Polyposis.
- Name the condition related to nasal polyposis?
- What are the main types of nasal polyps?
- What important points in you will ask from the patient of nasal polyposis?
- What is jamption's triad?





- How would you examine and investigate the patient of nasal polyposis.
- What are the treatment options in surgical of nasal polyposis patient?

Topic:	F. B Nose, Rhinolith, Furuncle
Mode of Teaching:	Lecture
Interactive Portion:	25%
Assessment: 1	MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

- Define boil nose and name the organism causing furunclosis?
- What are the cases of furuncle nose?
- Enlist clinical features treatment and complication of boil nose.
- Define Rhinolith? Along with its causes.
- How will you diagnosis the patient with Rhinolith.
- Explain management of patient of Rhinolith.

No. of Slides:	20-25
Topic:	Rhinitis
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

- Define Rhinitis and enlist its types.
- Name the organisms causing all types of Rhinitis.
- What are the clinical features in Rhinitis?
- How will you investigate the patient of Rhinitis?
- How will you treat different forms of Rhinitis?
- What are its possible complications?

Topic: Mode of Teaching: No. of Slides: Interactive Portion: 25%	Maxillary Sinusitis with Complications of Sinusitis Lecture 20-25
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes





Learning Outcomes:

At the end of session students will be able to:

- Define Maxillary sinusitis along with types.
- What are the possible causes of Maxillary Sinusitis?
- How a patient does presents.
- Name investigations required.
- How will you treat Maxillary Sinusitis?
- What are different surgical approaches?
- What are possible complications of untreated Maxillary Sinusitis?

Торіс:	Surgical Procedure
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

- Enlist common ENT surgical procedures?
- What are the most commonly performed emergency procedures in ENT.
- What are various types of Myringoplasty?
- What does FESS stands for? And what are its advantages over conventional surgical procedures?

Торіс:	Tumour of Sinusitis
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

- Enlist Benign and malignant tumors of sinusitis?
- What are the clinical features of CA maxillary sinuses/ CA ethmoid sinuses?
- How will you proceed before going to surgery?
- What are different types of classification systems?
- Explain TNM staging system for CA Maxillary ethmoid sinuses?
- What are the treatment options and diagnosis?





Topic: Mode of Teaching: No. of Slides: Interactive Portion: 25%	Allergic Rhinitis Lecture 20-25
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

- Define allergic rhinitis along with its clinical types?
- Enlist its causative factors and pathogenesis.
- Enumerate clinical features of allergic rhinitis.
- What are the sign in allergic rhinitis which are related to nose, eyes, ear and throat?
- Enlist investigations required.
- Give treatment options.
- What are the possible complications?

Торіс:	Juvenile Angiofibroma
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

- Define juvenile Angiofibroma and name its components.
- Why this tumor is exclusively found in adolescent moles.
- How does the patient present.
- How will you investigate the patient?
- How will you manage the patient of nasopharyngeal Fibroma?
- What are the different approaches in the surgical management of patient?

Topic:	Adenoidectomy
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	





At the end of session students will be able to:

- What is waldyer's sign?
- Where the adenoids are located?
- Enlist sign and symptom of the patient with adenoid hypertrophy?
- How will you examine and investigate the patient.
- Enumerate steps of adenoidectomy.
- Name postoperative complications of procedures.

Торіс:	Tonsils
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

- Define tonsils.
- Explain detailed anatomy and physiology of tonsils.
- Name common disorders involving tonsils.
- Define acute tonsillitis its types causative organisms, clinical features and treatment.
- Enlist complications of acute tonsillitis.
- Enlist differential diagnose of membrane over tonsil.
- Write a short note on faucal diphtheria.
- What is chronic tonsillitis give its types clinical feature treatment and complications?
- How would you examine the patient with tonsillitis?
- Enlist diagnose of lingual tonsils.
- What is the most commonly performed elective operation in ENT and enlist indications.
- Write down steps of tonsillectomy.

Торіс:	Retropharyngeal Abscess
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

- Define abscess? Define retropharyngeal abscess and its types?
- What are common causes of acute retropharyngeal abscess?





- Enlist clinical features of acute retropharyngeal abscess, and how will you investigate.
- Give treatment options for acute retropharyngeal abscess.
- Write a short note on retropharyngeal abscess.
- Under following leading.
 - ➤ Causes.
 - Sign and symptom.
 - Investigation.
 - > Treatment.

Торіс:	Tumor, Cleft Lip and Cleft Palate
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

- Define cleft lip and cleft palate.
- What are some causes of cleft lip and palate?
- Differentiate complete and incomplete cleft lip.
- Describe embryologic feature in regard to formation of cleft lip and palate.
- List initial priorities for managing a new bone with cleft lip and palate.
- Discus airway in new bone with cleft lip and palate.
- What is approach of feeding in infant with cleft lip and palate?
- Discus pathophysiology of middle ear disease in child with cleft lip and palate.
- Where should cleft palate repaired.
- Name common methods cleft palate repair.
- What is valvo pharyngeal insufficiency?
- List postoperative complications of cleft palate repair.

Торіс:	Tracheostomy
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

At the end of session students will be able to:

• Define Tracheostomy, enlist its indications.





- Explain the procedure briefly.
- Enlist complications (possible) after Tracheostomy.
- What should be ideal postoperative care of Tracheostomy?

Торіс:	Bronchoscopy
Mode of Teaching:	Lecture
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
No. of Slides:	20-25
Loorning Outcomos	

Learning Outcomes:

At the end of session students will be able to:

- What is Bronchoscopy, what are its types?
- What are indications of Bronchoscopy?
- Briefly explain the procedure?
- What should be ideal post operative care of Bronchoscopy?
- Enlist complications of Bronchoscopy.
- What precaution should be taken during procedure?

Торіс:	Rhinoplasty
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

- What is Rhinoplasty and how common it is?
- How does one analyze the nose preoperatively?
- Define alar collapse. Why is it imp?
- Enlist imp incision used in Rhinoplasty?
- List major support mechanism for nasal tip.
- Name two types of Rhinoplasty, what is "Polly beak" deformity and how does it ocure?

Topic:	X-ray, CT Scan, Evaluation
Mode of Teaching:	Lecture
No. of Slides:	20-25





Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

- What do you mean by X-ray PNS (Woler's view). What structures seen on this view.
- Which X-ray you would advise a patient with suspected nasal bone fracture.
- On X-ray soft tissue lateral view neck, how would you differentiate between?
 - > Adenoids
 - > AC Polyp
 - Nasal Angiofibroma
 - Write basic radiological investigation with views, you would carryons for suspected F.B Throat?
- Which radiological investigation you would advise for sino nasal polyposis before FESS and why?

Topic:	Instrument and Evaluation
Mode of Teaching:	Lecture
No. of Slides:	20-25
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

- Identify the following Instruments.
- Write down the names of instruments used in tonsillectomy and list their functions.
- Write names of some common instruments used in ear surgery and list their function.

ENT BENAZIR BHUTTO HOSPITAL

Topic:	Anatomy, Physiology & Clinical Methods of Ear
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

• At the end of lecture students will be able to know the anatomy and physiology & their clinical importance regarding Ear, nose & throat diseases.





Topic:	Pinna
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

At the end of session students will be able to:

• At the end of lectures the students will understand the clinical anatomy of Pinna and common diseases e.gPericondiritisKeloids, Heamatoma etc.

Торіс:	External auditory meatus
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

At the end of session students will be able to:

• At the end of lecture the students will understand clinical anatomy of EAC and diseases like otomycosis, foreign bodies, wax, etc.

Торіс:	External Auditory Meatus
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

At the end of session students will be able to:

• Boil, malignant otitis externa, diffuse otitis externa, keratosis obturans.

Торіс:	Hearing assessment
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour





Lecture:45minutesInteractive:15minutesLearning Outcomes:15minutes

At the end of session students will be able to:

- Define hearing loss / deafness.
- Enlist common causes of hearing loss.
- Give types of hearing loss
- How will you take history and perform examination of a patient with Deafness?
- Differentiate between conductive & sensorineural hearing loss.
- Management of hearing loss.

Торіс:	Acute Otitis Media (AOM)
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

At the end of session students will be able to:

- Define AOM.
- Enlist common causes of AOM.
- How will you take history and perform examination of a patient with AOM?
- Differentiate between acute & chronic OM.
- Management of ASOM.
- Complications of AOM.

Topic:	Otitis Media with Effusion (OME)
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

- Define OME.
- Enlist common causes of OME.
- How will you take history and perform examination of a patient with OME?
- Differentiate between acute & chronic SOM and OME.
- Management of OME.





• Complications of OME.

Торіс:	Chronic Suppurative Otitis Media (CSOM)
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

At the end of session students will be able to:

- Define CSOM
- Types of CSOM
- Enlist common causes of CSOM.
- How will you take history and perform examination of a patient with CSOM?
- Differentiate between acute & chronic SOM and OME.
- Management of CSOM
- Complications of CSOM.

Topic:	Complications of COM
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

• At the end of the lecture the students understand common complications and different surgical operations for the treatment of complicated SOM.

Торіс:	Postauricularmasses , fistula, preauricular sinus and mastoiditis
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	





• At the end of the lectures the students understand Postauricularmasses, fistula, preauricular sinus and mastoiditis and their management.

Topic:	Facial Nerve Paralysis
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

Enlist common causes of Facial Nerve Paralysis

- Give types of Facial Nerve Paralysis
- How will you take history and perform examination of a patient with Facial Nerve Paralysis
- Differentiate between supra- nuclear lesion and infra-nuclear lesions.
- Management of Facial Nerve Paralysis

Topic:	Otosclerosis
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes	

Learning Outcomes:

- Define Otosclerosis
- Pathogenesis of Otosclerosis
- Enlist common causes of Otosclerosis
- Give types of Otosclerosis
- How will you take history and perform examination of a patient with Otosclerosis
- Management of Otosclerosis

Торіс:	Meniere's Disease
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes





Learning Outcomes:

- Define Meniere's disease.
- Pathogenesis of Meniere's disease
- Enlist common causes of Meniere's disease
- How will you take history and perform examination of a patient with Meniere's disease.
- Management of Meniere's disease

Торіс:	Instrument , X-ray, SEQs & MCQs
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutesLearning Outcomes:
 Identify instrument 	e of FNT

- Identify instruments of ENT
- Diagnose ENT diseases on x rays

Торіс:	Anatomy, Physiology & Examination of Larynx
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes	

- Learning Outcomes:
 - At the end of lecture students will be able to know the anatomy and physiology & their clinical importance regarding larynx diseases.

Торіс:	Laryngomalacia&Epiglotitis
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

- Define Laryngomalacia&Epiglotitis
- Enlist common causes of Laryngomalacia&Epiglotitis
- How will you take history and perform examination of a patient with Laryngomalacia&Epiglotitis
- Management of Laryngomalacia&Epiglotitis





• Complications of Laryngomalacia&Epiglotitis

Topic:	Hoarseness
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

- Define Hoarseness
- Enlist common causes of Hoarseness
- How will you take history and perform examination of a patient with Hoarseness
- Management of Hoarseness

Topic:	Carcinoma larynx
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion: 25%	
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes

Learning Outcomes:

- Enlist common causes of C.A. Larynx
- Give types of C.A. Larynx
- How will you take history and perform examination of a patient with C.A. Larynx
- Management of C.A. Larynx
- Rehabilitation of post laryngectomized patient

Topic:	Oesophagus& oral cavity
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
I	

Learning Outcomes:

• At the end of the lecture the students understand anatomy, physiology, clinical features of oesophageal and oral cavity diseases.

Topic:	Dysphagia & Plummer Vinson Syndrome
Mode of Teaching:	Lecture





No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Learning Outcomes:	

- Define Dysphagia
- Enlist common causes of Dysphagia
- Give types of Dysphagia
- How will you take history and perform examination of a patient with Dysphagia
- Management of Dysphagia

Topic:	Oral cavity ulcers
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture:	One hour
Lecture:	45minutes
Interactive:	15minutes
Looming Outcomes	

Learning Outcomes:

- Define ulcer
- Enlist common causes of oral ulcer
- Give types of oral ulcer
- How will you take history and perform examination of a patient with oral ulcer
- Management of oral ulcers

Topic:	Oral cavity ulcers
Mode of Teaching:	Lecture
No. of Slides:	15-20
Interactive Portion:	25%
Assessment:	1 MCQ or SEQ
Duration of Lecture	: One hour
Lecture:	45minutes
Interactive:	15minutes
Loorning Outcomes	

- Learning Outcomes:
 - Define ulcer
 - Enlist common causes of oral ulcer
 - Give types of oral ulcer
 - How will you take history and perform examination of a patient with oral ulcer
 - Management of oral ulcers



DEPARTMENT OF MEDICAL EDUCATION RMC /Allied Hospitals, Rawalpindi



4th year Learning Outcome

DEPARTMENT OF OPHTHALMOLOGY

Topic: Disorders of Eyelids, Lash and Lacrimal System **Assistant Professor/SR/Senior PGT Teacher: Mode of Teaching: Lectures Three Hours** Practical demonstrations three hours No. Of pictures/slides: 10 **ASSESSMENT TOOLS:SEQs x 3** MCQs x 6 Interactive: ONE HOUR Learning objectives: At the end of the session student should be capable of 1. Knowing the surgical anatomy and physiology of eyelids and lacrimal system. 2. Diagnosing common eyelid disorders with differentials, lid swelling, blepharitis, Trichiasis, entropion, ectropion, blephroptosis,. **Topic: Diseases Of Conjunctiva** Mode of teaching: lectures two hours Practical demonstrations two hours No. Of pictures/slides:8 **ASSESSMENT TOOLS:SEQs x 3** MCQs x 6 Interactive: ONE HOUR **Teacher:** Assistant Professor/SR/Senior PGT Learning objectives: At the end of the session student should be capable of 1. Knowing the anatomy and physiology of conjunctiva. 2. Analyzing the symptoms and signs of conjunctival diseases. 3. Performing clinical methods and ordering relevant lab investigations for conjunctival diseases. 4. Treatment of conjunctival infections and allergies. 5. Describing different surgical procedures of conjunctival disorders. **TOPIC:** Cornea Mode of teaching: lectures two hours Practical demonstrations two hours No. Of pictures/slides:6 Assessment tools: seqs x 4 MCQs x 8 Interactive: ONE HOUR Assistant Professor/SR/Senior PGT **Teacher:** Learning objectives:

At the end of the session student should be capable of

- 1. Knowing the anatomy and physiology of cornea.
- 2. Performing clinical methods and clinical tests for corneal disorders.
- 3. Treatment of corneal infections.





5. Describing different surgical procedures done upon cornea.

Topic:LensMode of teaching: lectures two hourspractical demonstrations four hoursno. Of pictures/slides:4Assessment tools: seqs x 3MCQS x 6Interactive: one hourTeacher: Assistant Professor/SR/senior PGTLearning objectives:At the end of the session student should be capable of

- 1. Diagnosing cataract.
- 2. Knowing etiology of secondary cataracts.
- 3. Treatment options of cataract
- 4. Pre-op preparation of a cataract patient.
- 5. Using medicine in post-op period.
- 6. Knowing common post-op complications and their treatment.

Topic: Glaucoma

Mode of teaching: lectures three hours

Practical demonstrations two hours

No. of pictures/slides:10

Assessment tools: seqs x 4

MCQs x 6

Interactive: One Hour

Teacher: professor/Assistant Professor/SR.

Learning objectives:

At the end of the session student should be capable of

- 1. Knowing definition and pathophysiology of glaucoma.
- 2. Classifying glaucoma.
- 3. Knowing the essentials of glaucoma diagnosis
- 4. Treatment options for glaucoma including details of medical treatment.
- 5. Prevention of glaucoma.

Topic: <u>Uveal Tract</u>

Mode of teaching: lectures two hours

Practical demonstrations one hour

No. Of pictures/slides: 5

Assessment tools: seqs x 2

MCQS X 4

Interactive: one hour

Teacher: professor/Assistant Professor/SR.

Learning objectives:

At the end of the session student should be capable of





- 1. Knowing anatomy of uveal tract.
- 2. Classifying uveitis.
- 3. Diagnosing anterior uveitis and its complications.
- 4. Treatment of anterior uveitis.

Topic: Vitreoretina

Mode of teaching: lectures two hours

Practical demonstrations one hour

No. Of pictures/slides: 10

Assessment tools: seqs x 5

MCQS x 8

Interactive: one hour

Teacher: professor/Assistant Professor/SR

Learning objectives:

At the end of the session student should be capable of

1. Knowing anatomy physiology clinical methods and ocular and lab investigations for vitreoretinal disorders.

- 2. Diagnosing vasculopathies and retinal dystrophies and detachment.
- 3. Classifying diabetic and hypertensive retinopathies.
- 4. Treatment options for diabetic retinopathy.

Topic: Optic Nerve And Neuro-Ophthalmology

Mode of teaching: lectures three hours

Practical demonstrations two hour

No. Of pictures/slides: 6

Assessment tools: seqs x 4

MCQS x 10

Interactive: one hour

Teacher: professor/Assistant Professor/SR

Learning objectives:

At the end of the session student should be capable of:

- 1. Knowing anatomy and physiology of optic nerve
- 2. Performing clinical methods and ocular and lab investigations to demonstrate and diagnose disorders of optic nerve, third nerve, forth nerve, sixth nerve and seventh nerve palsies
- 3. Differentiating between papilledema and papillitis.
- 4. Treating optic neuritis.

Topic: Diseases Of The Orbit

Mode of teaching: lectures one hour Practical demonstrations two hour

No. Of pictures/slides: 5 Assessment tools: seqs x 3 MCQS X 6 Interactive: one hour Teacher: professor/Assistant Professor/SR





Learning objectives:

At the end of the session student should be capable of:

- 1. Knowing anatomy of the orbit.
- 2. Doing orbital examination.
- 3. Classifying proptosis.
- 4. Diagnosing and preseptalpostseptal cellulitis.

Topic: Strabismus

Mode of teaching: lectures two hours

practical demonstrations two hours

no. Of pictures/slides: 4

Assessment tools: seqs x 2

MCQS x 6

Interactive: one hour

Teacher: professor/Assistant Professor/SR

Learning objectives:

At the end of the session student should be capable of:

- 1. Knowing and demonstrating extra ocular muscle physiology.
- 2. Performing cover uncover test.
- 3. Diagnosing eso and exotropias.
- 4. Knowing about cyloplegic refractions.
- 5. Knowing effects an indications of muscle recession and resection.

Topic: Ocular Trauma

Mode of teaching: lectures two hours

Practical demonstrations two hours

No. Of pictures/slides: 6

Assessment tools: seqs x 3

MCQS x 6

Interactive: one hour

Teacher: professor/Assistant Professor/SR

Learning objectives:

At the end of the session student should be capable of:

- 1. Knowing effects and management of blunt trauma to the eye .
- 2. Management of chemical injury.
- 3. Identifying orbital floor fracture.
- 4. Diagnosing intra ocular foreign body and knowing its management.

Topic: <u>Ocular Pharmocology</u>

Mode of teaching: lectures one hour

practical demonstrations three hours

no. Of pictures/slides/packing of various eye preparations: 12

Assessment tools: seqs x 2

MCQS x 10

interactive: one hour





Teacher: professor/Assistant Professor/SR/PGT

Learning objectives:

At the end of the session student should be capable of:

- 1. Knowing various roots for ocular therapeutics.
- 2. Knowing names of commonly used antibiotics, anti inflammatory, intra ocular pressure lowering and diagnostic ocular preparations along with knowledge of dosage and side effects

Topic: Systemic Disease And Eye

Mode of teaching: lectures four hours

practical demonstrations four hours

no. Of pictures/slides/packing of various eye preparations: 15

Assessment tools: seqs x 5

MCQS x 10

Interactive: one hour

Teacher: professor/Assistant Professor/SR

Learning objectives:

At the end of the session student should be capable of:

1. Knowing ocular features of following diseases:

Rheumatoid arthritis, SLE, sjogren syndrome, MARFAN syndrome, sarcoidosis, tuberculosis, AIDS, stevens-johnson syndrome, systemic hypertension, diabetes mellitus, thyrotoxicosis, myasthenia gravis and leukaemia.



DEPARTMENT OF MEDICAL EDUCATION RMC /Allied Hospitals, Rawalpindi



4th year Learning Outcome

OBSTETRICS /GYNAECOLOGY Benazir Bhutto Hospital

Lecture 1:	Development of fetus
Teacher:	Prof/Assistant Prof
No of slides	30 - 35
Lecture	35 min
Interactive	10 min
MCQ s	5

Student Feedback form

At the end of lecture the student should be able to :

- Name the three stages of the prenatal period, identify the time period within which each occurs, and describe the main characteristics that define each stage.
- Describe the development of the zygote during the early germinal period, and define the following: mitosis, cleavage, blastocyst, endometrium/deciduas
- Discuss the growth and development of the embryo from the end of the second week until the end of the eighth week during the embryonic period.
- Briefly describe the growth and development of the fetus at the 8 ,10 ,12 ,16 ,20 ,24 ,28,30, 32,34,36 weeksand then weekly till term

Lecture2Anatomy of fetal skull, Bony pelvis ,Types of pelvis, Anatomical changes in pregnancyTeacherProf/Assistant ProfNo of slides30 -35Lecture35 minInteractive10 minMCO s5

Student Feedback form

At the end of lecture the student should be able to

- Describe the anatomical features of fetal skull, the bones of fetal skull and their sutures.
- Describe the bony features and types of female pelvis
- Identify various diameters of fetal skull and bony pelvis in relation to their role in normal and abnormal parturition
- Explain the various anatomical changes in female pelvic bones, joints and ligaments in preparation for a vaginal delivery

Lecture3	Obstetric history taking and examination
Teacher	Assistant Prof /Prof
No of slides	30 - 35
Lecture	35 min
Interactive	10 min
MCQ s :	5





Student Feedback form

At the end of lecture the student be able to :

- 1. Develop the basic clinical skills of history taking, clinical examination and be able to present an obstetric case.
- 2. Conduct an obstetrical abdominal examination
- 3. Demonstrate the fundal height, presentation, lie, attitude of fetus and auscultation of fetal heart

Lecture4Prenatal diagnosisTeacherAssistant Prof/ProfNo of slides35-40Lecture35 minInteractive10 minMCQ 22SEQ 33

Student Feed back

At the end of lecture the student should be able to;

- 1. Identify Couples/individuals of "high risk" where voluntary, informed testing prior to pregnancy may be offered
- 2. Describe various Prenatal Diagnosis Techniques
- 3. Explain the role of Teratogens egdrugs ,environmental factors, infections and their timings of exposure according to gestational age.
- 4. Counsel the parents on common fetal abnormalities

Lecture5: Minor Disorders Of Pregnancy (nausea vomiting, varicose veins, backache)

Teacher: Assistant Prof/Prof

No of Slides	30	
Lecture	35 min	
Interactive	10 min	
MCQs	5	
Student Feedback form		

A: NAUSEA ANDVOMITING

At the end of lecture the student should be able to

- 1. Define nausea and vomiting in pregnancy
- 2. Distinguish from other disorders causing nausea and vomiting in pregnancy
- 3. EnlistSafe remedies/drugs to treat nausea and vomiting in pregnancy

B: VARICOSE VEINS

Describe the causes and associated complications

C: BACKACHE

Explain causes of backache during pregnancy





Lecture6Diagnosis Of Labour And Basic ConceptsOf LabourTeacherAssistant prof/ProfNo of slides40-45Lecture35 minInteractive10 min3 groups of students:

Student feedback form

At the end of the lecture the student should be able to :

- 1. Differentiate between true labour , false labour and Prelabour
- 2. Apply knowledge to utilize partogram in the management of labour.
- 3. Explain the management of a woman in first and second stage of labour
- 4. Explain the steps of normal vaginal delivery
 - Contents of delivery pack

-Describe how would the student employ aseptic techniques used for normal vaginal delivery.

- Case Scenario of false labour ,latent phase,truelabour

Lecture7	Fetal monitoring in labour and fetal distress
Teacher:	Assistant prof/Prof

No of slides40Lecture35 minInteractive10 minMCQ5

Student feedback form

At the end of the lecture the student should be able to :

- 1. Describe physiology of fetal oxygenation in labour
- 2. Describe various methods of fetal monitoring in labour
- 3. List the indications of electronic fetal monitoring
- 4. Identify and interpret the normal, atypical and abnormal results of fetal monitoring

Lecture 8	Third Stage Of Labour And Its Complications
Teacher:	Assistant prof/Prof
NO of slides	40
Lecture	35 min
Interactive	10 min
MCQs	4
SEQ	2

Student feedback form

At the end of the lecture the student should be able to :

- 1. Define third stage of labour
- 2. Describe the steps of active management of third stage of labour(AMTSL).





- 3. Define Post partumhaemorrhage and its causes
- 4. Outline the management of primary PPH

Lecture 9 Teacher:	Abnormal Labour(Primary Dysfunctional, Secondary Arrest, Prolonged Latent Phase) Assistant Prof/Prof
No of slides	45
Lecture	35 min
Interactive	10 min
Mcqs	4
Seqs	2

Student feedback form

At the end of the lecture the student should be able to :

- 1. Anticipate and diagnose abnormal labour
- 2. Explain types of abnormal labour on the basis of partographic findings
- 3. Outline the management of prolonged latent phase ,primary dysfunctional labour and secondary arrest of cervical dilatation

Lecture 10:	Trial Of Labour, Obstructed Labour And Its Management
Teacher	Assistant Prof/Prof
No of slides	45-50
Lecture	35 min
Interactive	10 min
Mcqs	5

Student feedback form

At the end of the lecture the student should be able to

- 1. Define trial of labour, and obstructed labour
- 2. Describe the management of a woman having trial of labour
- 3. Describe the clinical signs and symptoms of obstructed labour and rupture of uterus
- 4. Outline the management of obstructed labour

Lecture 11:.Mal Presentation(Other Than Breech) Teacher: Assistant prof/Prof No of slides :40 Lecture :35 min Interactive :10 min MCQ: 5

Student feedback form

At the end of the lecture the student should be able to:

1. Definemalpresentation and differentiate it from malposition





- 2. Explain the features of face ,brow, transverse ,cord presentation and cord prolapsed
- 3. Outline the management strategies for various malpresentations
- 4. Describe the emergency management of cord prolapse

Lecture 12:	Induction Of Labour
Teacher:	Assistant Prof/Prof
No of slides	35
Lecture	35 min
Interactive	10 min
MCQ	5
Student feedback form	

Student feedback form

At the end of the lecture the student should be able to:

1. List common indications and contraindications for induction of labor

- 2. Describe methods available for laborInduction
- 3. Identify outcomes associated with induction of labour
- 4. Explain the maternal and fetal complications with induction of labour

Lecture 13	Episiotomy, Perineal Tears, Instrumental Delivery
Teacher:	Assistant Prof/Prof
No of slides:	40-45
Lecture	35 min
Interactive	10 min
Seq	4
Mcq	2
~	

Student feedback form

At the end of the lecture the student should be able to:

- 1. List its indications, types, advantages and disadvantages of various types of episiotomy
- 2. Explain the types of perineal tears and their complications
- 3. Devise a plan to follow up a patient having episiotomy or perineal tear
- 4. Identify and explain different types of Forceps and Vacuum cups
- 5. Describe the indications and contraindications of forceps and vacuum delivery





GYNAE/OBS Department DHQ, HOSPITAL

Topic :	Obstetric Statistics
Mode of Teaching	Lecture
Interactive Portion	25%
Assessment	1MCQs and 1 Scenarios
Teacher	Professor/AssistantProfessor /Senior Registrar
Duration of Lecture	45 mints
Number of Slides	10-15
Lecture	30 Minutes
Interactive	15 Minutes
Learning outcome	Student should be able to:-
Student Feedback Form	

- Define all relevant statistical terms.
- Calculate relevant rates/ratio.
- Describe significance of all statistics.
- Describe statistics of Pakistan according to most recent PHDS results.

Торіс	Obstetric Shock / Collapse
Mode of Teaching	Lecture
Class	4 th Year MBBS
Number of Slides	10-15
Interactive Portion	25%
Assessment	1MCQs and 1 Scenarios
Teacher	Professor/Assistant Professor/ Senior Registrar
Duration of Lecture	45 Minutes
Lecture	30 Minutes
Interactive	15 Minutes
Learning outcome	Student should be able to:-
Student Feedback Form	

- Define Shock and enlist all causes of obstetric shock •
- Suggest and justify relevant investigations •
- Differentiate all causes of shock on clinical findings and investigation. •
- Outline management plan. •

Topic :	Antenatal case in high risk pregnancy / fetal surveillance
Mode of Teaching	Lecture
Class	4 th Year MBBS
Number of Slides	10-15
Interactive Portion	25%
Assessment	1 MCQs and 1 Scenarios
Teacher	Professor/Assistant Professor/ Senior Registrar





Duration of Lecture Lecture Interactive Student Feedback Form Learning outcome

Student should be able to:-

- Describe objectives of antenatal care
- Describe the process of antenatal care in high risk pregnancy

45 Minutes

30 Minutes

15 Minutes

- Enlist and describe all methods of fetal surveillance
- Interpret results of various methods of fetal surveillance and plan management accordingly.

Торіс:	IUGR.
Mode of Teaching	Lecture
Class	4 th Year MBBS
Number of Slides	10-15
Interactive Portion	25%
Assessment	2 MCQs and 1 Scenarios
Teacher	Professor/Assistant Professor/ Senior Registrar
Duration of Lecture	45 Minutes
Lecture	30 Minutes
Interactive	15 Minutes
Learning outcome	Student should be able to:-
Student Feedback Form	

Student Feedback Form

- Define IUGR.
- Classify IUGR and enlist causes
- Enlist causes of IUGR
- Suggest and justify relevant investigations
- Differentiate causes of IUGR based on clinical findings and investigations
- Outline management plan.
- Describe prenatal and long time complications associated with IUGR.

Topic :	Post Date Pregnancy
Mode of Teaching	Lecture
Class	4 th Year MBBS
Number of Slides	10-15
Interactive Portion	25%
Assessment	2 MCQs and 1 Scenarios
Teacher	Professor/Assistant Professor/ Senior Registrar
Duration of Lecture	45 Minutes
Lecture	30 Minutes
Interactive	15 Minutes
Learning outcome	Student should be able to:-
Student Feedback Form	





- Define term, post-term, and post-date pregnancies.
- Calculate date of delivery in women with normal and abnormal menstrual cycle length.
- Describe maternal and fetal risks in post-date pregnancy.
- Outline management plan.
- 1. Topic : **Miscellaneous Disorders**.
- 2. Mode of Teaching
- 3. Class

Lecture

- 4thYear MBBS
- 4. Number of Slides
- 5. Interactive Portion
- 6. Assessment 7. Teacher
- 2 MCQs and 2 Scenarios Professor/Assistant Professor /Senior Registrar
- 8. Duration of Lecture
- i. Lecture 30 Minutes
- 15 Minutes ii. Interactive

Learning outcome

Student should be able to:-

Define Oligohydramnios, Polyhydramnios, and Hyperemesis Gravidarum •

45 Minutes

10-15

25%

- Define maternal and fetal risk in each condition •
- Suggest and justify relevantinvestigations. •
- Outline management plan • **Student Feedback Form**

Topic :	Litigation in Obstetrics
Mode of Teaching	Lecture
Class	4 th Year MBBS
Number of Slides	10-15
Interactive Portion	25%
Assessment	2 MCQs and 1 Scenarios
Teacher	Professor/Assistant Professor/ Senior Registrar
Duration of Lecture	45 Minutes
Lecture	30 Minutes
Interactive	15 Minutes
Learning outcome	Student should be able to:-
Enlist most sommon source	a of litization in chatatuing

- Enlist most common causes of litigation in obstetrics. •
- Describe legal points relevant to obstetrics according to Pakistan Panel Court e.g abortion.
- Describe steps that health care professional can take to avoid litigation e.g written informed consent, • documentation etc.

Student Feedback Form

	Topic :	Hypertension in Pregnancy
2.	Mode of Teaching	Lecture
3.	Class	4 th l Year MBBS





- 4. Number of Slides
- 5. Interactive Portion
- Assessment
 Teacher
- 25% 2 MCQs and 1 Scenarios
- Professor/Assistant Professor/ Senior Registrar 45 Minutes
- 8. Duration of Lecture
- i. Lecture 30 Minutes
- ii. Interactive 15 Minutes Learning outcome
 - Student should be able to:-
- Define hypertension and classify hypertensive
- Describe pathogenesis and risk factors
- Describe maternal and fetal risks
- Suggest and justify relevant investigation.
- Outline management plan of patients depending upon its severity

10-15

- Define eclampsia and discuss management
 - Student Feedback Form





1.	Topic :	Heart Disease in pregnancy	
2.	Mode of Teaching	Lecture	
	Class	4 th l Year MBBS	
4.	Number of Slides	10-15	
5.	Interactive Portion	25%	
6.	Assessment	2 MCQs and 1 Scenarios	
7.	Teacher	Professor/Assistant Professor/ Senior Registrar	
8.	Duration of Lecture	45 Minutes	
i.	Lecture 30 Minutes		
ii.	Interactive 15 Minutes		
	Learning outcome	Student should be able to:-	
•	Enlist common heart disease	s encountered in pregnancy.	
•	Describe fetal and maternal r		
•	Suggest and justify relevant		
•		cluding multi-disciplinary approach.	
•	Describe contraception options in these patients. Student Foodbook Form		
	Student Feedback Form		
1.	Topic :	Coagulation Disorders	
2.	Mode of Teaching	Lecture	
3.	Class	4 th 1 Year MBBS	
4.	Number of Slides	10-15	
5.	Interactive Portion	25%	
6.	Assessment	2 MCQs and 1 Scenarios	
7.	Teacher	Professor/Assistant Professor/ Senior Registrar	
8.	Duration of Lecture	45 Minutes	
i.	Lecture 30 Minutes		
ii.	Interactive 15 Minutes		
	Learning outcome	Students should be able to:-	
•	Enlist common coagulation disorders encountered in pregnant women e.g DIC, thrombocytopenia.		
•	Describe maternal and fetal risk factors.		
•	Suggest and justify relevant investigations.		
•	Outline management plan especially the need for multidisciplinary approach.		
-	Student Feedback Form		
	Student I Couback I VI III		
	Topic :	Other medical disorders (Thyroid, Respiratory, Epilepsy).	
1.	Mode of Teaching	Lecture	
2.	Class	4 th l Year MBBS	
3.	Number of Slides	10-15	
4.	Interactive Portion	25%	

- **Interactive Portion** 4.
- 5. Assessment
- 6. Teacher Professor/Assistant Professor/ Senior Registrar

2 MCQs and 1 Scenarios

7. **Duration of Lecture** 45 Minutes





- iii. Lecture 30 Minutes
- iv. Interactive 15 Minutes
- 8. Learning outcome Student should be able to:-
- Enlist common thyroid and respiratory pregnant women .
- Describe maternal and fetal risk factor in common thyroid and respiratory disorders and epilepsy .
- Suggest and justify relevant investigation.
- Outline management plan especially the need for multidisciplinaryapproach.
- Describe contraceptive options for these patients e.g. interaction of OCP with anti-epileptic drugs.
- Student Feedback Form

01. Topic :	Renal Disorders in Pregnancy.
01. Mode of Teaching	Lecture
02. Class	4 th l Year MBBS
03. Number of Slides	10-15
04. Interactive Portion	25%
05. Assessment	2 MCQs and 1 Scenarios
06. Teacher	Professor/Assistant Professor/ Senior Registrar
07. Duration of Lecture	45 Minutes
v. Lecture 30 Minutes	
vi. Interactive 15 Minutes	
Learning outcome	Student should be able to:-
• Enlist common renal disord	lers in pregnancy.

- Describe maternal and fetal risk.
- Suggest and justify relevant investigation.
- Outline management plan involving multi disciplinarian approach. **Student Feedback Form**

02.Mode of Teaching 03.Lecture03.Class4th 1 Year MBBS04.Number of Slides10-1506.Interactive Portion25%07.Assessment2 MCQs08.TeacherProfessor/Assistant Professor/ Senior RegistrarDuration of Lecture30 MinutesLecture30 MinutesInteractive15 MinutesLearning outcome45	03. Class04. Number of Slides06. Interactive Portion07. Assessment08. TeacherDuration of LectureLecture30 MinutesInteractive15 Minutes	4 th 1 Year MBBS 10-15 25% 2 MCQs Professor/Assistant Professor/ Senior Registrar
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- Describe significance of history taking and examination.
- Describe all important points of history taking e.g presenting complaints, history of present Inners, Gynaecological history taking. Post medical and surgical history Drug history, personal & socio-examine history, Family history.





• Describe all important points of general physical examination, abdominal examination and gynaecological examination (speculum and bimanual pelvic examination. **Student Feedback Form**





GYNAE/OBS UNIT-1

	Topic :	Complications of Puerperium	
1.	Mode of Teaching	Lecture	
2.	Class	4 th year MBBS	
	Number of Slides	10-15	
3.	Assessment	1MCQs and 1 Scenarios	
4.	Teacher	Professor/Assistant Professor /Senior Registrar	
5.	Duration of Lecture	45 mints	
	Lecture 30 Minute	S	
	Interactive 15 Minutes		
6.	Learning outcome	Student should be able to:-	
٠	• Enlist the causes of delayed involution		
٠	• Define and describe secondary PPH		
•	• Give causes of thromboembolism in puerperium		
• Define and manage cases of puerperal Pyrexia			
•			
•	Describe breast disorders related to puerperium		

7. Student Feedback Form

1.	Topic :	Antepartum Haemorrhage (APH)
	Mode of Teaching	Lecture
3.	Class	4 th Year MBBS
4.	Number of Slides	10-15
5.	Assessment	2MCQs and 2 Scenarios
6.	Teacher	Professor/Assistant Professor/ Senior Registrar
7.	Duration of Lecture	45 Minutes
	Lecture 30 Minutes	
	Interactive 15 Mi	nutes
8.	Learning outcome	Student should be able to:-

- Define APH
- Enlist and define the causes of APH
- Diagnose and manage different types of placenta praevia
- Diagnose and manage abruptio placentae and its complications
- Diagnose and manage other causes of APH
- 9. Student Feedback Form

1. Topic :

Other obstetric emergencies . Lecture

2. Mode of Teaching





- 3. Class
- 4. Number of Slides
- 5. Assessment
- 6. Teacher

- 10-15
 1 MCQs and 1 Scenarios
 Professor/Assistant Professor/ Senior Registrar
 45 Minutes
- 7. Duration of Lecture
- i. Lecture 30 Minutes
- ii. Interactive 15 Minutes
- 8. Student Feedback Form Learning outcome

Student should be able to:-

4th Year MBBS

- Define emergency
- Describe the structured approach to obstetric emergency
- Define, diagnose and give management plan for ruptured uterus
- Give causes of sudden maternal collapse
- Should be able to diagnose and manage the causes of cord prolapse and shoulder dystocia
- Document the events and management

	Topic:		Multiple pregnancy
1.	Mode of Tea	ching	Lecture
2.	Class	-	4 th Year MBBS
3.	Number of S	lides	10-15
4.	Assessment		2 MCQs and 1 Scenarios
5.	Teacher		Professor/Assistant Professor/ Senior Registrar
6.	Duration of Lecture		45 Minutes
	Lecture	30 Minutes	
	Interactive	15 Minutes	
	Learning outcome		Student should be able to:-
•	Define multip	ole pregnancy	
	a		

- Give its prevalence
- Classify the types of multiple pregnancy
- Give complications of multiple pregnancy including monochorionic twin pregnancy
- Give management of normal and complicated twin pregnancy
- Outline intrapartum and postpartum management
- 7. Student Feedback Form

1.	Topic :		Rhesus incompatibility
2.	Mode of Tea	ching	Lecture
3.	Class		4 th Year MBBS
4.	Number of S	lides	10-15
5.	Assessment		2 MCQs and 1 Scenarios
6.	Teacher		Professor/Assistant Professor/ Senior Registrar
7.	Duration of Lecture		45 Minutes
i.	Lecture	30 Minutes	





- ii. Interactive 15 Minutes
- 8. Learning outcome Student should be able to:-
- Define rhesus disease
- Give preventive methods for iso-immunization
- Give management of pregnancy in a sensitized woman
- Outline intrapartum management
- Advise neonatal follow-up
- 9. Student Feedback Form
- 9. Topic :

Pyrexia in pregnancy

10. Mode of Teaching

aching Lecture

11. Class

14. Teacher

- 4thYear MBBS 10-15
- 12. Number of Slides 13. Assessment
- 2 MCQs and 1 Scenarios
- Professor/Assistant Professor /Senior Registrar 45 Minutes
- **15. Duration of Lecture**
- i. Lecture 30 Minutes
- ii. Interactive 15 Minutes
- Learning outcome Student should be able to:-
- Define pyrexia
- Give different causes of pyrexia in pregnancy
- Take history, perform examination and advise relevant investigations
- Give management plan after diagnosis Student Feedback Form

1.	Topic :	Early pregnancy loss and its management
2.	Mode of Teaching	Lecture
3.	Class	4 th Year MBBS
4.	Number of Slides	10-15
5.	Assessment	2 MCQs and 1 Scenarios
6.	Teacher	Professor/Assistant Professor/ Senior Registrar
7.	Duration of Lecture	45 Minutes
i.	Lecture 30 Minutes	
ii.	Interactive 15 Minutes	
	Learning outcome	Student should be able to
•	Define early pregnancy loss	
٠	Enlist types of miscarriages	
•	Enlist etiological factors	
•	Describe the clinical features	
•	Give the role of ultrasound in diagnosis	

- Outline management plan
- 8. Student Feedback Form





9. Topic :	Preterm labour	
10. Mode of Teaching	Lecture	
11. Class	4 th l Year MBBS	
12. Number of Slides	10-15	
13. Assessment	2 MCQs and 1 Scenarios	
14. Teacher	Professor/Assistant Professor/ Senior Registrar	
15. Duration of Lecture	45 Minutes	
i. Lecture 30 Minutes		
ii. Interactive 15 Minutes		
Learning outcome	Student should be able to:-	
Define preterm labour and PPROM		
Give etiological factors for preterm labour and PPROM		

- Investigate the case
- Outline the management of preterm labour and PPROM
- Know the complications and their management

16. Student Feedback Form

9.	Topic :		Diabetes in pregnancy
10.	. Mode of Tea	ching	Lecture
11.	. Class	_	4 th l Year MBBS
12	. Number of S	lides	10-15
13	. Assessment		2 MCQs and 1 Scenarios
14	. Teacher		Professor/Assistant Professor/ Senior Registrar
15.	Duration of	Lecture	45 Minutes
i.	Lecture	30 Minutes	
ii.	Interactive	15 Minutes	
	Learning out	tcome	Student should be able to:-
•	Define different types of diaba		hetes in pregnancy

- Define different types of diabetes in pregnancy.
- Diagnose GDM
- Outline management plan for evaluation and control of DM during pregnancy including preconception councelling, management during first, second and third trimesters, role of ultrasonography and medical treatment
- Outline management during labour and puerperium
- Screening methods for GDM
- Maternal and neonatal complications of DM
- 16. Student Feedback Form

9. Topic :	Prescribing drugs in pregnancy
10. Mode of Teaching	Lecture





- 11. Class4th 1 Year MBBS12. Number of Slides10-1513. Assessment1 MCQs and 1 Scenarios14. TeacherProfessor/Assistant Professor/ Senior Registrar15. Duration of Lecture45 Minutesi. Lecture30 Minutesii. Interactive15 MinutesLearning outcomeStudents should be able to:-
- Learning outcome StudeDefine the categories of drugs
- Give the groups of commonly used drugs and their side effects
- Enlist safe drugs
- Enlist the drugs contra indicated in pregnancy

Student Feedback Form

	Topic :		Liver disorders in pregnancy
9.	Mode of Tea	ching	Lecture
10.	Class		4 th l Year MBBS
11.	Number of S	lides	10-15
12.	Interactive F	Portion	25%
13.	Assessment		2 MCQs and 1 Scenarios
14.	Teacher		Professor/Assistant Professor/ Senior Registrar
15. Duration of Lecture		Lecture	45 Minutes
iii.	Lecture	30 Minutes	
iv.	Interactive	15 Minutes	
	Learning outcome		Student should be able to:-
• Enlist different liver disorders d		nt liver disorder	rs during pregnancy

- Know the etiology, investigations and management of acute viral hepatitis during pregnancy
- Know the pathogenesis and diagnosis of liver disorders associated with pre-eclampsia and its management
- Briefly describe the pathology, diagnosis and management of obstetric cholestasis, acute fatty liver of pregnancy, autoimmune hepatitis, gallstones and primary biliary cirrhosis

Student Feedback Form

01. Topic :	Fetal distress
08. Mode of Teaching	Lecture
09. Class	4 th l Year MBBS
10. Number of Slides	10-15
11. Assessment	1 MCQs and 1 Scenarios
12. Teacher	Professor/Assistant Professor/ Senior Registrar
13. Duration of Lecture	45 Minutes
v. Lecture 30 Minutes	





- vi. Interactive 15 Minutes
- **14. Learning outcome** Student should be able to:-
- Define fetal distress
- Enlist pregnancies high risk for fetal compromise •
- Define meconium staining and its different grades •
- Interpret CTG and recognize common signs of fetal distress •
- Outline management options in case of suspected fetal distress •
- Describe fetal blood sampling used for diagnosis of fetal distress •

10. Student Feedback Form

- 01. **Topic : Imaging in Obstetric**
- **Mode of Teaching** 02. Lecture 4th 1 Year MBBS
- 03. Class
- **Number of Slides** 10-15 05.
 - **06.** Assessment
 - 07. Teacher

2 MCQs Professor/Assistant Professor/ Senior Registrar 45 Minutes

08. **Duration of Lecture**

vii. Lecture **30** Minutes

viii. Interactive 15 Minutes

Learning outcome Student should be able to:-

- Enlist different methods of fetal imaging and know the principles of their functioning •
- Give ultrasound imaging types Dating, anomaly, normal and abnormal findings
- Doppler USG of fetal vessels and their interpretation •
- Define the role of MRI •
 - **09. Student Feedback Form**



DEPARTMENT OF MEDICAL EDUCATION RMC /Allied Hospitals, Rawalpindi



4th year Learning Outcome

OBSTETRICS / GYNAECOLOGY

1.	Topic:	Malpresentation (Breech)
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	14
5.	Interactive Portion	25%
6.	Assessment	2 MCQs and 1 Scenario
7.	Teacher	Assistant Professor / Associate Professor/Professor
8.	Duration of Lecture	45 minutes
	Lecture	35 Minutes
	Interactive	10 Minutes
	Learning outcome	Student should be able to:

- Understand the clinical importance of breech presentation
- Enlist the etiology and know the incidence and types of breech presentation

Fourth Year MBBS

• Diagnosis by clinical methods and with imaging techniques Student Feedback Form

Topic: Mechanism of labour in breech and malposition

25%

- 2. Mode of Teaching Lecture
- 3. Class

4. Number of Slides 20

- 5. Interactive Portion
- 6. Assessment 1 MCQ & 1 Scenario
- 7. Teacher AP / Assoc. Prof. / Professor
- 8. Duration of Lecture 45 minutes
 - Lecture 30 Minutes
 - Interactive 15 Minutes
- 9. Learning outcome Student should be able to:
- Define labour its diagnosis and physiology
- Understand mechanical variable as three "Ps" stages of labour and cardinal movement of labour
- Plot partograms
- Understand the mechanism of delivery in breech and other malpresentation Student Feedback Form
- 1. Topic: Normal Puerperium
- 2. Mode of Teaching Lecture
- 3. Class Fourth Year MBBS
- 4. Learning outcome Student should be able to:
- Define normal puerperium and understand the physiological changes in different systems in it
- Plan management of normal puerperium
- 5. Number of Slides 20





6. Interactive Portion 20% 1 MCQ and 1 Scenario 7. Assessment Assistant Professor 8. Teacher 9. Duration of Lecture 45 minutes Lecture **35** Minutes Interactive 10 Minutes 10. Student Feedback Form

1	. Topic:	Breast feeding
2	. Mode of Teaching	Lecture
3	. Class	Fourth Year MBBS
4	. Number of Slides	15
5	. Interactive Portion	25%
6	5. Assessment	1 MCQs and 1 Scenario
7	. Teacher	Assistant Professor / Assoc. Professor
8	5. Duration of Lecture	45 minutes
	Lecture	30 Minutes
	Interactive	15 Minutes
	Learning outcome	Student should be able to:
•	Know briefly about anatom	ical and physiological changes during pregr

- Know briefly about anatomical and physiological changes during pregnancy Enlist all advantages of breast feeding discuss breast feeding policy
- Plan management for problems associated with breast feeding •
- Student Feedback Form

1. Topic:		Analgesia and Anesthesia in labour
2. Mode of Tea	aching	Lecture
3. Class		Fourth Year MBBS
4. Learning out	tcome	Student should be able to:
5. Number of S	Slides	20
6. Interactive P	ortion	25%
7. Assessment		1 MCQ
8. Teacher		AP / Assoc. Professor
9. Duration of	Lecture	45 minutes
Lectu	ure	30 Minutes
Inter	active	15 Minutes
• Define anest	hesia and analge	esia

- Discuss types and techniques of anesthesia and analgesia • Student Feedback Form
- 1. Topic:

Abdominal delivery

Lecture

2. Mode of Teaching





- 3. Class Fourth Year MBBS 4. Number of Slides 20 20 % 5. Interactive Portion 6. Assessment 1 MCQ and 1 Scenario AP / Assoc. Professor 7. Teacher 8. Duration of Lecture 45 minutes Lecture 30 Minutes Interactive **15** Minutes Learning outcome Student should be able to: Define the types and enlist the indications for abdominal delivery Describe the preoperative preparation and timing of abdominal delivery •
- Enlist the complications of abdominal delivery and discuss post operative care Student Feedback Form

10 - 15

1. Topic:

Conception fertilization and embedding of ovum

- 2. Mode of Teaching Lecture Fourth Year MBBS
- 3. Class
- 4. Number of Slides
- 5. Interactive Portion 25%
- 3 MCQs and 2 Scenarios 6. Assessment
- 7. Teacher
- Assistant Professor 8. Duration of Lecture 45 minutes
- Lecture **35** Minutes
 - Interactive **10 Minutes**
- Learning outcome Student should be able to:
- Understand the sequence of coordinated events of fusion male and female pronuclei to form a zygote •
- The site and timing of implantation of the conceptus •
- The transformation of the zygote to the morula and the blastocyst

18-20

- The transport of the conceptus from its site of fertilization to the fourth place of embedding i.e. the uterine • cavity
- The time intervals required for the process of fertilization to the successful implantation of the conceptus in the endometrium Student Feedback Form

Topic: Development of placenta, abnormalities of placenta, fetal circulation

- 2. Mode of Teaching Lecture
- 3. Class Fourth Year MBBS
- 4. Number of Slides
- 5. Interactive Portion 20%
- 6. Assessment 3 MCQs and 2 Scenarios
- 7. Teacher Assistant Professor
- 8. Duration of Lecture 45 minutes
 - Lecture **35** Minutes
 - Interactive 10 Minutes





- Learning outcome Student should be able to:
- Understand placental villi development
- Understand placental structure
- Describe different types of placental abnormalities
- Trace the flow of blood in the fetal circulation
- State the location and function of foramen ovale and ductus arteriosus
- Describe how fetal circulation differs from postnatal circulation Student Feedback Form
- **Diagnosis of pregnancy** 1. Topic: Physiological changes associated with pregnancy Mode of Teaching Lecture 2. Fourth Year MBBS 3. Class Number of Slides 10-15 **Interactive Portion** 25% Assessment 3 MCOs and 2 Scenarios Asst. Professor Teacher Duration of Lecture 45 minutes Lecture **35 Minutes** Interactive 10 Minutes 9. Learning outcome Student should be able to:
 - Describe the various types of pregnancy tests include the timing of tests and interpretation of results
 - Explain the expected maternal anatomic and physiological adaptations to pregnancy for each body system
 - Identify the maternal hormones produced during pregnancy, their target organs and their major effects on pregnancy
 Student Faedback Form
 - Student Feedback Form

1.	Topic:	Antenatal care and pre pregnancy counseling
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Interactive Portion	25%
6.	Assessment	3 MCQs and 2 Scenarios
7.	Teacher	Asst. Professor
8.	Duration of Lecture	45 minutes
	Lecture	35 Minutes
9.	Interactive	
	Learning outcome	Student should be able to:
-	Understand the scale of muse	atal ages

- Understand the goals of prenatal care
- Describe the components of preconception care
- Describe routine investigations undertaken on the first antenatal visits
- Know the usual schedule of prenatal care visits during pregnancy
- Understand the goals of preconception care





Assure that women of child bearing age receive evidence based risk screening, health promotion and intervention that will enable them to enter a pregnancy in good health

10 Minutes Student Feedback Form

Topic: Basic terms and concepts in obstetrics (Duration of pregnancy, calculation of EDD, Preterm, post term, postdates, viability, estimation of birth weights, low birth weight, very low birth weight, lie,

- presentations etc) 2. Mode of Teaching Lecture
- 3. Class Fourth Year MBBS
- 4. Number of Slides 10 - 15
- 5. Interactive Portion 25%
- 6. Assessment 3 MCQs and 2 Scenarios Asst. Professor / Associate Professor
- 7. Teacher
- 8. Duration of Lecture 45 minutes **35** Minutes

Lecture Interactive

10 Minutes

Learning outcome Student should be able to:

Clearly define the common obstetrics terminologies Student Feedback Form

Topic: Physiology of normal labour, mechanism of onset of labour

Fourth Year MBBS

- 2. Mode of Teaching Lecture
- 3. Class
- 4. Number of Slides 10-15
- 5. Interactive Portion 25%
- 3 MCQs and 2 Scenarios 6. Assessment
- 7. Teacher Asst. Professor
- 8. Duration of Lecture 45 minutes
 - Lecture **35 Minutes**
 - Interactive **10 Minutes**
 - Learning outcome Student should be able to:
- Understand and recognize the signs and symptoms and physiological changes leading to onset of labour •
- Understand a normal labour pattern
- Understand the phases and stages of labour • Student Feedback Form





Topic: Management of normal labour and delivery partograms

Mode of Teaching	Lecture	
Class	Fourth Year MBBS	
Number of Slides	10-15	
Interactive Portion	25%	
Assessment	3 MCQs and 2 Scenarios	
Teacher	Asst. Professor	
Duration of Lecture	45 minutes	
Lecture35 MinutesInteractive10 Minutes		
		Learning outcome
Describe and identity normal and abnormal progress of labour		
Describe appropriate management of normal and abnormal labour pattern		
	Mode of Teaching Class Number of Slides Interactive Portion Assessment Teacher Duration of Lecture Lecture Interactive Learning outcome Describe and identity normal	

• Describe proper use of partographs including monitoring maternal and fetal signs Student Feedback Form





Department of Medicine CVS

Investigation of Cardiovascular systemSub-Topic:ElectrocardiogramLearning Outcomes:At the end of the lecture students should be able to describe and discuss:

- Normal pattern
- Identify major abnormalities like MI, LVH/RVH, axis conduction defects and arrhythmias, drugs and electrolyte effects.

Sub-Topic: Chest x-ray

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

• Cardiac shadow, Cardiac borders, Cardiomegally, pericardial effusion, Pulmonary hypertension

Sub-Topic: Echocardiography

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Familiarity with basic Echocardiography.
- Principles and anatomical views with identification of cardiac chambers and valves, indications of echocardiography.

Sub-Topic: Endotracheal tube, Stress Thallium, CT angiography, Coronary angiography. **Learning Outcomes:**

At the end of the lecture students should be able to describe and discuss:

- Familiarity with basic principles.
- Must know indications and contra indications/Limitations.

Sub-Topic: Congestive Cardiac failure Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathogenesis and etiology of CCF.
- Differentiation between Right and Left heart failure.
- Symptoms and signs of CCF.
- Investigation, D/D and basic management of CCF.

Sub-Topic: Pulmonary edema Learning Outcomes:

- Pathogenesis and causes of LVF.
- Acute vs chronic LV dysfunction
- D/D especially from bronchial asthma, including appropriate investigation labs, ECG, CXR.





• Management of acute LVF. Sub-Topic: Rheumatic fever Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Aetiology and pathogenesis, symptoms and signs, diagnostic criteria for Rheumatic fever pattern of Cardiac involvement in RF.
- Extra cardiac manifestation of RF.
- D/D, investigation and management of Rheumatic Fever.

Sub-Topic: Hypertension Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition and diagnostic criteria
- [JNC (VII)], definitions primary and secondary hypertension, investigations.
- TOD in hypertension.
- Classes of drugs used in management of HTN.
- Hypertension in special situations like, pregnancy, renal failure, children, elderly.

Sub-Topic: Valvular heart disease Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

 Aetiology pathogenesis Signs and symptoms, D/D management prognosis of acquired VHD like: MS AS MR AR

PULMONOLOGY

Sub-Topic: Tuberculosis Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

• Will be taught in infection.

Sub-Topic: Pleural Effusion/Empyema Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathogenesis
- Causes and aetiology of pleural effusion empyema.
- Signs and symptoms
- Investigations in pleural effusion, transudativevs exudative.
- Management of pleural effusion, empyema.

Sub-Topic: Pnuemothorax Learning Outcomes:





- Causes/Aetiology
- Signs and symptoms
- Investigations
- Management plan

Sub-Topic: Respiratory Failure/ABG's Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Acute and chronic Respiratory failure
- Type I and Type II respiratory failure
- Aetiology and causes
- Signs and symptoms of respiratory failure
- Investigation and management of respiratory failure

Sub-Topic: Investigations Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Sputum analysis
- CXR
- CT scan/MRI
- Spirometry (pulmonary function test)
- Bronchoscopy
- Ventilator/perfusion studies

GIT

Sub-Topic: Investigations Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- CBC
- LFT's
- PT, Coagulations studies
- USG, CT scan, MRI
- Endoscopy, endoscopic USG
- Barium studies
- Specific investigation for specific enzyme deficiencies
- Antibodies/serology
- Biopsy indication/contraindications

Sub-Topic: Jaundice Learning Outcomes:

- Already done.
- See under III year Dr. NY Khan





Sub-Topic: Ascites Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathogenesis and mechanism of production of ascites
- Causes of ascites in general
- Sign and symptoms of ascites
- Investigation and general principles of management of ascites.

Sub-Topic: APD/Gastritis Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Aetology and pathogenesis
- Signs and symptoms
- Investigation
- Management plan

Sub-Topic: Dysphagia Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition
- Aetiology /Causes
- Clinical clues to look for in a case of dysphagia
- Investigations and management

Sub-Topic: Achlasia Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition
- Pathology
- S/S
- Clinical examination
- Investigation and management

Sub-Topic: Gastroesophageal reflux disease Learning Outcomes:

- Definition
- Mechanics and causes
- Signs and symptoms
- Investigations and management





RHEUMATOLOGY

Sub-Topic: Osteoarthritis

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathogenesis/aetiology
- Signs and symptoms
- D/D of OA
- Investigations
- Management plan

Sub-Topic: Osteoporosis Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathogenesis
- Sign and symptoms
- Investigations and management

Sub-Topic: Serum sickness Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition
- Types of hypersensitivity reaction
- Causes and clinical presentation
- Management of serum sickness

Sub-Topic: Metabolic arthropathies Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Uric acid metabolism
- Uratearthropathy
- S/S, D/D, clues in history and physical examination
- Joint fluid aspiration and examination
- Management, role of drug like colchicin Indomethacin and allopurinol
- Pyrophosphate arthropathy
- Differentiation from uratearthropathy.
- Management.

Sub-Topic: Investigations/Joints Learning Outcomes:

- An appropriate set of investigation for the patient with joint problem
- Basic investigation like CBC, ESR, CRP, Uric acid and specialized serological test and immune profile essay.





• CT, MRI, arthoscopy, Biopsy.

HEAMATOLOGY

Sub-Topic: Hemolytic Anemia Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition of hemolysis
- Pathophysiology of hemolysis
- Types of hemolytic anemias including enzymopathies, auto-immune, drug induced, mechanical, infective causes.
- Brief outline of importance of hemolytic anemias
- Clinical features+ signs including jaundice, pallor, calculi + splenomegaly.
- Investigations including haemoglobin, electorphoresis, osmetic fragility rest, peripheral film, coombs direct & indirect test.
- Broad outline of treatment modalities.

Sub-Topic: Hemoglobinopathies

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition
- Patho physiology
- Clinical features
- Investigations including peripheral film, haemoglobin, electrophoresis.
- Treatment Modalities

Sub-Topic: Sickle cell anemia

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathophysiology
- Mechanism of sickling
- Complications and relevant investigations.
- Treatment including that of acute crises, long term management

Sub-Topic: Thalasemia

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition + etiology
- Types of thalasemia (minor, Major)
- Pathophysiology
- Clinical features (difference between minor and major varieties)
- Investigations
- Treatment
- Counseling/prevention/screening

INFECTION

Sub-Topic: Tuberculosis





Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Epidemiology
- Bacteriology
- Aetiology + Pathogenesis
- Organs involved in tuberculosis
- Investigations: including AFB + culture media+PCR
- Treatment
- Drugs used
- Indication, side effects

Sub-Topic: Leprosy Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Etiology- including organism viability + incubation + pathogenesis period
- Types of leprosy including lepromatous + tuberculous leprosy
- Clinical features, lepra reactions
- Investigations
- Treatment including that of lepra reactions.

Sub-Topic: Infections mononucleosis Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Causative organism
- Mode of transmission
- Clinical features
- Investigations/Management

Sub-Topic: HIV/AIDS

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Causative organism+ epidemiology (brief historical background)
- Mode of transmission.
- Difference between HIV+AIDS
- Pathogenesis
- Clinical features
- Complications and their management
- Course and prognosis
- Investigations
- Treatment modalities
- Treatment in special conditions i.e. pregnancy, newly born.
- Prevention

Sub-Topic: Infectious diarrhea





Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition of diarrhea (Acute)
- Causative organisms (viral, Bacterial, Parasitic)
- Types of diarrhea
- Pathogenesis
- Clinical features/Complications
- Investigations
- Management

Sub-Topic: Gastro-enteritis Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Definition
- Etiology-causative organisms
- Pathogenesis
- Clinical features/Complications
- Investigations
- Management

ENDOCRINE

Sub-Topic: Hyperthyphoidism Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Sign and symptoms
- Causes
- Investigations (T3, T4, TSH)
- Treatment (drug, surgical, others)
- Complication/crisis
 - Sub-Topic: hypothyroidism Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Sign and symptoms
- Causes
- Investigation (T3, T4, TSH, antibodies)
- Treatment (Drugs)
- Complication, Myxoedema coma.

Sub-Topic: Cushing syndrome Learning Outcomes:

- Sign and symptoms
- Causes





- Investigation
- Treatment (Medical, Surgical)
- Complications

Sub-Topic: Addison's Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Sign and symptoms
- Causes
- Investigation
- Treatment
- Complications
- •

NEUROLOGY

Sub-Topic: CNS infections Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Symptoms of CNS infection
- Signs of CNS infection
- Common types of CNS infection
- Investigations
- CSF (R/E, Viral, Pyogenic, tuberculous)
- CT Scan, MRI
- Broad outline of Rx

Sub-Topic: Tuberculosis (TBM) Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Symptoms of TBM
- Signs of TBM
- CSF finding in TBM
- CT scan/MRI
- Complication of TBM
- Treatment of TBM

Sub-Topic: Encephalitis Learning Outcomes:

- Sign and symptoms
- Common causes of encephalitis
- CSF findings.
- Other investigations.
- Treatment





Sub-Topic: Brain Abscess Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Sign and symptoms (Red tags)
- Causes
- CT scan/MRI (diagnostic radiology)
- Treatment options

Sub-Topic: Raised Intracranial pressure Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Sign and symptoms
- Causes
- Investigation
- CT Scan, diagnostic radiology

Sub-Topic: Investigations of CNS Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- CT
- MRI, MRA, MRV
- PET
- CSF
- NCS
- EMG
- EEG

Sub-Topic: Spinal cord compression/Disease Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Sign and symptoms
- Main causes
- Investigations
- Management

NEPHROLOGY

Sub-Topic: Urinary tract infections Learning Outcomes:

- Pathophysiology
- Risk factors for UTI
- Clincial presentations according to involvement of renal tract





- Investigations required
- Management of UTI and of persistent/recurrent UTI.

Sub-Topic: Drugs and renal disease Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Mechanism of action of different drugs causing renal impairment
- Drugs causing renal impairment
- Prescribing in renal impairment
- Adjusting the dose in renal impairment

Sub-Topic: Acute renal failure Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathophysiology
- Causes
- Differentiating between pre-renal, renal, post-renal failure
- Clinical assessment
- Investigations required to establish diagnosis and aetiology
- Management according to cause of ARF

Sub-Topic: Chronic Renal Failure

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathophysiology
- Causes of CRF
- Clinical features
- Complications
- Factors contributing to acute on chronic renal failure
- Investigations required to establish diagnosis and to look for complications
- Management
- Followup
- Renal replacement therapy indications and types

Sub-Topic: Investigations of Renal disease Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- GFR calculation
- Urinalysis

Sub-Topic: Blood test Learning Outcomes:





At the end of the lecture students should be able to describe and discuss:

- Hemotology
- Biochemistry
- Immunology

Sub-Topic: Imaging

Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Ultrasound
- Computed tomography
- Magnetic resonance imaging
- Renal arterography
- CT angiography
- Intravenous urography
- Pyelographgy
- Radionucleride studies
- Renal biopsy
- Rationale of investigations.

METABOLIC DISORDERS

Sub-Topic: Gout Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathophysiology
- Causes of Hyperuricemia and gout
- Clinical presentation and differentiating from other causes
- Investigations required for diagnosis
- Management of acute and chronic gout.

Sub-Topic: Osteogenesis imperfect Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Pathophysiology
- Clinical presentation
- Differentiating from other causes of recurrent fractures
- Work up
- Management

Sub-Topic: Disorders of Aminoacid Metabolism





Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Role of aminoacids.
- Disorders resulting from
- derangement of
- aminoacid metabolism.
- Broad outline only
- Clinical features
- Diagnosis
- Treatment
- Prevention

MISCELLANEOUS

Sub-Topic: Heat stroke/Heat Exhaustion Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Normal thermoregulation
- Pathophysiology
- Difference between heat stroke and heat exhaustion.
- Risk factors predisposing to heat stroke clinical assessment of patient
- Other causes of hyperthermia
- Investigations
- Management

Sub-Topic: Snake Bite Learning Outcomes:

At the end of the lecture students should be able to describe and discuss:

- Overview Viper vs Cobra
- Local and systemic effects
- Investigations (DIC profile, urine R/E)
- First aid in snake bite cases
- Role of anti-venom
- Supportive management

Sub-Topic: Electric shock Learning Outcomes:

- Damage caused by electric shock burns.
- Cardiac complications
- Management





PAEDIATRICS

Topic:	Measles	
9. Mode of Teaching	Lecture	
10. Class	Fourth Year MBBS	
11. Number of Slides	10-15	
12. Pictures	Slideshow of measles and other rashes	
13. Interactive Portion	25%	
14. Assessment	3 MCQs and 2 Scenarios	
15. Teacher	Assistant Professor / SR	
16. Duration of Lecture	One Hour	
Lecture	45 Minutes	
Interactive	15 Minutes	
Learning outcome	Student should be able to:	
Define Measles		
Describe clinical features		
• Differentiate from other causes of rash		
Identify complications		
Manage disease and its complications		

- Know immunization against measles
- Enlist preventive measures
- Enlist preventive measures Student Feedback Form

	Topic:	Malnutrition Assessment
1.	Mode of Teaching	Lecture
2.	Class	Fourth Year MBBS
3.	Number of Slides	10-15
4.	Pictures	Marasmus and Kwashiorkor
5.	Interactive Portion	25%
6.	Assessment	3 MCQs and 2 Scenarios
7.	Teacher	Assistant Professor / SR
8.	Duration of Lecture	One Hour
	Lecture	45 Minutes
	Interactive	15 Minutes
	Learning outcome	Student should be able to:

- Define Malnutrition
- Enlist common etiological factors
- Classify
- Evaluate malnourished child from history and physical examination
- Plot Growth parameters on the percentile charts
- Know WHO management protocol for severe malnutrition
- Enlist the steps of nutritional rehabilitation Student Feedback Form Growth parameters





1	Topic:	Breast feeding
2	Mode of Teaching	Lecture
3	Class	Fourth Year MBBS
4	Number of Slides	10-15
5	Interactive Portion	25%
6	Assessment	3 MCQs and 2 Scenarios
7	Teacher	Assistant Professor / SR
	9 Duration of Lecture	One Hour
	Lecture	45 Minutes
	Interactive	15 Minutes
	Learning outcome	Student should be able to:
•	Enumerate advantages of breast feeding	

- Describe the physiology
- Know the importance of early initiation of breast feeding
- Enlist five steps towards good breast feeding Student Feedback Form

1. Topic:Bacterial Meningitis2. Mode of TeachingLecture3. ClassFourth Year MBBS4. Number of Slides10-15

- Pictures Meningococcemia
 Interactive Portion 25%
 Assessment 3 MCQs and 2 Scenarios
 Teacher Assistant Professor / SR
 Duration of Lecture Lecture Lecture Interactive 15 Minutes
- Learning outcome Student should be able to:
- Define meningitis
- Enlist common etiological factors according to age
- Describe pathogenesis and clinical features
- Plan pertinent investigations, interpret and take appropriate action
- Make differential diagnosis
- Monitor for complications
- Enlist steps of management plan
- Know immunization against meningitis and prophylaxis against H. influenzae and meningococcus Student Feedback Form Growth parameters

	Topic:	Tuberculosis
1.	Mode of Teaching	Lecture
2.	Class	Fourth Year MBBS
3.	Number of Slides	10-15





- 4. Pictures
- 5. Interactive Portion
- 6. Assessment
- 7. Teacher
- 8. Duration of Lecture
- 3 MCQs and 2 Scenarios Assistant Professor / SR One Hour 45 Minutes
- 15 Minutes

25%

Student should be able to:

Radiology, Montoux test

- Learning outcomeDefine tuberculosis
- Describe epidemiology and pathogenesis
- Differentiate various types

Lecture

Interactive

- Plan pertinent investigations, interpret and take appropriate action
- Apply PPA scoring chart for diagnosis
- Enlist steps of management plan
- Know immunization against tuberculosis Student Feedback Form Growth parameters

	Topic:	Tuberculous Meningitis
1.	Mode of Teaching	Lecture
2.	Class	Fourth Year MBBS
3.	Number of Slides	10-15
4.	Interactive Portion	25%
5.	Assessment	3 MCQs and 2 Scenarios
6.	Teacher	Assistant Professor / SR
7.	Duration of Lecture	One Hour
	Lecture	45 Minutes
	Interactive	15 Minutes
	Learning outcome	Student should be able to:

- Define
- Describe epidemiology and pathogenesis
- Differentiate various stages
- Plan pertinent investigations, interpret and take appropriate action
- Enlist steps of management plan
- Identify complications and know treatment accordingly Student Feedback Form Growth parameters

1.	Topic:	Diphtheria
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Pictures	Types of diphtheria
6.	Interactive Portion	25%
7.	Assessment	3 MCQs and 2 Scenarios





- 8. Teacher
- Assistant Professor / SR One Hour
- 9. Duration of Lecture
LectureOne Hour
45 Minutes
15 Minutes
Learning outcome9. Duration of Lecture
LectureOne Hour
45 Minutes
15 Minutes
Student should be able to:
- Know etiology
- Describe epidemiology and pathogenesis
- Differentiate various types
- Plan pertinent investigations, interpret and take appropriate action
- Enumerate differential diagnosis
- Enlist steps of management plan
- Identify complications and know treatment accordingly
- Know immunization against diphtheria Student Feedback Form Growth parameters

1.	Topic:	Pertussis
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Video	paroxysmal cough
6.	Pictures	complications
7.	Interactive Portion	25%
8.	Assessment	3 MCQs and 2 Scenarios
9.	Teacher	Assistant Professor / SR
10.	Duration of Lecture	One Hour
	Lecture	45 Minutes
	Interactive	15 Minutes
	Learning outcome	Student should be able to:

- Know etiology
- Describe epidemiology and pathogenesis
- Discuss three stages of the disease
- Differentiate clinical features according to age
- Enumerate differential diagnosis
- Enlist steps of management plan
- Plan pertinent investigations, interpret and take appropriate action
- Identify complications and know treatment accordingly
- Know immunization against Pertussis
- Preventive measures Student Feedback Form Growth parameters

1.	Topic:	Malaria
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS





- 4. Learning outcome Student should be able to:
- 5. Number of Slides 10-15
- 6. Interactive Portion
- 7. Assessment
- 8. Teacher

- 3 MCQs and 2 Scenarios Assistant Professor / SR
- 9. Duration of Lecture

Lecture

One Hour

25%

- 45 Minutes
- Interactive
- Know etiology
- Describe epidemiology and pathogenesis
- Know incubation periods and clinical features according to the type and age

15 Minutes

- Plan pertinent investigations, interpret and take appropriate action
- Enumerate differential diagnosis
- Enlist steps of management
- Identify complications and know treatment accordingly
- Preventive measures Student Feedback Form Growth parameters

1	Tonia	Enteric Fever
1.	Topic:	Enteric rever
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Interactive Portion	25%
6.	Assessment	3 MCQs and 2 Scenarios
7.	Teacher	Assistant Professor / SR
8.	Duration of Lecture	One Hour
	Lecture	45 Minutes
	Interactive	15 Minutes
9.	Learning outcome	Student should be able to:
•	Define	

- Define
- Know etiology
- Describe epidemiology and pathogenesis
- Know incubation period and its clinical features according to the age
- Plan pertinent investigations, interpret and take appropriate action
- Enumerate differential diagnosis
- Enlist steps of management
- Identify complications and know treatment accordingly
- Preventive measures Student Feedback Form Growth parameters





10. Topic:	Developmental milestones	
11. Mode of Teaching	Lecture	
12. Class	Fourth Year MBBS	
13. Number of Slides	10-15	
14. Interactive Portion	20%	
15. Assessment	3 MCQs and 2 Scenarios	
16. Teacher	Assistant Professor / SR	
17. Duration of Lecture	45 Minutes	
Lecture	35 Minutes	
Interactive	10 Minutes	
Learning outcome	Student should be able to:	

- Know the developmental milestones according to gross motor, fine motor, vision, hearing, speech and social behavior at different ages.
- Assess developmental age.
- Recognise warning signs for developmental delay. Student Feedback Form

1.	Topic:	Mental Retardation / Developmental Delay
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Interactive Portion	20%
6.	Assessment	3 MCQs and 2 Scenarios
7.	Teacher	Assistant Professor / SR
8.	Duration of Lecture	45 Minutes
	Lecture	35 Minutes
	Interactive	10 Minutes
	Learning outcome	Student should be able to:
•	Define mental retarda	ation and delayed development
•	Enlist common and the	reatable causes
•	Discuss clinical featu	ires
•	Plan pertinent investi	gations, interpret and take appropriate action
•	Manage	
	Student Feedback Fo	rm

1.	Topic:	Rickets (Vitamin D Deficiency)
2.	Mode of Teaching	Lecture

- 3. Class Fourth Year MBBS
- 4. Number of Slides 10-15
- 5. Interactive Portion 20%
- 6. Assessment3 MCQs and 2 Scenarios
- 7. Teacher Assistant Professor / SR
- 8. Duration of Lecture 45 Minutes





Enlist different causeDiscuss clinical prese	entation gations, interpret and take appropriate action
1. Topic:	Thalasaemia
2. Mode of Teaching	Lecture
3. Class	Fourth Year MBBS
4. Number of Slides	10-15
5. Pictures	Thalasemia facies
6. Radiology	X-ray Skull
7. Interactive Portion	20%
8. Assessment	3 MCQs and 2 Scenarios
9. Teacher	Assistant Professor / SR
10. Duration of Lecture	45 Minutes
Lecture	35 Minutes
Interactive	10 Minutes
Learning outcome	Student should be able to:
• Define Thalassemia	
• Identify the types and	l pathophysiology
• Describe the clinical	features

- Plan pertinent investigations, interpret and take appropriate action
- Discuss the management of Thalasemia and its complications
- Do genetic counseling Student Feedback Form

1.	Topic:	Aplastic Anemia
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Interactive Portion	20%
6.	Assessment	3 MCQs and 2 Scenarios
7.	Teacher	Assistant Professor / SR
8.	Duration of Lecture	45 Minutes
	Lecture	35 Minutes
	Interactive	10 Minutes
	Learning outcome	Student should be able to:
-	Define	

- Define
- Enlist the etiology and types





- Describe the pathophysiology •
- Discuss the clinical features •
- Make differential diagnosis •
- Plan pertinent investigations, interpret and take appropriate action •
- Enumerate complications •
- Manage according to the cause •
- Do counseling of the patients and parents. • Student Feedback Form
- 1. Topic: Hemophilia
- 2. Mode of Teaching
- Fourth Year MBBS 3. Class 10-15
- 4. Number of Slides 20%
- 5. Interactive Portion
- 6. Assessment
- 7. Teacher
- 3 MCQs and 2 Scenarios Assistant Professor / SR 8. Duration of Lecture 45 Minutes **35 Minutes** Interactive 10 Minutes Student should be able to:

Lecture

Learning outcome

Lecture

- Define •
- Know the pattern of inheritance •
- Enlist the types and classify according to severity •
- Describe the clinical features and complications •
- Plan pertinent investigations, interpret and take appropriate action •
- Manage and plan prophylaxis •
- Do counseling of the patients and parents. • Student Feedback Form



DEPARTMENT OF MEDICAL EDUCATION RMC /Allied Hospitals, Rawalpindi



4th year Learning Outcome

PATHOLOGY DEPARTMENT

Topic:Oral CavityDate:5-1-15Time:8-9amLearning Outcomes:Infections/ Tumors

Topic:Salivary GlandsDate:6-1-15Time:8-9amLearning Outcomes:Infections/ Tumors

Topic:Esophagus InfectionDate:7-1-15Time:8-9amLearning Outcomes:

Topic:	Stomach, Acute gastritis, Chronic gastritis
Date:	12-1-15
Time:	8-9am

Learning Outcomes:

- H pylori gastritis
- Autoimmune gastritis

Topic:	Complications of chronic gastritis
Date:	13-1-15
Time:	8-9am
I	

Learning Outcomes:

- Peptic ulcer disease
- Dysplasia
- Hypertrophic gastropathies
- Zollinger Ellison syndrome

Topic:Gastric polyps & tumorsDate:14-1-15Time:8-9amLearning Outcomes:

- Inflammatory & hyperplastic polyps
- Gastric adenoma
- Gastric adenocarcinoma





- Lymphoma
- Carcinoid tumor
- Stromal tumor

Topic:Complications of chronic gastritis**Date:**19-1-15**Time:**8-9am

Learning Outcomes:

- Peptic ulcer disease
- Dysplasia
- Hypertrophic gastropathies
- Zollinger Ellison syndrome

Topic:Gastric polyps & tumors**Date:**20-1-15**Time:**8-9am

Learning Outcomes:

- Inflammatory & hyperplastic polyps
- Gastric adenoma
- Gastric adenocarcinoma
- Lymphoma
- Carcinoid tumor
- Stromal tumor

Topic:

Intestinal obstruction, Ischemic bowel disease Angiodysplasia Malabsorption& diarrheaInfectious enterocolitis

- **Date:** 21-1-15
- **Time:** 8-9am

Learning Outcomes:

- Cholera
- Campylobacter enterocolitis
- Shigellosis
- Salmonellosis
- Typhoid fever
- Yersinia
- E coli

Date:26-1-15Time:8-9amTopic:Learning Outcomes:

Pseudomembranous colitis





- Whipple disease
- Viral gastroenteritis
- Parasitic enterocolitis Irritable bowel syndrome Inflammatory bowel disease
- Crohn disease
- Ulcerative colitis Sigmoid diverticulitis

Topic:	Polyps
Date:	27-1-15
Time:	8-9am
• • • •	

Learning Outcomes:

- Inflammatory polyps
- Hamartomatous polyps
- Hyperplastic polyps
- Neoplastic polyps Familial syndromes Adenocarcinoma
- Tumors of anal canal
- Hemorrhoids
- Acute appendicitis Tumors of appendix
- Inflammatory disease of peritoneal cavity

General features of hepatic disease
28-1-15
8-9am

Learning Outcomes:

- Patterns of hepatic injury
- Hepatic failure
- Cirrhosis
- Portal hypertension
- Jaundice & cholestasis

Торіс:	Infectious disorders
Date:	2-2-15
Time:	8-9am
I	

Learning Outcomes:

- Viral hepatitis
- Bacterial, parasitic & helminthic infections
- Autoimmune hepatitis
- Drug & toxin induced liver disease
- Alcoholic liver disease
- Metabolic liver disease
- Nonalcoholic fatty liver disease





- Hemochromatosis
- Wilson disease
- Antitrypsin deficiency
- Neonatal cholestasis

Topic:Intrahepatic biliary tract disease**Date:**3-2-15**Time:**8-9am

Learning Outcomes:

- Secondary biliary cirrhosis
- Primary biliary cirrhosis
- Primary sclerosing
- Cholangitis

Topic:

- Anomalies of biliary tree
- Circulatory disorders
- Impaired blood flow into liver
- Impaired blood flow through liver
- Hepatic venous outflow obstruction
- Hepatic complications
- Hepatic disease associated with pregnancy

Hepatic complications, Hepatic disease associated with pregnancy,

Nodules & tumors
4-2-15

Date: 4-2-15 **Time:** 8-9am

- Learning Outcomes:
- Nodular hyperplasia
- Benign neoplasm
- Malignant tumors---HCC
- Metastatic tumors
- Congenital anomalies of biliary tract
- Disorders of gall bladder
- Cholelithiasis
- Cholecystitis
- Disorders of extrahepatic bile ducts
- Choledocholithiasis& ascending cholangitis
- Biliary atyresia
- Choledochal cysts
- Tumors of gall bladder

Topic: Date:	9-2-15
Time:	8-9am





Learning Outcomes:

- Pancreas
- Congenital anomalies
- Pancreatitis
- Non neoplastic cysts

Topic:	Pituitary gland
Date:	10-2-15
Time:	8-9am

Learning Outcomes:

- Clinical manifestations of pituitary disease
- Pituitary adenomas & hyperpituitarism
- Hypopituitarism
- Posterior pituitary syndromes
- Hypothalamic suprasellar tumors

Торіс:	Thyroid gland
Date:	11-2-15
Time:	8-9am
Learning Outco	omes:

Hyperthyroidism

- Hypothyroidism
- Thyroiditis
- Graves disease
- Diffuse & multinodular goiter

Topic:	Thyroid gland
Date:	16-2-15
Time:	8-9am
T ! O (

- Learning Outcomes:
- Hyperthyroidism
- Hypothyroidism
- Thyroiditis
- Graves disease
- Diffuse & multinodular goiter

Topic:	
Date:	17-2-15
Time:	8-9am





Learning Outcomes:

- Neoplasms of thyroid
- Congenital anomalies

Торіс:	Parathyroid glands
Date:	18-2-15
Time:	8-9am
Learning Outcomes:	

- Hyperparathyroidism
- Hypoparathyroidism
- Pseudohypoparathyroidism

Торіс:	Endocrine Pancreas
Date:	23-2-15
Time:	8-9am
Learning Outcomes:	

- Diabetes mellitus
- Pancreatic endocrine neoplasm

Topic:	Endocrine Pancreas
Date:	24-2-15
Time:	8-9am
T ! O !	

Learning Outcomes:

- Diabetes mellitus
- Pancreatic endocrine neoplasm

Topic:	Adrenal glands
Date:	25-2-15
Time:	8-9am
Learning Outcome	

Learning Outcomes:

- Adrenocortical hyperfunction(hyperadrenalism)
- Adrenocortical insufficiency

Topic:Renal SystemClinicalDate:2-3-15Time:8-9amLearning Outcomes:

• Manifestations of renal diseases





Торіс:	Renal System
Date:	3-3-15
Time:	8-9am

Learning Outcomes:

- Glomerular diseases
- Clinical manifestations
- Histologic alterations
- Pathogenesis of glomerular injury
- Mechanisms of progression in glomerular diseases

Topic:	Renal System
Date:	4-3-15
Time:	8-9am
T ! O (

- Learning Outcomes:
- Nephritic syndrome
- Poststreptococcal,post infectious
- Rapidly progressive GN

Topic:	Renal System
Date:	9-3-15
Time:	8-9am
Learning Outc	omes

Nephrotic syndrome

Isolated urinary abnormalities

Topic:	Renal System
Date:	10-3-15
Time:	8-9am
T ! O !	

Learning Outcomes:

- Chronic glomerulonephritis
- Glomerular lesions associated with systemic diseases

Торіс:	Renal System
Date:	11-3-15
Time:	8-9am
Learning Outcom	mes:

- Tubular & interstitial diseases
- Acute tubular necrosis
- Tubulointerstitial nephritis

Topic:	Renal System
Date:	30-3-15
Time:	8-9am
Learning Outcomes:	





• Urolithiasis

Торіс:	Renal System
Date:	31-3-15
Time:	8-9am
T ! O !	

- Learning Outcomes:
- Tumors of kidney
- Benign tumors
- Malignant tumors
- Renal cell carcinoma, urothelial carcinoma

Торіс:	Renal System	
Date:	1-4-15	
Time:	8-9am	
Learning Outcomes:		
Ureters		

- Congenital anomalies
- Inflammation
- Tumors
- Obstructive lesions

Торіс:	Renal System
Date:	6-4-15
Time:	8-9am
Learning Outcom	es:

- Urinary bladder
- Congenital anomalies
- Inflammation
- Metaplastic lesions
- Neoplasms
- Obstruction

Topic:	Renal System
Date:	7-4-15
Time:	8-9am
Learning Outcomes:	
Urethra	

- Inflammation
- Tumors

Congenital & inflammatory lesions of testis & epididymis

Topic:	Renal System
Date:	8 -4-15





Time: 8-9am

Learning Outcomes: Testicular tumors

- Germ cell tumors
- Tumors of sex cord gonadal stroma
- Gonadoblastoma
- Testicular lymphoma

Торіс:	Renal System
Date:	13-4-15
Time:	8-9am
Learning Outcomes:	
Prostate	

• Inflammation

Topic:		Renal System
Date:		14-4-15
Time:		8-9am
Learning Outcomes:		
Prostate		
T	1	•

•	Tumors	adenocarcinoma	

Торіс:	Female genital tractInfections of the female genital tractVulva
Date:	15-4-15
Time:	8-9am
Learning Outcomes	:

Bartholin cyst

- Non neoplastic epithelial disorders
- Benign exophytic lesions
- Squamous neoplastic lesions
- Glandular neoplastic lesions Malignant melanoma

Topic:	Female genital tractVagina
Date:	20-4-15
Time:	8-9am
T	

Learning Outcomes:

- Development anomalies
- Premalignant & malignant neoplasms





Topic:	Female genital tract Cervix
Date:	21-4-15
Time:	8-9am

Learning Outcomes:

- Inflammation
- Endocervical polyps
- Premalignant & malignant neoplasms---cervical intraepithelial neoplasia, cervical carcinoma

Торіс:	Female genital tractUterus & endometrium
Date:	22-4-15
Time:	8-9am

Learning Outcomes:

- Dysfunctional uterine bleeding
- Inflammation
- Endometriosis
- Endometrial polyps
- Endometrial hyperplasia
- Malignant neoplasms of endometrium
- Tumors of endometrium with stromal differentiation
- Tumors of myometrium

Topic:Female genital tractFallopian tumors**Date:**27-4-15**Time:**8-9am

Learning Outcomes:

- Inflammation
- Tumors & cysts

Topic:	Female genital tractGestational & placental disorders
Date:	28-4-15
Time:	8-9am

Learning Outcomes:

- Disorders of early pregnancy
- Disorders of late pregnancy
- Gestational trophoblastic disease----hydatidiform mole, invasion mole, choriocarcinoma, placental site trophoblastic tumor

Topic:	Female genital tractOvaries
Date:	29-4-15
Time:	8-9am
T I O (

Learning Outcomes:

- Non neoplastic & functional cysts
- Ovarian tumors---epithelial tumors, germ cell tumors, sex cord stromal tumors





Topic:	Breast
Date:	4-5-15
Time:	8-9am

Learning Outcomes:

- Disorders of development
- Clinical presentations of breast disease
- Inflammatory disorders
- Benign epithelial
- lesions
- Gynecomastia (male breast

Торіс:	Breast
Date:	5-5-15
Time:	8-9am

Learning Outcomes:

Carcinoma of breast

- Incidence & epidemiology
- Etiology & pathogenesis
- Classification
- Prognostic & predictive factors
- Stromal tumors

Topic:	CVS	
Date:	6-5-15	
Time:	8-9am	
Learning Outcomes		

Learning Outcomes:

Blood vessels

- Structure & function of blood vessels
- Vessel development, growth & remodeling
- Congenital anomalies
- Vascular response to injury
- Hypertensive vascular disease
- Arteriosclerosis
- Atherosclerosis
- Epidemiology, Pathogenesis, Consequences

Topic:	CVS	
Date:	11-5-15	
Time:	8-9am	
Learning Outcomes:		
blood vessels		

• Aneurysms & dissectionAbdominal aortic aneurysmThoracic aortic aneurysmsAortic dissection





- VasculitisNon infectiousvasculitisTemporal arteritisTakayasu arteritisPolyarteritisnodosaKawasaki diseaseMicroscopic polyangiitisWegener granulomatosisBuerger diseaseInfectious vasculitis
- Raynaud phenomenon

Topic:	CVS
Date:	12-5-15
Time:	8-9am
Learning Outcomes:	

Blood vessels

- Veins &lymphatics
- Tumors

Benign tumors----Hemangioma, lymphangioma, glomangioma Intermediate tumors----Kaposi sarcoma, hemangioendothelioma Malignant tumors----angiosarcoma, hemangiopericytoma

Торіс:	CVS	
Date:	13-5-15	
Time:	8-9am	
Learning Outcomes:		
Heart		
	o • 1• /•	

- Cardiac structure & specialization
- Effects of aging on heart
- Heart disease: overview of pathophysiology
- Heart failure

Cardiac hypertrophy Left sided heart failure Right sided heart failure

Topic:	CVS	
Date:	18-5-15	
Time:	8-9am	
Learning Outcomes:		
Heart		
Congenital heart disease		

Ischemic heart disease

- Angina pectoris
- Myocardial infarction
- Chronic ischemic heart disease
- Sudden cardiac death Hypertensive heart disease

Topic:	CVS
Date:	19-5-15
Time:	8-9am





Learning Outcomes:

Heart Valvular heart disease

- Calcific valvular degeneration
- Mitral valve prolapsed
- Rheumatic fever & rheumatic heart disease
- Infective endocarditis
- Non infected vegetations
- Carcinoid heart disease
- Complications

Topic:	CVS	
Date:	20-5-15	
Time:	8-9am	
Learning Outcomes:		
Heart		
Cardiomyopathie	es	
Dilated cardiomyopathy		

- Dilated cardiomyopathy
- Hypertrophic cardiomyopathy
- Restrictive cardiomyopathy
- Myocarditis Pericardial diseases
- Effusion Pericarditis

Торіс:	CVS
Date:	25-5-15
Time:	8-9am
Learning Outcomes	5:
Heart	
Tumors	

- Primary---myxoma, lipoma, fibroelastoma, rhabdomyoma, sarcoma
- Cardiac effects of noncardiac neoplasms

Topic:	CVS
Date:	26-5-15
Time:	8-9am

Learning Outcomes:

Diseases of white blood cells, lymph nodes, spleen & thymus

- Development & maintenance of hematopoietic tissues
- Disorders of WBC
- Leukopenia---neutropenia, agranulocytosis
- Reactive proliferations of WBC & lymph nodes





- Leukocytosis
- Lymphadenitis

Topic:	CVS
Date:	27-5-15
Time:	8-9am

Learning Outcomes:

Diseases of white blood cells, lymph nodes, spleen & thymus Neoplastic proliferations of white cells

• Lymphoid neoplasms

Precursor B & T cell neoplasms Peripheral B cell neoplasm Peripheral T cell & NK cell neoplasms Hodgkin lymphoma

Topic:	CVS
Date:	1-6-15
Time:	8-9am
Learning Outcomes	:
Diseases of white blo	od cells, lymph nodes, spleen & thymus
Myeloid neoplasms	
Ac myeloid leukemia	1
Myelodysplastic sync	Iromes

• Myeloproliferative disorders

Topic:	CVS
Date:	2-6-15
Time:	8-9am

Learning Outcomes:

Diseases of white blood cells, lymph nodes, spleen & thymus

- Splenomegaly
- Neoplasms of spleen
- Congenital anomalies
- Rupture of spleen

Topic:	CVS
Date:	3-6-15
Time:	8-9am

Learning Outcomes:

Diseases of white blood cells, lymph nodes, spleen & thymus

- Developmental disorders of thymus
- Thymic hyperplasia





Thymomas

Topic:	CVS
Date:	8-6-15
Time:	8-9am
Learning Outco	mes:
Red blood cells &	& bleeding disorders
Anemias	
Anemias of blood	d loss
Hemolytic anemi	as
hereditary sphere	ocytosis

- Hemolytic disease due to red cell enzyme defect
- Sicke cell disease

Topic:	CVS	
Date:	9-6-15	
Time:	8-9am	
Learning Outcomes:		
Red blood cells & bleeding disorders		

- Thalassemia syndromes
- PNH

•

- Immunohemolyticanemias
- Hemolytic anemia resulting from trauma to RBCs

Торіс:	CVS
Date:	10-6-15
Time:	8-9am

Learning Outcomes:

Red blood cells & bleeding disorders

Anemias of diminished erythropoiesis megaloblasticanemias, iron deficiency anemia, anemia of chronic disease, aplastic anemia, pure red cell aplasia

Topic:	CVS
Date:	3-8-15
Time:	8-9am
Loorning Oute	moge

Learning Outcomes:

- Red blood cells & bleeding disorders
- Polycythemia

Topic: CVS





Date: 4-8-15 **Time:** 8-9am

Learning Outcomes:

• Red blood cells & bleeding disorders

Topic:	CVS
Date:	5-8-15
Time:	8-9am
I	

Learning Outcomes:

• Red blood cells & bleeding disorders

Topic:	CVS
Date:	10-8-15
Time:	8-9am

Learning Outcomes:

Red blood cells & bleeding disorders Hemorrhagic diatheses

Bleeding disorders caused by vessel wall abnormalities

Topic:	CVS
Date:	11-8-15
Time:	8-9am

Learning Outcomes:

Red blood cells & bleeding disorders

• Bleeding related to reduced platelet number: thrombocytopenia-----chronic immune thrombocytopenic purpura, acute ITP, drug induced, HIV associated, TTP, HUS

Topic:	CVS
Date:	12-8-15
Time:	8-9am

Learning Outcomes:

Red blood cells & bleeding disorders

Bleeding disorders related to defective platelet functions

Торіс:	CVS
Date:	18-8-15
Time:	8-9am

Learning Outcomes:

- Red blood cells & bleeding disorders
- Disseminated intravascular coagulation





Торіс:	Respiratory system
Date:	19-8-15
Time:	8-9am

Time:

- Learning Outcomes:
- Congenital anomalies

Торіс:	Respiratory system
Date:	24-8-15
Time:	8-9am
Learning Outcomes:	

• Atelectasis

Торіс:	Respiratory system
Date:	25-8-15
Time:	8-9am

Learning Outcomes:

- Pulmonary edema
- Hemodynamic Pulmonary Edema
- Edema Caused by Microvascular Injury

Topic:	Respiratory system
Date:	26-8-15
Time:	8-9am

Learning Outcomes:

- Acute Lung Injury and Acute Respiratory Distress
- Syndrome (Diffuse Alveolar Damage)
- Acute Interstitial Pnoumonia

Торіс:	Respiratory system
Date:	31-8-15
Time:	8-9am

Learning Outcomes:

- Obstructive versus Restrictive Pulmonary Diseases
- Obstructive Pulmonary DiseasesEmphysema

Topic:	Respiratory system
Date:	1-9-15
Time:	8-9am
Learning Autcomes	

Learning Outcomes: Chronic Bronchitis

- Chronic Bronchiti
- Asthma
- Bronchiectasis

Topic: Respiratory system





Date:	2-9-15
Time:	8-9am
Learning Out	comes:
Chronic Diffus	se Interstitial (Restrictive) Diseases
Fibrosing Dise	ases
Idiopathic	
Non specific in	nterstitial pneumonia
Cryptogenic or	ganizing pneumonia
Topic:	Respiratory system
Date:	7-9-15
Time:	8-9am
Learning Out	comes:
Pulmonary inv	olvement in connective tissue disease
Pneumoconios	is
Topic:	Respiratory system
Date:	8-9-15
Time:	8-9am
Learning Out	
Complications	
Granulomatous	s diseases
Sarcoidosis	
Hypersensitivi	ty pneumonitis
Topic:	Respiratory system
Date:	9-9-15
Time:	8-9am
Learning Out	comes:
Pulmonary eos	
	ed interstitial diseases
	eolar proteinosis
	r

Торіс:	Respiratory system
Date:	14-9-15
Time:	8-9am
Learning Outcomes:	

• Diseases of vascular origin

• Pulmonary embolism, hemorrhage, infarction

Topic:	Respiratory system
Date:	15-9-15
Time:	8-9am





Learning Outcomes:

- Pulmonary hypertension
- Diffuse pulmonary hemorrhage syndromes
- Goodpasture syndrome
- Idiopathic pulmonary hemosiderosis
- Wegener granulomatosis

Торіс:	Respiratory system
Date:	16-9-15
Time:	8-9am

Learning Outcomes:

- Pulmonary infections
- Community acquired acute pneumonias
- Community acquired atypical pneumonias
- Hospital acquired

Topic:	Respiratory system
Date:	21-9-15
Time:	8-9am

Learning Outcomes:

- Aspiration pneumonia
- Lung abscess
- Chronic pneumonia
- Pneumonia in immunocompromised host
- Pulmonary disease in HIV infection

 Topic:

 Date:
 22-9-15

 Time:
 8-9am

Respiratory system

Learning Outcomes:

- Lung transplantation
- Tumors
- Carcinomas
- Neuroendocrine proliferations & tumors
- o Miscellaneous tumors
- Metastatic tumors

Topic:	Respiratory system
Date:	23-9-15
Time:	8-9am
T ! O (

Learning Outcomes:

- Pleura
- Pleural effusion
- Pneumothorax





• Pleural tumors

Торіс:	Skin
Date:	28-9-15
Time:	8-9am

Learning Outcomes:

• Definitions of macroscopic & microscopic terms

Topic:	Skin
Date:	29-9-15
Time:	8-9am

Learning Outcomes:

• Disorders of pigmentation & melanocytes

Topic:	Skin
Date:	30-9-15
Time:	8-9am
Time:	8-9am

Learning Outcomes:

- Benign epithelial tumors
- Premalignant & malignant epidermal tumors
- Actinic keratosis
- Squamous cell carcinoma
- Basal cell carcinoma





ORTHOPAEDICS

- Topic:
- **Ankle Fractures**
- 1. Mode of teaching: Lecture Forth year MBBS
- 2. Class:
- 3. Number of slides: 35
- 4. Interactive portion:
- 25% Assistant Professor / SR 5. Teacher:
- 6. Duration of lecture: One hour 7. Lecture 45 minutes
- Learning outcome: Student should be able to:
- Define dislocation ٠
- Types of fracture associated with ankle dislocation •
- Able to differentiate fracture pattern on x rays, •
- Should know treatment •
- Identify complications •

	Topic:	Colle's Fracture
1.	Mode of teaching:	Lecture
2.	Class:	Forth year MBBS
3.	Number of slides:	20
4.	Interactive portion:	25%
5.	Teacher:	Assistant Professor / SR
6.	Duration of lecture:	One hour
	Lecture	45 minutes
	Learning outcome:	Student should be able to:
•	Define colle's fractur	e

- Define colle's fracture
- Classification of fracture
- Able to differentiate fracture pattern on x rays,
- Should know treatment •
- Identify complications •

1.	Topic:	General Fracture Introduction
2.	Mode of teaching:	Lecture
3.	Class:	Forth year MBBS
4.	Number of slides:	31
5.	Interactive portion:	25%
6.	Teacher:	Assistant Professor / SR
7.	Duration of lecture:	One hour
	Lecture	45 minutes
	Learning outcome:	Student should be able to:
•	Define fracture	

- Types of fracture
- Able to differentiate fracture pattern on x rays,





students should be able

Identify complications

	Topic:	Fracture Around Elbow
1.	Mode of teaching:	Lecture
2.	Class:	Forth year MBBS

- 2. Class: 31
- 3. Number of slides:
- 4. Interactive portion: 25%
- 5. Teacher: Assistant Professor / SR 6. Duration of lecture: One hour Lecture 45 minutes Learning outcome Students should be able
- To asses clinically elbow fracture
- Types of fracture
- Able to differentiate fracture pattern on x rays, •
- Know general treatment plan
- Identify complications

Fracture Around Knee Topic:

- 1. Mode of teaching: Lecture
- 2. Class: Forth year MBBS
- 3. Number of slides: 31 25%
- 4. Interactive portion:
- 5. Teacher: Assistant Professor / SR
- 6. Duration of lecture: One hour
- Lecture 45 minutes
- Learning Outcome
- Define supracondylar femur fracture and schatzker fracture •
- Classification of fracture •
- Able to differentiate fracture pattern on x rays, •
- Should know treatment •
- Identify complications •

	Topic:	Hip Dislocation	
1.	Mode of teaching:	Lecture	
2.	Class:	Forth year MBBS	
	Learning Outcome		students should be able
•	Define dislocation		

- Interpret x rays of hip dislocation
- Should know the complications of hip dislocation •
- Should know mechanism responsible for hip dislocation
- Should know treatment •





- 3. Number of slides: 31
- 4. Interactive portion:
- 5. Teacher:
- 25% Assistant Professor / SR
- 6. Duration of lecture: One hour Lecture 45 minutes

Topic: **Hip joint Fractures**

40

- 1. Mode of teaching:
- 2. Class:
- Lecture Forth year MBBS
- 3. Number of slides:
- 4. Interactive portion: 25% Assistant Professor / SR
- 5. Teacher:
- 6. Duration of lecture: One hour 45 minutes Lecture Learning Outcome students should be able
- Define hip fracture •
- Types of fracture •
- Able to differentiate fracture pattern on x rays •
- Know classification •
- Should know treatment options Identify complications

Shoulder Dislocation 1. Topic:

- 2. Mode of teaching: Lecture
- Forth year MBBS 3. Class:
- 4. Number of slides: 40
- 5. Interactive portion: 25%
- Assistant Professor / SR 6. Teacher:
- 7. Duration of lecture: One hour
- 45 minutes Lecture
- Learning Outcome students should be able
- Define dislocation •
- Interpret x rays of shoulder dislocation
- Should know the complications of shoulder dislocation •
- Should know mechanism responsible for shoulder dislocation •
- Should know treatment •

	Topic:	Wrist Fractures
1.	Mode of teaching:	Lecture
2.	Class:	Forth year MBBS
3.	Number of slides:	40
4.	Interactive portion:	25%
5.	Teacher:	Assistant Professor / SR





6. Duration of lecture: One hour Lecture 45 minutes Learning Outcome

students should be able

- Know the anatomy of wrist joint 0
- To interpret x rays of wrist joint 0
- To pick fractures of carpal bones 0
- Know the treatment 0
- Know the complications of carpal bone fractures 0

Topic: **Congenital Muscular Torticollis**

1. Mode of teaching:

Lecture

- Forth year MBBS 2. Class:
- 3. Number of slides: 35 25%
- 4. Interactive portion:
- Assistant Professor / SR 5. Teacher:
- 6. Duration of lecture: One hour Lecture 45 minutes Learning Outcome Students should be able
- What is Congenital Muscular Torticollis •
- Etiology of CMT •
- Symptoms of CMT •
- D/D of CMT
- What is the treatment options for CMT •

	Topic:	OsteogenesisImperfecta
1.	Mode of teaching:	Lecture
2.	Class:	Forth year MBBS
3.	Number of slides:	40
4.	Interactive portion:	25%
5.	Teacher:	Assistant Professor / SR
6.	Duration of lecture:	One hour
	Lecture	45 minutes
	Learning Outcome	Students should be able
•	What is Osteogenesis	Imperfecta?

- How to diagnose it?
- Classification
- Management & Treatment

	Topic:	Osteomyelitis
1.	Mode of teaching:	Lecture
2.	Class:	Forth year MBBS
3.	Number of slides:	40
4.	Interactive portion:	25%





- 5. Teacher: Assistant Professor / SR
- 6. Duration of lecture: One hour Lecture 45 minutes Learning Outcome

students should be able

- What is Osteomyelitis
- Classification of Osteomyelitis
- Predisposing Factors
- Pathogenesis
- Signs & Symptoms
- Treatment
- Complications

1. Topic: SUPRACONDYLER FRACTURE OF HUMERUS

- 2. Mode of teaching:
- : Lecture
- 3. Class: Forth year MBBS
- 4. Number of slides:
- 5. Interactive portion: 25%
- 6. Teacher: Assistant Professor / SR

40

- Duration of lecture: One hour Lecture 45 minutes Learning Outcome Students should be able
- Definition of Supracondyler Fractures
- Causes
- Classification of Supracondyler Fractures
- How to Diagnosis
- Treatment Options
- Complications

8. Topic:

Ankle Fractures

- 9. Mode of teaching: Lecture
- 10. Class: Forth year MBBS
- 11. Number of slides: 35
- 12. Interactive portion: 25%
- 13. Teacher:Assistant Professor / SR
- 14. Duration of lecture: One hour
 - Lecture 45 minutes
 - Learning outcome: Student should be able to:
- Define dislocation
- Types of fracture associated with ankle dislocation
- Able to differentiate fracture pattern on x rays,
- Should know treatment
- Identify complications





ORTHOPAEDICS LEARNING OUTCOME

- 7. Topic:Colle's Fracture8. Mode of teaching:Lecture9. Class:Forth year MBBS10. Number of slides:2011. Interactive portion:25%
- 12. Teacher: Assistant Professor / SR
 13. Duration of lecture: One hour
 Lecture 45 minutes
 Learning outcome: Student should be able to:
- Define colle's fracture
- Classification of fracture
- Able to differentiate fracture pattern on x rays,
- Should know treatment
- Identify complications

8. Topic:	General Fracture Introduction
9. Mode of teaching:	Lecture
10. Class:	Forth year MBBS
11. Number of slides:	31
12. Interactive portion:	25%
13. Teacher:	Assistant Professor / SR
14. Duration of lecture:	One hour
Lecture	45 minutes

- Learning outcome: Student should be able to:
- Define fracture
- Types of fracture
- Able to differentiate fracture pattern on x rays,
- Identify complications

7. Topic:	Fracture Around Elbow
8. Mode of teaching:	Lecture
9. Class:	Forth year MBBS
10. Number of slides:	31
11. Interactive portion:	25%
12. Teacher:	Assistant Professor / SR
13. Duration of lecture:	One hour
Lecture	45 minutes
Learning outcome	Students should be able





- To asses clinically elbow fracture
- Types of fracture
- Able to differentiate fracture pattern on x rays,
- Know general treatment plan
- Identify complications

7. Topic: Fracture Around Knee

- 8. Mode of teaching: Lecture
- 9. Class: Forth year MBBS
- 10. Number of slides:
- 11. Interactive portion: 25%
- 12. Teacher: Assistant Professor / SR

31

- 13. Duration of lecture:One hourLecture45 minutesLearning Outcomestudents should be able
- Define supracondylar femur fracture and schatzker fracture
- Classification of fracture
- Able to differentiate fracture pattern on x rays,
- Should know treatment
- Identify complications

7. Topic:	Hip Dislocation
8. Mode of teaching:	Lecture
9. Class:	Forth year MBBS
10. Number of slides:	31
11. Interactive portion:	25%
12. Teacher:	Assistant Professor / SR
13. Duration of lecture:	One hour
Lecture	45 minutes
Learning Outcome	students should be able
Define dislocation	

- Define dislocation
- Interpret x rays of hip dislocation
- Should know the complications of hip dislocation
- Should know mechanism responsible for hip dislocation
- Should know treatment

7. Topic:	Hip joint Fractures
8. Mode of teaching:	Lecture
9. Class:	Forth year MBBS
10. Number of slides:	40
11. Interactive portion:	25%
12. Teacher:	Assistant Professor / SR





13. Duration of lecture: One hour Lecture 45 minutes Learning Outcome

students should be able

- Define hip fracture •
- Types of fracture •
- Able to differentiate fracture pattern on x rays •
- Know classification •
- Should know treatment options • Identify complications
- 8. Topic: **Shoulder Dislocation**
- 9. Mode of teaching: Lecture
- 10. Class:
- Forth year MBBS 11. Number of slides: 40
- 12. Interactive portion: 25%
- 13. Teacher: Assistant Professor / SR
- 14. Duration of lecture: One hour
- 45 minutes Lecture

Learning Outcome students should be able

- Define dislocation •
- Interpret x rays of shoulder dislocation •
- Should know the complications of shoulder dislocation •
- Should know mechanism responsible for shoulder dislocation •
- Should know treatment

7.	Topic:	Wrist Fractures	
8.	Mode of teaching:	Lecture	
9.	Class:	Forth year MBBS	
10.	Number of slides:	40	
11.	Interactive portion:	25%	
12.	Teacher:	Assistant Professor /	SR
13.	Duration of lecture:	One hour	
	Lecture	45 minutes	
	Learning Outcome		students should be able
0	Know the anatomy of	f wrist joint	
0	To interpret x ravs of	0	

- o interpret x rays of wrist joint
- To pick fractures of carpal bones 0
- Know the treatment 0
- Know the complications of carpal bone fractures 0





- 7. Topic: **Congenital Muscular Torticollis**
- 8. Mode of teaching:
- Lecture 9. Class: Forth year MBBS

35

- 10. Number of slides:
- 11. Interactive portion:
- 25% 12. Teacher: Assistant Professor / SR
- 13. Duration of lecture: One hour 45 minutes Lecture Learning Outcome Students should be able
- What is Congenital Muscular Torticollis •
- Etiology of CMT •
- Symptoms of CMT
- D/D of CMT •
- What is the treatment options for CMT •

7. Topic: **Osteogenesis Imperfecta** 8. Mode of teaching: Lecture Forth year MBBS 9. Class: 10. Number of slides: 40 11. Interactive portion: 25% 12. Teacher: Assistant Professor / SR 13. Duration of lecture: One hour Lecture 45 minutes Learning Outcome Students should be able What is Osteogenesis Imperfecta? •

- How to diagnose it? •
- Classification
- Management & Treatment •

7. Topic:	Osteomyelitis	
1		
8. Mode of teaching:	Lecture	
9. Class:	Forth year MBBS	
10. Number of slides:	40	
11. Interactive portion:	25%	
12. Teacher:	Assistant Professor / SR	
13. Duration of lecture:	One hour	
Lecture	45 minutes	
Learning Outcome	students should be able	
What is Osteomyelitis		
Classification of Osteomyelitis		
Predisposing Factors		
Dothogonosia		

- Pathogenesis
- Signs & Symptoms





- Treatment
- Complications

8. Topic:	SUPRACONDYLER FRACTURE OF HUMERUS
9. Mode of teaching:	Lecture
10. Class:	Forth year MBBS
11. Number of slides:	40
12. Interactive portion:	25%
13. Teacher:	Assistant Professor / SR
14. Duration of lecture:	One hour
Lecture	45 minutes
Learning Outcome	Students should be able

- Definition of Supracondyler Fractures
- Causes
- Classification of Supracondyler Fractures
- How to Diagnosis
- Treatment Options
- Complications









ORTHOPAEDICS LEARNING OUTCOME

15. Topic: **Ankle Fractures** 16. Mode of teaching: Lecture

- 17. Class:
- Forth year MBBS
- 18. Learning outcome: Student should be able to:
- Define dislocation •
- Types of fracture associated with ankle dislocation •
- Able to differentiate fracture pattern on x rays, •
- Should know treatment •
- Identify complications •
- 19. Number of slides: 35
- 20. Interactive portion: 25%
- 21. Teacher: Assistant Professor / SR
- 22. Duration of lecture: One hour Lecture 45 minutes

ORTHOPAEDICS

LEARNING OUTCOME

Colle's Fracture

- 14. Mode of teaching: Lecture
- 15. Class:

Forth year MBBS

Topic:

- 16. Learning outcome: Student should be able to:
- Define colle's fracture •
- Classification of fracture •
- Able to differentiate fracture pattern on x rays,
- Should know treatment •
- Identify complications •
- 17. Number of slides: 20
- 18. Interactive portion: 25%
- 19. Teacher: Assistant Professor / SR
- 20. Duration of lecture: One hour Lecture 45 minutes

ORTHOPAEDICS LEARNING OUTCOME

General Fracture Introduction

	ropie. G	~
15. Mode of teaching:	Lecture	
16. Class:	Forth year MBBS	
17. Learning outcome:	Student should be able to:	
• Define fracture		

Topic:





- Types of fracture
- Able to differentiate fracture pattern on x rays,
- Identify complications •
- 18. Number of slides: 31
- 19. Interactive portion: 25%
- 20. Teacher: Assistant Professor / SR
- 21. Duration of lecture: One hour Lecture 45 minutes

ORTHOPAEDICS LEARNING OUTCOME

- **14.** Topic: **Fracture Around Elbow**
- 15. Mode of teaching: Lecture
- 16. Class: Forth year MBBS

Students should be able Learning outcome

- To asses clinically elbow fracture •
- Types of fracture •
- Able to differentiate fracture pattern on x rays, •
- Know general treatment plan •
- Identify complications •
- 17. Number of slides: 31
- 18. Interactive portion: 25%
- 19. Teacher: Assistant Professor / SR
- 20. Duration of lecture: One hour Lecture 45 minutes

ORTHOPAEDICS LEARNING OUTCOME

14. Topic: **Fracture Around Knee**

Lecture

- 15. Mode of teaching:
- 16. Class: Forth year MBBS

Learning Outcome students should be able

- Define supracondylar femur fracture and schatzker fracture •
- Classification of fracture •
- Able to differentiate fracture pattern on x rays, •
- Should know treatment •
- Identify complications •
- 17. Number of slides: 31
- 18. Interactive portion: 25%
- 19. Teacher: Assistant Professor / SR
- 20. Duration of lecture: One hour





Lecture

45 minutes

ORTHOPAEDICS LEARNING OUTCOME

14. Topic:	Hip Dislocation	
15. Mode of teaching:	Lecture	
16. Class:	Forth year MBBS	
Learning Outcome		students should be able
Define dislocation		
Interpret x rays of hip dislocation		
Should know the complications of hip dislocation		

- Should know mechanism responsible for hip dislocation
- Should know treatment
- 17. Number of slides: 31
- 18. Interactive portion: 25%
- 19. Teacher: Assistant Professor / SR
- 20. Duration of lecture:One hourLecture45 minutes

ORTHOPAEDICS LEARNING OUTCOME

14. Topic:	Hip joint Fractures	
15. Mode of teaching:	Lecture	
16. Class:	Forth year MBBS	
Learning Outcome	students should be able	
 Define hip fracture 	students should be usie	
-		
• Types of fracture		
• Able to differentiate f	fracture pattern on x rays	
 Know classification 		
Should know treatment options		
Identify complications		
17. Number of slides:	40	
18. Interactive portion:	25%	
-	Assistant Professor / SR	
20. Duration of lecture:	One hour	
Lecture	45 minutes	
Topic:	Shoulder Dislocation	
15. Mode of teaching:	Lecture	
16. Class:	Forth year MBBS	
17. Number of slides:	40	
18. Interactive portion:	25%	
ro. meraenve portion.		





- 19. Teacher: Assistant Professor / SR 20. Duration of lecture: One hour Lecture 45 minutes Learning Outcome students should be able Define dislocation ٠ Interpret x rays of shoulder dislocation Should know the complications of shoulder dislocation • Should know mechanism responsible for shoulder dislocation • Should know treatment • Wrist Fractures Topic: 14. Mode of teaching: Lecture Forth year MBBS 15. Class: 16. Number of slides: 40 25% 17. Interactive portion: 18. Teacher: Assistant Professor / SR 19. Duration of lecture: One hour 45 minutes Lecture Learning Outcome students should be able Know the anatomy of wrist joint 0 To interpret x rays of wrist joint 0 To pick fractures of carpal bones 0 Know the treatment 0 Know the complications of carpal bone fractures 0 **Congenital Muscular Torticollis** Topic: 14. Mode of teaching: Lecture Forth year MBBS 15. Class: 16. Number of slides: 35 17. Interactive portion: 25% 18. Teacher: Assistant Professor / SR 19. Duration of lecture: One hour Lecture 45 minutes Learning Outcome Students should be able What is Congenital Muscular Torticollis Etiology of CMT •
- Symptoms of CMT
- D/D of CMT
- What is the treatment options for CMT

Topic:OsteogenesisImperfecta14. Mode of teaching:Lecture





- 15. Class: Forth year MBBS 16. Number of slides: 40 25% 17. Interactive portion: 18. Teacher: Assistant Professor / SR 19. Duration of lecture: One hour Lecture 45 minutes Students should be able Learning Outcome What is Osteogenesis Imperfecta? • How to diagnose it? • • Classification Management & Treatment • Topic: Osteomyelitis 14. Mode of teaching: Lecture 15. Class: Forth year MBBS 16. Number of slides: 40 17. Interactive portion: 25% 18. Teacher: Assistant Professor / SR 19. Duration of lecture: One hour Lecture 45 minutes Learning Outcome students should be able • What is Osteomyelitis Classification of Osteomyelitis • **Predisposing Factors** • Pathogenesis • Signs & Symptoms • Treatment ٠ Complications • SUPRACONDYLER FRACTURE OF HUMERUS **15.** Topic: 16. Mode of teaching: Lecture 17. Class: Forth year MBBS 18. Number of slides: 40 19. Interactive portion: 25% 20. Teacher: Assistant Professor / SR 21. Duration of lecture: One hour Lecture 45 minutes Students should be able Learning Outcome • Definition of Supracondyler Fractures • Causes • Classification of Supracondyler Fractures
- How to Diagnosis
- Treatment Options
- Complication



Topic:



4th year Learning Outcome

Dr. Anis Ahmed. Assistant Professor Surgery RMC. SU-I BBH

MANAGEMENT OF CHEST TRAUMA

Learning Outcomes:

At the end of the lecture the students will be able to:

- Understand the anatomy of the chest wall
- Define the type of chest trauma Describe the emergency management of chest trauma.

Topic: POST OPERATIVE CARE

Learning Outcomes:

At the end of the lecture the students will be able to:

- Define preioperative period
- Enlist mild moderate and major operations Define steps in the management of post operative care.

Topic:PREOPERATIVE CARELearning Outcomes:

At the end of the lecture the students will be able to:

- Define preioperative period
- Enlist the steps of preparation of the patient for the operation. Describe the risks and benefits of the operation to the patient.

Topic:SURGICAL DISORDERS OF INFANTSLearning Outcomes:

At the end of the lecture the students will be able to:

• Define various surgical disorders in infants. Briefly outline the steps in the management of these disorders.

Topic:MANAGEMENT OF TRAUMA

Learning Outcomes:

At the end of the lecture the students will be able to:

- Define what is trauma.
- Steps in the management of trauma
- ATLS protocols in the management of trauma. Outline trimodal pattern of death in trauma.

Topic: ARTERIAL DISORDERS

Learning Outcomes:

At the end of the lecture the students will be able to:





- Classify arterial disorders
- Define signs and symptoms associated with arterial disorders Briefly outline the plan of management of arterial disorders.



1- TOPIC:

DEPARTMENT OF MEDICAL EDUCATION RMC /Allied Hospitals, Rawalpindi



4th year Learning Outcome

SURGERY DHQ HOSPITAL RAWALPINDI

BASIC TRAUMA LIFE SUPPORT

Lecture: Interactive session: No. of slides: Teacher: Duration of lecture: At the end of the session f

15 minutes 20 -35 Prof / AP / SR 60 minutes.

30 to 45 minutes

At the end of the session the 4thyear students should be able to:-

- i. Asses the trauma victim
- ii. Understand the primary, secondary survey and the initial resuscitation
- iii. Perform rescue breathing chest compression
- iv. Trauma victim in safe position

2-	TOPIC:	CARE IN	OPERATION THEATRE
	Lecture:		30 to 45 minutes
	Interactive session:	15 mir	nutes
	No. of slides:	20 - 35	
	Teacher:		Prof / AP / SR
	Duration of lecture:	60 mir	nutes.
	At the and of the see	cion the 1th yes	or students should be able to.

At the end of the session the 4th year students should be able to:-

- i. Understand and prevent complications in operation theatre.
- ii. Learn the safe positioning of patients whilst they are unconscious.
- iii. Respect and understand the principles of diathermy, suction and X-ray usage in theatre
- iv. Understand the theatre environment and how to behave in it.

TOPIC:	THROMBOEMBOLISM
Lecture:	30 to 45 minutes
Interactive session:	15 minutes
No. of slides:	20 - 35
Teacher:	Prof / AP / SR
Duration of lecture:	60 minutes.
	Interactive session: No. of slides: Teacher:

At the end of the session the 4th year students should be able to:-

- i. Define hypercoaguable state and VTE
- ii. Identify clinical features of VTE
- iii. Describe the causes, risk factors and prophylaxis of VTE
- iv. Describe Evidence- based recommendations for treatment of VTE
- v. Relate recent advances in oral anticoagulation to VTE and prevention of new cases of VTE
- vi. Decide anticoagulation in pre-op, per-op and post-op patients.





2. TOPIC: Lecture: Interactive session: No. of slides: Teacher:

DISASTER MANAGEMENT

30 to 45 minutes 15 minutes 20 -35 Prof / AP / SR

Duration of lecture: 60 minutes.

At the end of the session the 4th year students should be able to:-

- i. Define triage
- ii. Identify etiology and mechanism of trauma in disaster victims.
- iii. Classify injuries in disaster victims with order of incidence & criticality.
- iv. Diagnose these injuries clinically and interpret investigations.
- v. Manage trauma effectively as an individual and in a team.
- vi. Identify the life saving measures in disaster victims.

3. TOPIC:	MANAGEMENT OF WOUND
Lecture:	30 to 45 minutes
Interactive session:	15 minutes
No. of slides:	20 -35
Teacher:	Prof / AP / SR

Duration of lecture: 60 minutes.

At the end of the session the 4th year students should be able to:-

- i. Define wound
- ii. Classify types of wounds
- iii. Differentiate clinically between different grades of wound and grades of wound healing
- iv. Identify etiology of wounds & causes and risk factors for wound infection
- v. Describe various types of bandages and dressings in management of wound types
- vi. Plan investigations, interpret and take appropriate actions.
- vii. Discuss rehabilitation in case of debilitating wounds.



DEPARTMENT OF MEDICAL EDUCATION **RMC** /Allied Hospitals, Rawalpindi



4th year Learning Outcome

DEPARTMENT OF NEUROSURGERY

1.	Topic	Head Injury Pathophysiology
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Interactive portion	25%
6.	Assessment	03 MCQs and 2 Scenarios
7.	Teacher	Professor/Associate Professor
8.	Duration of lecture	45min
	Lecture 35 min	
	Interactive 10 min	
	Learning Outcome	Student should be able to:
•	Define concussion, contusion	n, counter and diffuse axonal injury.
•	How will you categorizedhea	d injury into minimal, mild, moderate, seve

- vere and critical.
- Explain primary injury, secondary injury in a patient with head trauma
- What is post traumatic brain swelling, explain the process involved
- What is the Monroe-Kellie theory? • Student feedback form

1.	Topic		Head Injury Management
2.	Mode of Tea	ching	Lecture
3.	Class	-	Fourth Year MBBS
4.	Number of S	lides	10-15
5.	Interactive po	ortion	25%
6.	Assessment		03 MCQs and 2 Scenarios
7.	Teacher		Professor/Associate Professor
8.	Duration of le	ecture	45min
	Lecture	35 min	
	Interactive	10 min	
	Learning Out	tcome	Student should be able to:
•	Define concu	ssion, contusi	on, counter and diffuse axonal injury.

- How will you categorized head injury into minimal, mild, moderate, severe and critical.
- Explain primary injury, secondary injury in a patient with head trauma •
- What is post traumatic brain swelling, explain the process involved •
- What is the Monroe-Kellie theory • Student feedback form

	Topic	Degenerative Disc Disease
1.	Mode of Teaching	Lecture
2.	Class	Fourth Year MBBS





- 3. Number of Slides
- 4. Interactive portion 25%
- 5. Assessment
- 6. Teacher

- 03 MCQs and 2 Scenarios Professor/Associate Professor 45min
- Duration of lecture
 Lecture 35 min
 Interactive 10 min
 Learning Outcome

Student should be able to:

- Define degenerative disc disease
- What are 02 most common types
- What is the pathophysiology
- How is lumber spinal stenosis diagnosed clinically and radiologically

10-15

- How does cervical spinal stenosis present
- What are the DDS
- How will you manage spinal stenosis and spondylolisthesis Student feedback form

1.

2.	Topic	Neural Tube Defects
3.	Mode of Teaching	Lecture
4.	Class	Fourth Year MBBS
5.	Number of Slides	10-15
6.	Interactive portion	25%
7.	Assessment	03 MCQs and 2 Scenarios
8.	Teacher	Professor/Associate Professor
9.	Duration of lecture	45min
	Lecture 35 min	
	Interactive 10 min	
	Learning Outcome	Student should be able to:
•	How are NTDs classified	

- How are the risk factors leading
- What are the risk factors leading to NTDs
- What investigations help in the detection of NTDs
- Define spinal bifida oculta
- Explain spinal bifida aperta and meningomylocele Student feedback form
- 1. Topic **Spinal Injuries** 2. Mode of Teaching Lecture Fourth Year MBBS 3. Class 4. Interactive portion 25% 5. Assessment 03 MCQs and 2 Scenarios 6. Teacher Professor/Associate Professor 7. Duration of lecture 45min 35 min Lecture





• • • • • • • • •	Interactive 10 min Number of Slides Learning Outcome Define spinal stability and sp Level of injury What is complete/incomplete What is spinal shock Name the different spinal con What is the pathogenesis inju Clinically how can you differ How will you investigate the Student feedback form	e injury rd injuries pries rentiate them
4. 5. 6. 7.	Topic Mode of Teaching Class Number of Slides Interactive portion Assessment Teacher Duration of lecture Lecture 35 min Interactive 10 min Learning Outcome Define hydrocephalus What are 02 fundamental sub What are special forms of hy What are the causes of hydro What is the CT/MRI criteria What are the sighnanfsymtom Percentage of mortalities of H	drocephalus cephalus to diagnose hydrocephalus ns of Hydrocephalus
4. 5. 6. 7.	Topic Mode of Teaching Class Number of Slides Interactive portion Assessment Teacher Duration of lecture Lecture 35 min Interactive 10 min Learning Outcome	Spinal Infections Lecture Fourth Year MBBS 10-15 25% 03 MCQs and 2 Scenarios Professor/Associate Professor 45min





- Categrozied Spinal infections
- What are causes of Spinal infections
- How will patients present with spinal infections
- How will you investigate these patients
- What is the pathophysiology of spinal cord dysfunction in these patients
- What will be your DIDs Student feedback form

1.	1	Brain Tumor 1	
	Mode of Teaching	Lecture	
3.	Class	Fourth Year MBBS	
4.	Number of Slides	10-15	
5.	Interactive portion	25%	
6.	Assessment	03 MCQs and 2 Scenarios	
7.	Teacher	Professor/Associate Professor	
8.	Duration of lecture	45min	
	Lecture 35 min		
	Interactive 10 min		
	Learning Outcome	Student should be able to:	
•	Classify Brain tumors		
•	-	11x	
•	How patients present clinicallyHow will you investigate these patients		
•	•	1	
•	Possible medical management		
•	What are the surgical options		
٠	What are the adjuent therapie	es available	
	Student feedback form		
1	Tra alia	During Transcence	
1.	1	Brain Tumor 2	
2.	Mode of Teaching	Lecture	
	Class	Fourth Year MBBS	
	Number of Slides	10-15	
	Interactive portion	25%	
6.	Assessment	03 MCQs and 2 Scenarios	
7.	Teacher	Professor/Associate Professor	
8.	Duration of lecture	45min	
	Lecture 35 min		
	Interactive 10 min		
	Learning Outcome	Student should be able to:	
٠	Classify Brain tumors		
•	How patients present clinical	llv	
	Putternes Presente ennieu		

- How will you investigate these patients
- Possible medical management and admission
- What are the surgical options





• What are the adjuent therapies available. Student feedback form

1.	Topic	Management of Hemorrhagic Stroke	
2.	Mode of Teaching	Lecture	
3.	Class	Fourth Year MBBS	
4.	Number of Slides	10-15	
5.	Interactive portion	25%	
6.	Assessment	03 MCQs and 2 Scenarios	
7.	Teacher	Professor/Associate Professor	
8.	Duration of lecture	45min	
	Lecture 35 min		
	Interactive 10 min		
	Learning Outcome	Student should be able to:	
٠	What are the causes of Hemorrhagic Stroke		

- Classify hemorrhagic stroke
- How will you manage
- What are the surgical options in management Student feedback form

1.	Topic	Trigeminal Neuralgia
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Interactive portion	25%
6.	Assessment	03 MCQs and 2 Scenarios
7.	Teacher	Professor/Associate Professor
8.	Duration of lecture	45min
	Lecture 35 min	
	Interactive 10 min	
	Learning Outcome	Student should be able to:
•	Define Trigeminal Neuralgia	

- Define Trigeminal Neuralgia
- Enumirate causes of Trigeminal Neurlgia
- how you will examine this patient
- Medical theropy for Trigeminal neuralgia
- What are the surgical options for trigeminal neuralgia Student feedback form

1.	Topic	Brain Infections
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Interactive portion	25%





- 6. Assessment
- 7. Teacher

- 03 MCQs and 2 Scenarios Professor/Associate Professor 45min
- B. Duration of lecture Lecture 35 min Interactive 10 min Learning Outcome
- Student should be able to:
- Enumirate the infactions after developing a brain abcess
- What are the main vectors for of brain infections
- Enumerate the most common pathogens.
- How do patients present with Brain infection
- How will you investigate these patients
- How will you treat these patients
- What is the criteria for surgical intervention Student feedback form

1.	Topic	Neuro Imaging
2.	Mode of Teaching	Lecture
3.	Class	Fourth Year MBBS
4.	Number of Slides	10-15
5.	Interactive portion	25%
6.	Assessment	03 MCQs and 2 Scenarios
7.	Teacher	Professor/Associate Professor
8.	Duration of lecture	45min
	Lecture 35 min	
	Interactive 10 min	
	Learning Outcome	Student should be able to:
	CT Scan Brain	

- What to order
- Where to order a CAT Scan (indications)
- Which are the main emergent conditions to rule out in head injury in a CT scan brain
- When to re-scan a patient with head injury
- How to differ between EDH,SDH, SAH and contusions. <u>Spinal Films</u>
- In trauma; which x rays to order and when
- When to order lumber and thorasic x-Rays
- Skull X-Rays
- Why importance to do skull x-rays
- What should be looked for in a skull x-rays <u>MRI Scan in treatment</u>
- What is role of MRI in head trauma
- What is the role of arteriogram in trauma
- 1. Topic

CSF Rhinorhea





- 2. Mode of Teaching
- 3. Class

Fourth Year MBBS 10-15

25%

Lecture

- 4. Number of Slides
- 5. Interactive portion
 6. Assessment
- Assessmen
 Teacher
- 7. Teacher

- 03 MCQs and 2 Scenarios Professor/Associate Professor
- 45min
- 8. Duration of lecture45minLecture35 minInteractive10 minLearning OutcomeStuden
 - Student should be able to:
- What is the pathway of egress CSF Rhinorhea
- 02 most common subtype of CSF Rhinorhea.
- What is the natural history of CSF CSFRhinorhea in traumatic and spontaneous CSF Rhinorhea
- Causes of traumatic CSF Rhinorhea
- Causes of spontaneous CSF Rhinorhea
- Which investigations will help in determining if CSF Rhinorhea is due to a CSF Fistula Student feedback form