# GANDHARA UNIVERSITY, PESHAWAR

# **KABIR MEDICAL COLLEGE**



# CURRICULUM FIVE YEAR MBBS PROGRAM

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#### **MISSION STATEMENT**

The mission of Kabir Medical College, Peshawar is to Educate Medical Students from diverse backgrounds to meet future primary and specialty health care needs. Our graduates will aspire to excellence in providing patient-centered and evidence-based care to their patients and communities. Kabir Medical College, Peshawar is committed to: -

- 1) Prepare physicians focused on improving access to high quality health care in Khyber Pakhtunkhwa as well as Nationally, with emphasis on Rural and Medically underserved Regions.
- 2) Advance knowledge through Research, Innovation and to serve patients and communities with respect and compassion.
- 3) Kabir Medical College, Peshawar is dedicated to the educational, intellectual, professional and personal development of its students, trainees and faculty, who are committed to the study and to the practice of Medicine.

#### **CURRICULUM COMMITTEE TERMS OF REFERENCE**

#### Purpose and Functions of the Committee

The curriculum committee as the authority for oversight of the under graduate program leading to the Medical Doctor (MBBS Degree). The curriculum committee of Kabir Medical College, Peshawar ensures that students learn the requisite knowledge, skills, attitude and behavior as per guidelines of Pakistan Medical and Dental Council.

#### Functions of the Curriculum Committee

#### 1) <u>Development of Policy</u>

The curriculum committee develops policies keeping in view the institutional mission and in compliance of Pakistan Medical and Dental Council and HEC guidelines. Such policies include those supporting the curricular framework, curricular hours, duties hours, curricular content and work load, curricular review and new learning within the curriculum.

#### 2) Establishment of Curricular Goals

The curriculum committee is responsible for the establishment and continuing review of overall curricular goals, competencies and educational objectives.

#### 3) <u>Curricular Design and Content</u>

The curriculum committee is responsible for the design and structure of the curriculum so that it meets the established goals and Competency Objectives. The curriculum committee approves the academic calendar, monitor the content and work load of courses and establishes degree requirements as per PM&DC and HEC requirements. It sets standards for the curriculum regarding depth and breadth of knowledge.

#### 4) Faculty Communication and Education

The curriculum committee is responsible for ensuring that all the teaching faculty are aware of their responsibilities and of the College curricular policies and objectives. It is also responsible for ensuring that the faculty members are provided with development opportunities.

#### 5) <u>Curricular Administration</u>

The curriculum committee is responsible for establishing an appropriate faculty structure to ensure that all the curricular goals are met.

#### 6) <u>Record Keeping</u>

The curriculum committee must document the performance of its designated functions. This documentation also serves to ensure that Medical Education Objectives, as set, are fulfilled and that the education program is moving forward.

#### **Record Keeping Functions**

- Curricular Quality Assurance documents, including annual report to the Dean/Principal concerned.
- Curriculum committee minutes
- Policies changes

#### 7) <u>Membership of the Curriculum Committee</u>

The curriculum committee shall be composed of Head Departments of Basic Medical Sciences Faculty, Clinical Medical Sciences Faculty, Director/Nominee of Department of Medical Education and Deputy Director Quality Enhancement Cell Gandhara University, Peshawar

#### 8) <u>Responsibilities of the Members</u>

All members will participate actively in the curriculum committee by:

- Reviewing all pre-circulated material.
- Attending at least 70% of the meetings
- Participate in the working groups, as required
- Communicating curriculum committee activities and decisions as appropriate

#### 9) <u>Term of Membership</u>

Appointment members will normally serve a three-year term, renewable once

#### 10) <u>Chairmanship</u>

Principal/Dean will be the chairman of curriculum committee.

#### 11) Duties of the chair

- 1) To chair all the curriculum committee meetings
- 2) To be responsible for the development and approval of meeting minutes
- 3) To develop agenda for all meetings
- 4) To monitor follow-up of all committee decisions

#### 12) Frequency and duration of meetings

Meetings will be held monthly during the academic year and otherwise at the call of the chair.

#### 13) <u>Quorum</u>

Quorum for the purpose of approving minutes are passing motions will be 50%.

#### 14) <u>Conflict of interest</u>

Members are expected to declare a conflict of interest if their real are perceived personal interest might be seen to influence their ability to assess any matter before the committee objectively. The can do so either by personal declaration at the beginning of a meeting or in writing to the chair. They will be excused from any discussions regarding the matter in question. The declaration and absences will be recorded in the minutes.

#### 15) Decision making

Decision that established program policy changing will be discussed in the context of specific motions, pass by majority of votes of members and recorded in the minutes. The chair will aim to build consensus, but the final decision will be made by voting.

#### 16) Administrative support and communication

#### Administrative support

The secretary will be a member of the faculty of Kabir Medical College, Peshawar, nominated by the Principal/Dean of the institution for a period of three years, renewable once.

#### Agenda & Minutes

- Agenda and minutes of curriculum meetings are to be distributed to the committee members by the secretary.
- Minutes are normally distributed electronically to all members within one week of meetings.
- The curriculum committee reports its decisions/recommendations, as per guidelines of PM&DC and HEC, to the Academic Council of Gandhara University, Peshawar for consideration and necessary approval by the Authorities of the University.

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### **Course Content Basic Medical Sciences**

First Professional MBBS GROSS ANATOMY

1.	Introduction to Anatomy	NATOMY 3.3	Pectoral Region and Axilla
1.1	Descriptive Anatomical	3.4	Brachial Plexus
1.1.1	Terms Related to Position	3.5	Back and Scapular Region
1.1.1	Terms Related to Movements	3.5.1	Muscles of the Back
1.1.2	Basic Anatomy Structure	3.5.2	Shoulder Joint
1.2.1	Skin	3.5.3	Acromio-Clavicular Joint
1.2.1	Foscia	3.6	Upper Arm
1.2.2	Muscles	3.6.1	Facial Compartments with their Contents
1.2.3	Skeletal	3.6.2	Cuboital Foss
	Smooth	3.7	The Forearm
	Cardiac	3.7.1	Fascial Compartments with their Contents
1.2.4	Joint	3.8	The Region of the Wrist
1.2.5	Ligaments	3.9	The palm of the Hand
1.2.6	Bursae	3.10	The Dorsum of the Hand
1.2.7	Synovial Sheaths	3.11	Elbow Joint
1.2.8	Blood Vessels	3.12	Superior and Inferior Radioulnar Joint
1.2.9	Lymphatic System	3.13	Radiocarpal Joint (Wrist Joint)
1.2.10	Nervous System Plexuses	3.14	Radiology of Upper Limb
1.2.10	Autonomic Nervous System	3.15	Clinical Anatomy
1.2.11	Bone	4.	Lower Limb
1.2.12	Cartilage	4.1	Surface Anatomy
1.2.13	Radiological Anatomy	4.2	Osteology
1.2.14	Clinical Anatomy	4.3	The Gluteal Region
2.	The Thorax	4.4	Anterior Fascial Compartment of the Thigh
2.1	Surface Anatomy	4.5	Medical Fascial Compartment of Thigh
2.2	Osteology	4.6	Femoral Triangle
2.3	Structure of Thoracic Wall	4.7	Adductor Canal
2.4	Internal Thoracic Artery	4.8	Posterior Fascial Compartment of Thigh
2.5	Mediastinum	4.9	Hip Joint
2.6	Pleura	4.10	Popliteal Fossa
2.7	Trachea	4.11	Anterior Fascial Compartment of Leg
2.8	Lungs	4.12	Lateral Fascial Compartment of Leg
2.9	Heart	4.13	Posterior Fascial Compartment of Leg
2.10	Arteries of the Thorax	4.14	Knee Joint
2.11	Nerves	4.15	The Foot
2.12	Lymphatics	4.15.1	Sole of the Foot
2.13	Oesophagus	4.15.2	Dorsum of the Foot
2.14	Thymus	4.16	Superior and Inferior Tibiofibular Joint
2.15	Clinical Anatomy	4.17	Ankle Joint
2.16	Radiology of Thorax	4.18	Tarsal Joint
3.	Upper Limb	4.19	Arches of the Lower Limb
3.1	Surface Anatomy	4.20	Radiology of Lower Limb
3.2	Osteology	4.21	Clinical Anatomy



### KABIR MEDICAL COLLEGE, PESHAWAR Course Content Basic Medical Sciences First Professional MBBS

GENERAL HISTOLOGY

1.	The Microscope
1.1	Various Parts
1.2	Focusing Procedure
1.3	Tissue Preparation for Microscope Study
2.	Cell
3.	Epithelia
4.	Connective Tissu
4.1	Classification
4.2	Mesenchymal Connective Tissue
4.3	Adult Connective Tissue
4.4	Cartilage
4.5	Bone
4.6	Blood
4.7	Muscle
5.	Nervous Tissue
5.1	Neuron
5.2	Neuroglia
5.3	Nerve Fiber



#### Course Content Basic Medical Sciences First Professional MBBS GENERAL EMBRIOLOGY

	GENERAL		
1.	First Week of Development	6.3	1
1.1	Gametogenesis	6.4	]
1.2	Structure of the Uterus	6.5	1
1.3	Reproductive Cycle	6.6	
1.4	Germ Cell-Transport and Viability	6.7	1
1.5	Fertilization	6.8	]
1.6	Cleavage		
1.7	Blastocyst Formation	1.	-
2.	Second Week of Development	Muscu	lar S
2.1	Implantation	1	2
2.2	Implantation Sties	2	5
3.	Third Week of Development	3	(
3.1	Strulation	4	(
3.2	Urulation	Articu	lar ð
3.3	Intraembryonic Coelom	1	]
3.4	Chorionic Villi	2	]
4.	Embryonic Period	0.	j
4.1	Folding of Embryo	0.1	]
4.2	Germ Layer Derivatives	0.2	]
4.3	Estimation of Embryonic Age		
5.	Fetal Period	Mark	s Ta
5.1	Estimation of Fetal Growth		
5.2	Fetal Circulation	Theor	·у
6.	Fetal Membrane and Placement	Practi	ical
6.1	Decidua		
6.2	Placental Development and Structure		

IDNIU		
6.3	Uterine Growth During Pregnancy	r
6.4	Labour	
6.5	Amnion	
6.6	Yolk Sac	
6.7	Allantois	
6.8	Multiple Pregnancy	
	<b>Congenital Malformation</b>	
1.	Teratology	
Muscula	ur System	
1	Skeletal Muscle	
2	Smooth Muscle	
3	Cardiac Muscle	
4	Congenital Malformation of Musc	les
Articula	r & Skeletal System	
1	Development of Bone and Cartilag	ge
2	Development of Joints	
<i>0</i> .	Limbs	
0.1	Limbs Development	
0.2	Limbs of Malformation	
EXAMINATION:		
Marks Total 200		200
Theory 100		100
Practical 100		100



**Course Content in Basic Medical Sciences** 

### **First Professional MBBS**

PHYSIOLOGY

1.	Cell Physiology
1.1	Cell Structure and Function
2.	Excitable Tissue (Nerve and Muscle)
2.1	Resting Membrane Potential
2.2	Nerve Action Potential
2.3	Skeletal Muscle
2.4	Neuromuscular Transmission
2.5	Smooth Muscle Physiology
3.	Heart
3.1	Physiology of Cardiac Muscle
3.2	Regulation of the Pumping of the Heart
3.3	Heart Sound and Murmurs
3.4	Cardiac Excitation
3.5	Cardiac Cycle
3.6	The Electrocardiogram
3.6.1	Principles of Recording
3.6.2	The Normal Electrocardiogram
3.7	Abnormal Rhythms-Tachycardia function, formation, maturation and destruction, Polycythemia. Anemia Bradycardia; Sinus arrythmia; heart block; premature contraction
3.8	Practical – Examination of the heart; ECG
4.	The Circulation
4.1	Overview of the Circulation
4.2	The microcirculation
4.3	Control of blood flow
4.4	Nervous control for the heat and circulation
4.5	Regulation of blood pressure
4.6	Kidneys in the regulation
4.7	Cardiac output, Venous return
4.8	Cardiac output during exercise
4.9	The coronary circulation
4.10	Circulation shock; Physiology of management
4.11	Practical – Measurement blood pressure and pulse
	Blood
	Red Blood Cells – Structure
	Resistance to infection, the white cells, leukemia, leukopenia, leukocytosis Resistance to infection, immunity and allergy
	Blood groups and transfusion Haemostasis

		and blood coagulation Prac	etical –
		Haematology	
		Respiration	
		Mechanism of pulmonary ventilat	
		volume and capacities, alveolar ve	
		The respiration Passages, The P	
		Circulation, Diffusion of Oxygen an	
		dioxide through the alveolar m	
		Transport of Carbon Dioxide, Regu	
		Respiration, Respiration of Insu	
		Pulmonary function tests, P abnormalities, Respiration is	special
		situation, High Altitude.	special
	6.10.2	Deep sea diving	
	6.10.3	Aviation	
		Practical – Measurement of Re	sniration
	7.	Function	spiration
	8.	Gastro Intestinal System	
	8.1	Gastro Intestinal motility, Defecatio	n
n, n,	8.2	Secretary Functions	
15 15	8.3	Digestion and absorption of Carbo	hydrates,
n		Proteins and Fats.	
	8.4	Endocrinology of the Gut.	
	9.	Sports Physiology	
	9.1	Muscles in exercise.	
	9.2	Physiology adjustment in muscular	exercise
	9.3	Physical Fitness	
		EXAMINATION	
	Paper		100
	Practica	l Examination	100
	Long Vi		60
	Short P	ractical	10
	Long Pr	actical	20
of	Procedu	ire	05
-	Note Bo	ok	05
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**Course Content Basic Medical Sciences** 

#### **First Professional MBBS**

**BIO-CHEMISTRY** 

	DIO-CIII
1.	Cell Structure and Function
1.1	Sub Cellular Organelles:
1.1	Description and Biochemical Function
1.2	Cell Fractionation:
1.2	Homogenisation and Centrifugation
2.	Water & pH
2.1	Dissociation of water, pH, pOH, and pK
2.2	Henderson – Hesselbatch Equation Buffers
2.3	Osmotic Pressure
2.4	Surface Tension
2.5	Absorption
3.	Chemistry of Bio-Molecules Part I
	Carbohydrates: Classification, Isomerism
3.1	structure & Chemical important
	monosaccharides
3.2	Disaccharides, Homo and Hetero
5.2	Polysaccharides.
3.3	Lipids: Classification, saturated and
5.5	unsaturated fatty acids, prostaglandins.
3.4	Phospholipids, Glyco-lipids, cholesterol,
	membranes.
4	Chemistry of Bio Molecules Part 2
4.1	Protein: Classification, properties and
	function, denaturation.
4.2	Amino Acids: Classification, Physical and Chemical Properties.
4.3	Peptides structure of proteins
4.5	Nuclei Acid: Structure and function of
	Pyrimidines, Purities, Nucleosides and
4.4	Nucleotides, Structure, Function and
	Synthesis of DNA and RNA
5.	Enzymes and Coenzymes
	Classification, properties, Factors Affecting
5.1	Enzymes Activity
5.2	Michalis-Menten Equation, Inhibition.
5.3	Regulation and Mechanism of Action of
5.5	Enzymes.
5.4	Clinical and Medical Application of enzymes
5.5	Coenzyme, their structure and functions
6.	Vitamins
6.1	Fat-soluble Vitamins: A, D, E, & K
	Water-soluble vitamins: B-Complex
6.2	Vitamins, Vitamins C, Sources, Requirement,
	Biochemical role, Deficiency Diseases.

7.	Nutrition		
7.1	Digestion and Absorption of food Nu	itrients,	
, • •	Digestive Juices		
7.2	Elements of food; their Requireme Functions, Balanced Diet.	ent and	
7.3		volity	
1.3	MR. SD, Nitrogen Balance, Protein Q Nutritional Disorders K kwash		
7.4	Marasmus, Obesity, Starvation.	niorkor,	
8.	Bioenergetics		
8.1	Biological Oxidation and Reduction		
8.2	Basic Energy Concepts, ATP formati its Function		
8.3	Electron Transport Chain and Ox Phosphorylation	idative	
9.	Blood		
	Blood Components, their function	ns and	
9.1	Abnormalities		
9.2	Plasma proteins, immunoglobulins,	blood	
9.2	clotting		
9.3	Porphyrins and Bile Pigments and Dis		
9.4	Haem Synthesis, Degradation and Dis	eases	
9.5	Acid Base, Balance, Transport of		
9.6	Gases, Metabolic and Respiratory A and Alkalosis	cidosis	
10.	Metabolism of Amino Acids		
10.1	Metabolism of Glycine		
10.2	Metabolism of Cysteine and Methioni	ne	
10.3	Metabolism of Phenyl alanine, Ty	rosine,	
10.5	Tryptophan and related diseases.		
<i>11</i> .	Practical's		
11.1	Qualitative Analysis of Carbohy	drates,	
11.1	Protein Fats, Milk and Foods		
	EXAMINATION		
Theory		100	
Practical's 100			
Long Vi		60	
	Table Viva20		
	Practical Skills 15		
Note Book 05			



#### Course Content Basic Medical Sciences First Professional MBBS COMMUNITY MEDICINE

1.	Introduction to Community Medicine, Public Health and Its Objectives
2.	Community Oriented Medical Education
3.	Social / Behavioral Studies
4.	Community Visits Studies
5.	Environmental Health Light climate social, water, waste, air, sounds.
6.	Demography and Health Statistics
7.	Primary Health Care
8.	Management Information System
9.	Health Statistics of Pakistan
10.	Family Health and Rural Health



#### Course Content Basic Medical Sciences Second Professional MBBS GROSS ANATOMY

1. Introduction to Anatomy 1.1 Surface Anatomy 1.2 Osteology The Neck 1.3 1.3.1 Sensory Nerves of the Neck 1.3.2 Triangles of the Neck Main Vessels and Nerves of the Neck 1.3.3 Cervical Part of Sympathetic Trunk 1.3.4 1.3.5 **Cervical Plexus** Viscera of the Neck. Thyroid and Parathyroid 1.3.6 Glands. The Root of the Neck Temporomandibular 1.3.7 Joint 1.4 The Scalp 1.5 The Face 1.5.1 Sensory Nerves of the face 1.5.2 Arterial Supply and Venous Drainage Muscles of Facial Expression 1.5.3 The Parotid Region 1.6 The parotid Gland 1.6.1 1.6.2 Muscles of Mastication The Temporal and Infratemporal Fossae 1.7 1.7.1 Contents of the Fossae 1.7.2 Temporomandibular Joint Submandibular Region 1.8 1.9 The Orbital Region 1.10 The Eye 1.11 The Ear. The 1.12 The Mouth 1.13 Pharynx 1.14 The Palate The Nose with Paranasal Air Sinuses 1.15 The Larynx 1.16 1.17 **Clinical Anatomy** 2. The Abdomen, Pelvis and Perineum 2.1 Surface Anatomy 2.2 Osteology Structure of the Abdominal Wall 2.3 2.4 Inguinal Canal The Abdominal Viscera 2.5 2.5.1 The Peritoneum 2.5.2 The Gastrointestinal System (GIT)

	l I
2.5.3	The blood vessels of GIT
2.5.4	Accessory Organs of GIT
	Liver
	Gall Bladder
	Pancreas
	Spleen
2.6	Urinary Tract
2.6.1	Kidneys
2.6.2	Ureters
2.6.3	Suprarenal Glands
2.6.4	Vessels and Nerves of the
2.7	Pelvis
2.7.1	False Pelvis
2.7.2	True Pelvis
2.7.3	The Pelvic Cavity, Contents of the Pelvic Cavity. Pelvic Viscera in Male with Male Genital Organs, Pelvic Viscera in Female with Female Genital Organs.
2.8	The Perineum
2.8.1	Anal Triangle
2.8.2	Male Urogenital Triangle
2.8.3	Female Urogenital Triangle
2.9	Radiology
2.10	Clinical Anatomy
3.	The Brain
3.1	General Topography of
3.1.1	Spinal Cord
3.1.2	Brain Stem
3.1.3	Cerebellum
3.1.4	Cerebrum
3.2	Blood Supply of the Spinal Cord and Brain
3.3	The CFS and Ventricular System
3.4	The Basal Nuclei
3.5	Thalamus and Hypothalamus
3.6	Visual Pathway
3.7	Internal Capsule
3.8	Position of the Nuclei of the Cranial Nerves
3.9	Ascending and Descending Tracts of the Spinal Cord



Course Content Basic Medical Sciences Second Professional MBBS SPECIAL HISTOLOGY

-	SI ECIAL I
1.	Special Histology
1.1	Study of Heart and Blood Vessels
1.2	Microscopic Study of Skin
1.3	Classification of the Glands
1.4	Body and their Microscopic Study
1.5	Microscopic Structure of the Respiratory System
1.6	Microscopic Structure of the Urinary System
1.7	Microscopic Structure of the Endocrine System
1.8	Macroscopics Structure of the Endocrine System Special Senses, the Eye and Ear.
	SPECIAL EMBRYOLOGY (PART II)
1.	Branchial Apparatus and Head and Neck
1.1	Branchial Arches
1.2	Pharyngeal Pouches
1.2	Branchial Anomalies
1.4	Development of Thyroid Glands
1.5	Development of Tongue
1.6	Development of Face and Plate.
2.	Body Cavities, Mesenteries and Diaphragm
2.1	Division of Coelom
2.2	Development of Diaphragm
3.	Respiratory System
3.1	Development of Larynx
3.2	Development of Trachea
3.3	Development of Bronchi and Lungs
4.	Digestive System
4.1	The Foregut
4.2	The Midgut
4.3	The Hindgut
5.	Circulatory System
5.1	Cardiovascular system
5.2	Lymphatic System
5.3	Congenital Malformations
<b>6.</b>	Nervous System
6.1	Central Nervous System
6.2	Spinal Cord, System
6.3	Peripheral Nervous System
6.4	Autonomic Nervous System
7.	The Eye and the Ear
7.1	Eye and its Congenital Malformations
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7.2	7.2 Ear and its Congenital Malformation		
8.	Integumentary System		
8.1	Skin		
8.2	Hari		
8.3	Glands		
8.4	Nails		
8.5	Mammy Glands		
8.6	Teeth		
	EXAMINATION		
Theory	Theory 100		
Practica	Practical's 100		
Total	Total 200		



**Course Content Basic Medical Sciences** 

Second Professional MBBS

PHYSIOLOGY

1.	Body Temperature Regulation	
1.2	Aetiology of Fever	
1.3	Practical- Recording of Body Temperature	
2.	Kidney and Body Fluids	
2.1	Body Composition, Fluids and Electrolytes	
2.3	pH of body Fluids	
2.4	Abnormalities of fluid and of reflex,	
2.4	Electrolyte	
2.5	Abnormalities of Acid, Base Balance	
2.6	Principles of Acid, Base Balance	
2.7	Glomerular Filatration; GFR and its	
	measurement	
2.8	Renal Blood flow	
2.9	Tubular reabsorption and secretion	
2.10	Clearance in estimation of kidney function	
2.10	and memory, Limbs system, hypothalamus	
2.11	Regulation of ECF osmolality and Na+	
0.10	concentration	
2.12	Formation of a dilute urine	
2.13	Formation of a concentration urine	
2.14	Disorders of urine concentrating ability	
2.15	Regulation of Blood volume and ECF volume	
2.16	Regulation of ECF electrolyte concentration	
	and acid base balance	
2.17	Physiology of micturition	
2.18	Renal failure and principles of dialysis	
3.	The Nervous System	
3.1	General organization of the nervous system	
3.2	Synapses; Synaptic transmission	
3.3	Sensory receptors; Nerve fibers	
3.4	Somatic Sensations 2.2 body	
3.5	Pain referred pain and inhibition of pain	
• •	Spinal cord reflexes, the stretch withdrawal	
3.6	reflex, Crossed Extensor Reflexes of	
27	locomotion and posture.	
3.7	Motor pathways; motor cortex	
3.8	The Brain stem	
3.9	Vestibular sensations, postural reflexes	
3.10	Cerebellum	
3.11	Over/view of the motor system	
3.12	The Cerebral cortex, Learning	
3.13	Spleen	

<b>BOOI</b>			
3.14	Speech		
3.15	The autonomic nervous system		
3.16	Cerebrospinal fluid		
	Practical, Examination of the Cranial nerves,		
3.17	testing of reflexes, testing of motor and		
	sensory functions.		
4.	The Special Senses		
4.1	Vision		
4.1.1	Functional anatomy		
4.1.2	Optics		
4.1.3	Functions of the retina, color vision		
4.1.4	Visual pathways, visual cortex		
4.1.5	Control of eye movements, eye muscles, reflex		
4.2	Hearing		
4.2.1	Functional Anatomy		
4.2.2	Transmission of sound		
4.2.3	Sound perception, Cochlea		
4.2.4	Auditory pathway, auditory cortex		
4.2.5	Conductive and perceptive deafness		
4.3	The Chemical Senses		
4.3.1	Taste		
4.3.2	Smell		
	Practical – Testing of vision, Hearing, Taste		
4.4	and smell		
5.	Endocrine System		
5.1	Modes of action of hormones, control		
5.1	systems		
5.2	Hypothalamus		
5.3	Pituitary hormones, control by the		
	hypothalamus		
5.4	Thyroid hormones		
5.5	Adrenal cortex and medulla		
5.6	Endocrine pancreas, insulin, Glucagon,		
	diabetes mellitus		
5.7	Parathyroid, Ca2+, bone metabolism		
5.8	Other endocrine system, Gut, Kidney,		
	Vascular epithelium		
6.	Reproductive System		
6.1	Male and Female Puberty		
6.2	Male reproductive system		
6.2.1	Male sex hormones		



### **Course Content Basic Medical Sciences** Second Professional MBBS

PHYSIOLOGY

6.2.2	Spermatogenesis		
6.3	Female reproductive system		
6.3.1	Female sex hormones		
6.3.2	Menstrual and ovarian cycles		
6.3.3	Menopause		
6.4	Fertilization, implantation and pregnancy		
6.5	Parturition and Lactation		
6.6	Placental Physiology		
6.7	6.7 Foetal and Neonatal Physiology		
6.8	Practical – Pregnancy Diagnosis Test		
	EXAMINATION		
Paper		100	
Practical		100	
Long Viva 60		60	
Short Viva 10		10	
Long Practical 20		20	
Procedure		05	
Note Book		05	



**Course Content Basic Medical Sciences** 

Second Professional MBBS

BIOCHEISTRY

1.1       Metabolism, Pathways         1.2       Metabolism at Organ Level; Liver, Kidney, Heart, Skeletal Muscle, RBC's         Mitochondria, Cytoplasm, Endoplasmic Reticulum, Ribosomes, Golgi apparatus         1.4       General Aspects of Metabolism of Carbohydrates, Proteins, Lipids         1.5       Techniques for Studying Metabolism         1.6       Regulation of Metabolism, Enzymic and Hormonal         1.7       Regulation of Metabolism, Enzymic and Hormonal         2.       Carbohydrate Metabolism         2.1       Glycogen; Glycogenolysis, Glycogen Synthesis, Glycogen Storage Diseases         2.2       Glycolysis, ATP Generation, Clinical Aspects.         2.3       Citric Acid Cycle         2.4       Gluconcogenesis in Fed and Starvation         2.5       Hexose Monophosphate, Shunt Pathway         2.6       Uronic Acid Pathway         2.7       Fructose and Galactose metabolism and Related Disease         2.8       Metabolism of Alcohol, Amino Sugars and Glycoproteins         2.9       Regulation of Blood Sugar level         2.10       Diabetes Mellitus         3.1       Biosynthesis of Fatty Acids         3.2       Oxidation of Lachols, Metabolisms         3.1       Biosynthesis, Degradation and Diseases         3.4       Metabolism of unsaturated F	1.	Intermediary Metabolism		
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4.3Integration of Carbohydrate, Lipid and Protein Metabolism5.Metabolism of Nuclei Acids5.1Purines; Synthesis, Degradation, Salvage and	4.1	and Non-Oxidative Deamination etc.		
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Metabolism           5.         Metabolism of Nuclei Acids           5.1         Purines; Synthesis, Degradation, Salvage and	12	Integration of Carbohydrate, Lipid and Protein		
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	5.			
J.1 D.	5 1	Purines; Synthesis, Degradation, Salvage and		
Diseases	3.1	Diseases		

5.2       Related Diseases         6.       Hormones         6.1       General Properties, Mechanism of Action         6.2       Pituitary and Hypothalamic Hormones         6.3       Thyroid and Parathyroid Hormones         6.4       Adrenal Cortex and Medullary Hormones         6.5       Gonadal Hormones         6.6       Pancreatic and GIT Hormones         7.       Metabolism         Major       Minerals; Calcium, Phosphorus, Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.1       Major         7.2       Minor         Minor       Minerals; Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.       Special Topics         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.1       Collection of Samples, Instrumentation and Quality Control      <	5.2 Pyrimidines; Synthesis, Degradation an			
6.1       General Properties, Mechanism of Action         6.2       Pituitary and Hypothalamic Hormones         6.3       Thyroid and Parathyroid Hormones         6.4       Adrenal Cortex and Medullary Hormones         6.5       Gonadal Hormones         6.6       Pancreatic and GIT Hormones         7.       Metabolism         Major       Minerals; Calcium, Phosphorus, Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.1       Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.2       Minor       Minerals; Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Quality Control         Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents				
6.2       Pituitary and Hypothalamic Hormones         6.3       Thyroid and Parathyroid Hormones         6.4       Adrenal Cortex and Medullary Hormones         6.5       Gonadal Hormones         6.6       Pancreatic and GIT Hormones         7.       Metabolism         7.       Metabolism         7.1       Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.2       Minor Minerals; Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Quantitative Assay of Organic and Inorganic Constituents         10.3       Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.3       Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart <td< td=""><td></td><td colspan="3"></td></td<>				
6.3       Thyroid and Parathyroid Hormones         6.4       Adrenal Cortex and Medullary Hormones         6.5       Gonadal Hormones         6.6       Pancreatic and GIT Hormones         7.       Metabolism         Major       Minerals; Calcium, Phosphorus, Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.1       Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.2       Minor         7.2       Minor Minerals; Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.       Special Topics         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.1       Orlection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.3       Creatinine, Uric Acid, Cholesterol, Bil				
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6.5Gonadal Hormones6.6Pancreatic and GIT Hormones7.MetabolismMajorMinerals; Calcium, Phosphorus, Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases7.1Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases7.2MinorMinerals; Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases8.Molecular Biology and Medical Genetics8.1Genetic Code8.2Protein Biosynthesis8.3Gene Regulation8.4Recombinant DNA Technology9.1Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids9.2Xenobiotics9.3Function Tests of Liver, Kidney and GIT10.Practical's10.1Collection of Samples, Instrumentation and Quality Control10.2Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents10.3Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride10.4Enzyme; Liver and HeartEXAMINATIONTheory100Practical100Practical10.4Enzyme; Liver and HeartEXAMINATIONTheory100Practical Kill <td></td> <td></td> <td></td>				
6.6       Pancreatic and GIT Hormones         7.       Metabolism         Major       Minerals;       Calcium, Phosphorus, Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.1       Minor       Minerals;       Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.1       Collection of Samples, Instrumentation and Quality Control         10.1       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.3       Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION       100         Practical       100         Iong Viva       60         Table Viva       20			es	
7.       Metabolism         7.1       Major Minerals; Calcium, Phosphorus, Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.2       Minor Minerals; Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.       Special Topics         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.3       Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION       100         Practical       100         Practical Skill       15				
7.1       Major Minerals; Calcium, Phosphorus, Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.2       Minor Minerals; Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.3       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION       100         Practical       100         Iong Viva       60         Table Viva       20				
7.1       Magnesium, Sodium, Potassium, Sources, Requirements Biochemical Role, Deficiency Diseases         7.2       Minor Minerals; Iron, Copper, Zinc, Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.3       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION       100         Practical       100         Practical Skill       15	7.		-	
7.2       Chromium, Iodine, Fluoride, Selenium etc. Sources, Requirement, Biochemical Role, Related Diseases         8.       Molecular Biology and Medical Genetics         8.1       Genetic Code         8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.       Special Topics         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.1       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Quantitative Assay of Organic and Inorganic Constituents         10.3       Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         10.0       Io0         Practical Skill	7.1	Magnesium, Sodium, Potassium, S Requirements Biochemical Role, De	Sources,	
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8.2       Protein Biosynthesis         8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.       Special Topics         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Quantitative Assay of Organic and Inorganic Constituents         10.3       Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         100       Long Viva         60       Table Viva       20         Practical Skill       15	8.		ics	
8.3       Gene Regulation         8.4       Recombinant DNA Technology         9.       Special Topics         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Quantitative Assay of Organic and Inorganic Constituents         10.3       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION       100         Practical       100         Practical       20         Practical Skill       15	8.1	Genetic Code		
8.4       Recombinant DNA Technology         9.       Special Topics         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.3       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION         100         Practical Skill	8.2	Protein Biosynthesis		
9.       Special Topics         9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.3       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         10.0       I00         Practical Skill       15	8.3	Gene Regulation		
9.1       Biochemistry of Bone, Muscle, Nervous Tissue and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.3       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         I00         Practical         I00         Practical         I00         Practical         I00         Practical         I00         Practical         I00         Practical	8.4	Recombinant DNA Technology		
9.1       and Body Fluids, Cancer, Aids         9.2       Xenobiotics         9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.1       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.2       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         10.0       Long Viva         60       Table Viva       20         Practical Skill       15	9.	Special Topics		
9.3       Function Tests of Liver, Kidney and GIT         10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.1       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.2       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         EXAMINATION         Theory         10.0       Long Viva         60       Table Viva         20       Practical Skill	9.1	-		
10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.2       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         IO0         Practical         10.4       Enzyme; Liver and Heart         IO0         Practical         10.4       Enzyme; Liver and Heart         IO0         Practical         100       Long Viva       60         Table Viva       20         Practical Skill       15	9.2			
10.       Practical's         10.1       Collection of Samples, Instrumentation and Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.2       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.4       Enzyme; Liver and Heart         IO0         Practical         10.4       Enzyme; Liver and Heart         IO0         Practical         10.4       Enzyme; Liver and Heart         IO0         Practical         100       Long Viva       60         Table Viva       20         Practical Skill       15	9.3	Function Tests of Liver, Kidney and GI	Т	
10.1       Quality Control         10.2       Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic Constituents         10.2       Blood Analysis; Glucose, Protein, Urea, Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride         10.3       Enzyme; Liver and Heart         10.4       Enzyme; Liver and Heart         100         Practical         10.4       Enzyme; Liver and Heart         100         Practical         100       Long Viva         60       Table Viva         20       Practical Skill	<i>10</i> .	Practical's		
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10.3Creatinine, Uric Acid, Cholesterol, Bilirubin, Chloride10.4Enzyme; Liver and HeartEXAMINATION100Practical100Long Viva60Table Viva20Practical Skill15	10.2	Normal and Abnormal Urine, Qualitative and Quantitative Assay of Organic and Inorganic		
EXAMINATIONTheory100Practical100Long Viva60Table Viva20Practical Skill15	10.3	Creatinine, Uric Acid, Cholesterol, Bilirubin,		
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Table Viva20Practical Skill15				
Practical Skill 15	0			
Note Book 05				
	Note Book 05			



#### Course Content Basic Medical Sciences Second Professional MBBS COMMUNITY MEDICINE

1.	1. Principles of Epidemiology and Epidemiological Methods		
2.	Infection and Dis-Infection		
3.	Family Health Maternal Health, Child Health and Development		
4.	Levels Prevention of Disease and Health Education and Communication		
5.	5. Food and Nutrition		
6.	6. Community Mental Health		
7.	7. Immunology and Expand and Program of Immunization		
8. Research Methodology National Health Policy			
9. Date Processing Community visits its interpretation and Presentation by Students			



**Course Content Third Professional MBBS** 

1.	Gen. Pharmacology	
2.	Pharmacodynamics	
3.	Pharmacokinetics	
4.	Anti-Microbials	
5.	Disinfectants	
6.	Antiseptics and Penicillin's	
7.	Anti-Hypertensives	
8.	Diuretics	
9.	Autonomic Nervous System	
10.	Anatomy and Physiology	
11.	Cholinergic System	
12.	General Anesthetics	
13.	Local Anesthetics	
14.	Anti-Microbials	
15.	Tetracyclines	
16.	Aminoglycosides	
17.	Sulphonamides	
18.	Quinolone	
19.	Metronidazole	
20.	Antimalarial	
21.	Cholinergic Agonists and Antagonists	
22.	Anti-Hypertensives	
23.	Anti-Arrythmias	
24.	Anti-Anginal	
25.	Anti-Coagulants	
26.	Anti-Ulcer Drugs	
27.	Anti-Diarrhoeal	
28.	Spasmolytic	
29.	Anti-Migraine Drugs	
30.	Cephalosporins	
31.	Antihelminthics	
32.	Anti-Protozoal	
33.	Adrenergic Agonists	
34.	Antagonists and Ganglion blocking Drug	
35.	Respiratory Syst. Bronchodilators	
36.	6. Expectorants Anti Wistamine	
37.	Narcotic Analgesics	
38.	Thrombolytics	
39.	Laxatives	
40.	Muscle Relaxants	
41.	Anti Thyroids	
42.	Non S. AIDs	

43.	Macrolides			
44.	Anti-Viral, and Anti T.B Drugs			
45.	CNS Depressants			
46.	Sedatives and Hypnotics			
47.	Anxiolytics			
48.	Anti Epileptic			
49.	Anti Depressants			
50.	Hormones			
51.	Cortico Steroids			
52.	Sex Hormones			
53.	Contraceptives			
54.	54. Anti Diabetic Drugs			
55.	Anti Cancer Drugs			
56.	56. Haematinics and Vitamins			
EXAMINATION				
Total Marks200				
Theory 100				
Practical / Viva 100				



**Course Content Third Professional MBBS** 

**General Phytology** 

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1.	Cell response to injury	34.	Corynebacterium	
2.	Connective tissue disease	35.	Mycobacterium	
3.	The inflammatory reaction	36.	Vibrio cholerae	
4.	Wound healing	37.	Bacillus anthracis	
5.	Chronic inflammation	38.	Pseudomonas	
6.	Chronic inflammation	39.	Bacterial food poisoning	
7.	Healing in specialized tissues	40.	Spirochaetes	
8.	Chronic inflammation	41.	Anaerobes: Clostridia, Tetanus ar	nd Gas
9.	Disorders of growth		Gangrene	
	Tumors	42.	Rickettsia	
	i) Classification	43.	Bacteriophage	
10.	ii) Structure and effect of some common	<b>(C)</b>	ELEMENTARY MYCOLO	GY
	tumors	i)	Introduction to fungi of Medical impo	ortance
	iii)Spread of malignant tumors iv)Etiology of tumors	ii)	Actinomyces group	
	General reaction to trauma: Haemorrhage and	iii)	Dermatophytes	
11.	shock Disorders of metabolism	iv)	Some important systemic fungi	
10	Disturbances of circulation. Hyperaemia,		(D) PARASITOLOGY	
12.	Ischaemia, embolism and infarction C.V.S.	•	Introduction to study of Parasites of I	Medical
13.	Derangement of Body Fluids.	i)	importance	
14.	Immunity and Hypersensitivity	ii)	Portozoa	
15.	Intercellular substance and its reaction: An	iii)	Mastigophora	
15.	introduction to (Autoimmune) disease.	iv)	Rhizopoda	
16.	Pigments and Pigmentation and cellular	v)	Sporaozoda	
	accumulations	vi)	Ciliate	
17.	Calcification (Pathological)	vii)	Diagnostic methods used in Parasitolo	ogy
18.	Deficiency disease	viii)	Laboratory diagnosis of amoebic dy	sentery,
19.	Medical Genetics.	viii)	Kala, azar and malaria	
	(B) BACTERIOLOGY	ix)	Nematoes	
	stematic Study of Pathologenic Bacteria)		Platyhelminthes	
20.	Bacterial morphology and structure	x)	a) Cestodes	
21.	Bacterial growth		b) Trematodes Schistosome	
22.	Sterilization and Disinfection	Total M	EXAMINATION	200
23.	Bacterial metabolism	Total M	arks	
24.	Staphylococcus groups, (Staphylococcus)	Theory	1 / \7.	100
25.	Streptococcus group	Practica	ll / Viva	100
26.	Pneumococcus			
27.	Neisseria group			
28.	Salmonella			
29.	Shigella group			
30.	Proteus			
31.	Pasteurella			
32.	Brucella			
33.	Hemophilus			



**Course Content Third Professional MBBS** 

	Cillical	Michio	
	Doctors and Patient: -		- Cognitive state
	- The History		- Intelligence
	- Routine questions		- Further tests of cerebral function
1.	- The physical examination		- Further Investigations
	- Writing out the history and examination		- Information gathering
	- Presenting a case		- Mental state evaluation
	- Interpretation		- Psychological testing
	General Consideration: -		The Skin, the Nails and the hair
	- The mental and emotional state		- Color and pigmentation
	- The attitude		- Hemorrhage in the skin
	- The gait		- Distribution in the skin
	- Physique		<ul> <li>Morphology of skin lesions</li> </ul>
	- The face		- The hair
	- The skin	5.	- The nails
2.	- The hands		- Coetaneous manifestations of internal
۷.	- The fact		
	- The feet - The neck		diseases
			- Drug eruptions
	- The breasts		- Special techniques in examination of the
	- Temperature		skin
	- Pulse		The abdomen
	- Respiration		- The mouth and throat
	- The mental state		- The abdomen
	The Psychiatric Assessment		- The groins
	THE PSYCHIATRIC HISTORY	6	- The male genitalia
	- Interview technique	6.	- Rectal examination
	- History taking scheme		- The female genitalia
	- History of present illness		- The acute abdomen
	- Family history		- Examination of vomit
	- Adolescence		- Aspiration of peritoneal fluid
3.	- Schooling		- The gastrointestinal tract
	- Occupation		The Urine
	- Psychosexual history	7.	- Physical examination
	- Past medical history		- Chemical examination
	- Alcohol abuse		<ul> <li>Microscopic examination</li> </ul>
	- Drug abuse		- Bacteriological examination
	- Personality		- Estimation of renal function
	- Social circumstances		The faces
	THE EXAMINATION		- Naked eye inspection
	- Physical examination	8.	- Chemical examination, microscopically
	- Psychiatric examination or mental state		examination
	examination		- Intestinal parasites
	- Appearance and behavior		The Respiratory System
4.	- Speech		- Anatomical landmarks
	- Thought content		- Inspection
	- Abnormal beliefs	9.	- Palpation
	- Abnormal experiences		- Percussion
	- Abnormal experiences of self-		- Auscultation
	environment		- The sputum
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**Course Content Third Professional MBBS** 

	Cinical	Thermore	
	- X-ray examination		- Aural toiler and syringing
	- Bronchoscope and thoracoscopy		- Some common abnormalities
	- Pleural aspiration and biopsy		- The external auditory meats
	- Lung function tests		- The tympanic
	- Immunology		- The investigation of hearing a hearing loss
	The Cardiovascular System		- Audiometric tests
	- General considerations		- Subjective hearing tests
	- General examination in relation to the		- Objective hearing tests
	cardiovascular system		- Vestibule investigation
	- Anatomical landmarks		- Positional vertigo
	- Arterial pulses		- Caloric tests
	- Measurement of the blood pressure		- Radiological examination
	- The venous pulse		- The nose and paranasal sinuses
10	- The precordium		- Examination
10.	- Percussion		- Some common abnormalities
	- Auscultation		- The throat
	- Ischemic heart disease		- Examination
	- The peripheral vascular system		- Examination of neck
	- Routine cardiovascular examination		- Some common abnormalities
	- Electrocardiograph		The Eye
	- Exercise test		- Visual acuity
	- Radiographic examination		- Color sense
	- Special instigations	14.	- Visual fields
	The Nervous System		- Examination of the eye
	- Anatomy and physiology		- Some clinical problems
	- Mental functions		The locomotion system
	- Speech		- The bones
	- Apraxia		- The joints
	- The cranial nerves		- General principles
11.	- Motor functions		<ul> <li>Examination of individual joints</li> </ul>
	- Sensation		- Spinal examination
	- Signs of meningeal irritation		<ul> <li>Thoracic and lumbar spine</li> </ul>
	- Special investigations		- Sacroiliac joints
	- Routine examination of the nervous		- Elbow
	system		- Forearm
	The Unconscious Patient		- Wrist
	- History	15.	- Fingers
	- General Examination	15.	- Thumb (carpometacarpal joint)
	- Consciousness		- Hand deformities
12.	- Pupils		- Hip
12.	- Ocular movements		- Knee
			- Ankle
	- Pattern of breathing		- Ankle - Foot
	- Motor responses		
	- Diagnosis of brain death		- The gait
	The Ears Nose and Throat		- Hypermobility
13.	- The Ear	1	- Some investigations used in rheumatic
15.	- Past history		diseases
	- Examination		- Rheumatoid factors
			Dage   21



**Course Content Third Professional MBBS** 

	Cinical	memor	A.	
	- Antinuclear antibody test (ANA)	17.	Spinal injuries	
	- NDA Binding test		Diseases of the spine	
	- Serum complement	19.	The Sacro iliac joint and low back pain	
	- HLA typing	20.	Lesions of the spinal cord	
	- Ant streptolysin-o (ASO) test	21.	The head and face	
	- Uric acid determinations	22.	The jaws and tempura mandibular joint	
	- Synovial fluid examination	23.	The salivary glands	
	<ul><li>Radiological examination</li><li>Orthography</li></ul>		The tongue, palate cheek and floor of the	
	The blood	24.	mouth	
	- Clinical examination	25.	The tonsils, pharynx and larynx	
	- Laboratory examination		Investigation of a case of dysphasia	
	- Anemia	26.	examination of	
16.	- Polycythemia	27.	The ear	
	- Blood transfusion	28.	The nose and paranasal and sinuses	
	- Disorders of white cells	29.	The neck	
	- Homeostasis	30.	The thyroid gland	
	- Parasites in the blood	31.	Injuries of the chest	
	Examination of children	32.	Diseases of the chest	
17.	<ul><li>General examination</li><li>Special examination</li></ul>	33.	The breast	
17.	<ul> <li>Development screening examination</li> </ul>	34.	Abdominal injuries	
	<ul> <li>Examination of the new born</li> </ul>	35.	An acute abdomen	
	Using the laboratory	35.	Chronic abdomen	
	- What investigation to request	30.	And abdominal lump	
18.	- What information to send	37.	A rectal case	
	- Collection of specimens	<u> </u>		
	- Making the best use of results		Investigation of urinary case examination of	
	CLINICAL METHODS SURGERY	40.	In inguinoscrotal swelling	
1.	General scheme of case taking examination of	41.	A swelling the groin	
2.	A swelling or a tumor	42.	A scrotal swelling	
3.	An ulcer	43.	The penis	
4.	Sinus or a fistula	44.	Surgical manifestations of filariasis and	
5.	Peripheral vascular disease and gangrene	45.	dracontiasis Burns	
6.	The lymphatic system	43.		
7.	Peripheral nerve lesions	MEDICINE		
8.	Bone and joint injuries	1.	Tropical Diseases	
9.	Injuries about individual joints	2.	Infection Diseases	
10.	A bony lesion	3.	Poisoning	
11.	A joint	4.	Disease by Physical Agents	
12.	Individual joints	5.	Nutritional Diseases	
13.	The hand	6.	Electrolytes and Acid Base balance	
14.	The foot		disturbances	
15.	Head injuries		SURGERY	
	Investigation of suspected intracranial tumor	1.	Wound classification treatment tissue repair,	
16.	examination of	1.	scars	
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**Course Content Third Professional MBBS** 

	Cimical	111eenio	
2.	Wound infections, infectious diseases, diagnosis Clinical features, investigations	9.	Irrespirable gas (asphyxiant) carbon monoxide,
	treatment	10.	Methane (Sue Gas)
3.	Vascular diseases		Tranquilliser, antidepressants and hypnotics
	Arterial diseases	11.	i.e. Diazepam, imipramine and barbiturates
5.	Venous diseases		COMMUNITY MEDICINE
	Cymphatic diseases		Epidemiology and Prevention of
4.	Slaviary Glands, diseases Clinical feature s		Communicable disease
	investigation treatment		- Respiratory infections
5.	Head and neck, burns treat	1.	- Intestinal infections
6.	Thyroid clinical feature, classification	1.	- Arthropod borne infections
	investigations, management treatment		- Zoonosis and parasitic diseases
7.	General treatment of fractures		- Surface (Contact) Infection and Sexually
	FORENSIC MEDICINE		transmitted diseases
1.	Personal identity		Principals, methods of epidemiology and
2.	Medicolegal autopsy	2.	health statistics used in health services
3.	Exhumation		research.
4.	Examination of bones		Prevention of environmental occupational health problems.
5.	Medico legal aspects of death	3.	(The Examination of community medicine
6.	Violent deaths from asphyxia		will be held in 3 <sup>rd</sup> Professional MBBS)
7.	Deaths from cold and wound		TOPICS in E.N. T
8.	Firearm injuries i.e. hand chest and abdomen		PHARYNX:
0	Regional injuries i.e. head, chest and	1	
9.	abdomen	1.	Anatomy
10.	Thermal injuries	2.	Ac. And CH. Tonsillitis
11.	Virginity, pregnancy and delivery	3.	Adenoids
12.	Sexual offenses and paraphilia	4.	Ac. And CH. Pharyngitis
13.	Abortion and infanticide	5.	Diphtheria
14.	Forensic psychiatry	6.	Vincent's angina
15.	Forensic psychiatry	7.	Ludwig's angina
16.	Forensic science laboratories	8.	Quinsy
	TOXICOLOGY	9.	Retropharyngeal abcess
1.	Common house hold poisons		Para pharyngeal abcess
	Mineral acids and alkalis i.e. sulphuric acid	H	YPOPHARYNX AND UPPER
2.	caustic potash and ammonia	<b>ESOPHAGUS:</b>	
	Organic acid i.e. oxalic acid and salicylic acid	1.	Plummer winason syndrome
3.	radioactive substances		Sq. cell carcinoma hypopharynx and upper
4.	Vegetable poison i.e. ergot capsicum	2.	desophagus foreign body oesophagus
5.	Animal poison i.e. snake venom		achalasia cardia
6.	Food poisons		LECTURES GYNAE/OBST
	Drug addicts i.e. opium, heroin amphetamine,	1.	Gynae/Obst introduction
7.	cocaine, chars alcoholism	2.	Anatomy/Physiology of genital tract
8.	Insecticides, fuels.	3.	Development of female pelvic organs



### KABIR MEDICAL COLLEGE, PESHAWAR Course Content Third Professional MBBS

4.	Puberty and its hormonal and anatomical changes		
5.	Ovarian and endometrial changes		
6.	Pregnancy it's Anatomical, physiological and hormonal changes.		
7.	Anenatal care/Diagnosis and treatment		
8.	Early pregnancy loss, abortions		
9.	Ectopic pregnancy		
10.	Termination of pregnancy		
11.	Antepartum Hemorrhage		
12.	Antenatal monitoring		
13.	Normal labor and its management		
14.	Abnormal labor		
Almannal delivery (a) Instrumental			
15.	Abdominal Use of drugs in pregnancy.		
]	BOOKS RECOMMENDED		
1.	Pharmacology Basic and Clinical Pharmacology by Bertram G. Katzang		
2.	<ul> <li>Pathology, Bacteriology and Parasitology:</li> <li>Basic Pathalogy by Robin and Kumar</li> <li>Medicla Micro Biology and Immuology BY Lavinson and Tawets</li> <li>A guide to Parasitology BY Black Lock's</li> </ul>		
3.	Forensic Medicine: By Keith Simpson Or Bernord Knight Or Perikh's Text book of Medical Jurisprudence and Taxology 5 <sup>th</sup> Edition		
4.	<ul> <li>Clinical Method: By Hutchinson and Ali</li> <li>Surgical Clinical Method by K. Das</li> </ul>		
5.	Text book of Community Medicine		



**Course Content Basic Medical Sciences** 

#### **Third Professional MBBS**

А.	DISEASE OF CARDIO- VASCULAR SYSTEM: -		
1.	Congenital anomalies of arteries		
2.	Atherosclerosis and arterioscleins		
3.	Arterial inflammations		
4.	Aortic aneurysms		
5.	Varicose veins		
6.	Phlebo thrombosis, Thrombophlebitis		
7.	Venous obstructions		
8.	Tumors of blood vessels and lymphatics		
9.	Heat Anatoky and blood supply		
10.	Left and right congestive heart failure		
11.	Ischemic heart disease		
12.	Hypertensive heart disease		
13.	Theumatic heart disease		
14.	Congenital heart diseases		
15.	Pericardial, endocardial, mayo cordial and		
13.	valvular diseases		
р	DISEASES OF RESPIRATORY		
В.	SYSTEM: -		
1.	Congenital-Anomalies		
2.	Pulmonary Congestion, Oedema, Embolism,		
	Haemorrhage and Infarction		
3.	Pulmonary vascular hypertension		
4.	Atelectasis, Obstructive Vs. Restrictive Pulmonary disease		
5.	Chronic obstructive pulmonary diseases, emphysema, Ch. Bronchitis, bronchiectasis, BRP asthma.		
6.	Infections		
7.	Pneumoconiosis and related diseases		
8.	Tumours of the Lungs		
C.	DISEASES OF URINARY		
	SYSTEM: -		
1.	Congenital Anomalies		
2.	Glomerular diseases Glomerulonephritis different types.		
3.	Nephrotic syndrome		
4.	Tubular diseases		
5.	Diseases of renal blood vessels		
6.	Urolithiasis		
0.	Oronuniasis		

	Urinary tract obstruction urolithiasis		
7.	Tumorus		
	DISEASES OF GASTRO		
D.	INTESTINAL SYSTEM: -		
1.	Oral cavity diseases		
2.	Diseases of the Jaw		
3.	Diseases of salivary glands		
4.	Diseases of Oesophagous congenial, inflammatory Ulcer, tumorus.		
5.	Diseases of small intestine, congenital, inflammatory tumors.		
Е.	<b>DISEASES OF LIVER: -</b>		
1.	Jaundice, Hepatitis, Necusis and Inflammation Cirbosis and tumors.		
2.	DISEASES OF BILIARY SYSTEM: Congenital Anomalies, Inflammation, Gholelithiasis, Tumours.		
3.	DISEASE OF THE PANCREAS: - Congenital, Inflammatory, Miscellaneous tumours.		
F.	DISEASES OF BREAST & FEMALE GENITALIA		
1.	Breast congenital anomalies, inflammation, endocrine imbalance and tumours.		
2.	Ovaries		
3.	Uterus and Fallopian tubes		
4.	Vagina and Vulva		
G.	DISEASES OF MALE		
	GENITAL SYSTEM: -		
1.	Tests, congenital anomalies, inflammation,		
2.	tumours Prostate – Inflammations, Hyperplas and Tumours		
	DISEASES OF ENDOCRINE		
H. SYSTEM: -			
1.	Pituitary and Hypothalium		
2.	Thyroid and Parathyroid		
3.	Adrenals etc		
4.	Thymus		
I.	MUSCULO SKELETAL SYSTEM: -		



**Course Content Basic Medical Sciences Third Professional MBBS** 

	SI ECIAL I A		-
1.	Muscle – Congenital, injury, dystrophies, tumours.		•
2.	Bones – Congenital injuries and Fractures, inflammation, tumours		•
J.	CNS		
1.	Congenital, Inflammation and tumour		•
	OPHTHALMOLOGY	-	Degene
1.	Anatomy Embryology Blood supply of the Eye Physiology Intra – ocular fluid and its circular Intra – ocular pressure Optical system of the eye Visual perceptions Visual path ways Pupillary pathways and reflexes	-	Change Sympto Cysts a
2.	Examination of the Eye and Therapeutics - External Examination - Ophthalmoscopy - Fundus occult • Optic Disc • Retinal vessels • Macula Lutea • General fundus - Functional Examination • Acuity of vision • Field of vision • Light sense • Colours sense	-	Congen
3.	Diseases of Eye - Diseases of Conjunctive - Conjunctivitis - Catarrhal - Purulent - Ophthalmia Neonatorum - Membranous Conjunctivitis - Simple Chronic - Angular Conjunctivitis - Follicular - Trachoma - Tuberculosis of Conjunctive		•

- Peritnaud's Conjunctivitis
- Pemphigus
- Phlyctenular Conjunctivitis (eczematous)
- Photophthalmia
- erative
- e in the Conjunctive
  - Concretions (Lithiasis)
  - Pinguecula
- tomatic Conditions
  - Subconjunctival Echymosis
  - Chemosis
  - Xerosis
  - Argyrosis
  - and Tumors
    - Lymphangiectasis
    - Lymphangiomata
    - Tumours
    - Polypoid
  - enital Tumors
    - Dermoid
      - Dermolipomata
      - Papillomata
      - Simple Granulomata
      - Fibromata
      - Naevi
      - Epithelioma
- ses of Cornea
  - Keratitis
    - Purunelent Keratitis
    - Ulceration
    - Hypopyon Ulcer
    - Marginal Ulcer
    - Chronic Serpiginous ulcer (rodent ulcer, mooren's ulcer)
    - Central ulcer
  - Keratomalacia
  - Atheramatous ulcer
  - Keratitis with lagophthalmos
  - Neuroparalytic ulcer
  - Non-suppurative superficial keratitis
  - Herpes fibrillis



### **Course Content Basic Medical Sciences** Third Professional MBBS

	STECHTETT		
	<ul> <li>Herpes zoster</li> <li>Superficial punctate keratitis</li> <li>Interstitial keratitis</li> <li>Keratitis disciformis</li> <li>Arcus sencilis</li> <li>Arcus Juvenilis</li> <li>Zonular Opacity</li> <li>Ectatic Conditions <ul> <li>Keratoglobus</li> <li>Symptomatic Conditions</li> <li>Opacities</li> </ul> </li> </ul>		<ul> <li>Inflammation of cheroid – Choroiditis</li> <li>Non Suppurative</li> <li>A granulomatous form</li> <li>Exudative choroiditis</li> <li>Disseminated choroiditis</li> <li>Anterior choroiditis</li> <li>Central</li> <li>Jnxtapatillary</li> <li>Diffuse</li> <li>Tuberculosis of choroid</li> <li>Tubercle of Choroid</li> <li>Brucellosis</li> <li>Suppurative or Purulent choroiditis</li> </ul>
4.	Diseases of Sclera - Episcleritis - Scleritis - Gumma and Tuberclosis - Ulceration - Scleromalacia Perforans - Blue Schlerotics Diseases of Iris and Ciliary Body	9.	<ul> <li>Degenerative Conditions of Choroid</li> <li>Post Inflammatory</li> <li>Primary</li> <li>Localized – Central Circumpupillary</li> <li>General</li> <li>Senile central atrophy (Tay's Choroiditis)</li> <li>Central areolar choroid atrophy</li> <li>Detachment of choroid</li> </ul>
5.	<ul> <li>Iritis</li> <li>Cyclitis</li> <li>Uveitis</li> <li>Brucellosis</li> <li>Sarcoidosis</li> <li>Uveoparotitis</li> <li>Uveitis associated with vitiligo, poliosis and deafness (the vot-Koyanagi syndrome)</li> <li>Diabetic Iritis</li> <li>Tumours Cysts</li> </ul>		<ul> <li>Tumors</li> <li>Primary Affection of Retina</li> <li>Diminution of visual acuity</li> <li>Cancertric canstricition of the field vision</li> <li>Scotomata</li> <li>Metamorphosia</li> <li>Micropsia</li> <li>Light Sense Dimished</li> <li>Photophobia</li> <li>Vascular Disorders</li> </ul>
6.	Glucoma The Lens - Cataract - Complicated Cataract - Diabetic - Irradiation - Electric - Ultrasonic Radiation - Secondary - Dislocation of Lens	10.	<ul> <li>Vascular Disorders</li> <li>H???? Raemia</li> <li>Anaemia</li> <li>Oedema</li> <li>Haemorrhage</li> <li>Exudative Retinopathy of doatsw</li> <li>Circinate retinopathy</li> <li>Retinitis proliferans</li> <li>Retrolental Fibropasia</li> <li>Retinal changes in diseases of blood</li> </ul>
7.	Diseases of Vitreous - Opacities - Persistent Hyaloid Artery Diseases of the Choroid and Retina		<ul> <li>Obstruction retinal vesels:-</li> <li>a) Obstruction of arterial circulation</li> <li>b) Obstruction of vonous circulation</li> </ul>
8.	<ul> <li>Primary affection of the Chorioid</li> <li>Vascular Disorders</li> </ul>		<ul> <li>c) Vascular sclerosis</li> <li>- Vascular retion-pathies</li> <li>- Arterios clerotic retinopathy</li> </ul>



Course Content Basic Medical Sciences Third Professional MBBS

SPECIAL PATHALOGY Renal retionopathy Arsenic Hypertensive Thallium \_ Retinopathy in toxaemia of pregnancy ?????? \_ Inflamation of retina Retinitis - Ergot \_ Purulent reinitis - Filixms Subacute infective retinitis Carbon disulphide -Syphlis \_ Stramonium - Periphlebitis retinae Cannabis indica Retinitis from bright light Diabetes \_ Degeneration of the retina Idoform \_ Nitri and dinitrobenzol Senile \_ Senile macular degeneration Deficiency amblyopia vitamin in diet -Peripheral senilecystic degeneration espacillay thiamine Degenerative Condition of Optic Nerve Angoid streaks - Primary pigmentary degeneration of the Optic Atrophy • retina retinitis pigmentosa Primary Familial lipoid degeneration \_ Secondary Amaurotic family idiocy Congenital abnormalizes of optic Maculo-cerebral familial degeneration nerve Lipoid Histoicytosis Colobona of optic dose • -New Formation of Retina Symptomatic disturbances of vision Angioma tosis of the Retinia Hemianopia Tuberlous fiberosis \_ Amaurosis Neurofibromatosis - Amaurosis Cyst - Scintillating scotomata Tumorus - Night blindness Detachement of Retina Coloured vision achromatopsia \_ Secondary Detachment Metamorphopsia -Simple detachment Micropsia Congenital abnormalities of the chorid Megalopsia and retina Photopsia Colobona of the chorid and retina \_ -Muscae volitanites Albinism Word blindness Congenital ligmentation of the retina -Malingering - Opaque nerve fivers Intra ocular tumourses Diseases of optic nerve -Tumours of uveal tract Disturbances of the circulation Tumours of iris Papilloe dema (chocked dise) Sarcoma (malignant melanoma) of chorid - Inflammationi of optic nerve optic neutitis Sarcoma of ciliary body - Paillitis Secondary carcinoma of the chorid \_ Acute retrobullar neuritis Tumours of retina Hereditary optic neuritis \_ Retino blastoma -The toxic amblyopias Injuries of the eye and sympathetic Tobaccoamblyopia ophthal mitis Ethyl alcohol Extra ocular foreign body Methyl alcohol \_ Foreign bodies Lead



### **Course Content Basic Medical Sciences** Third Professional MBBS

- Burns and injuries of caustics	Disorders Of Motility of the eye
- Contusion by blunt instrument	- Eye motor mechanism
- Cornea	Anatomy and physiology
Abreasion	- E.O.C Muscles
Deep Opacities	- Binoccular vision
Partial or complete rubtur	- Paralytic
- Sclera	- Nystagmus
- Rubture of the globe	, ,
- Irist and cibiary body	Symptomatic Diseases of the eye Intracranial
Functional defect	eneurysms
- Lens	Cerebral haemorrhage and thrombosis
- Contractous Changes	- Hydrocephalus
- Dislocation	- Meningitis
- Vitreous	- Brain abscess
<ul> <li>Disorganized</li> </ul>	- Encephalitis
- Choroid	- Luetic infections
- Torrn	- General Paralysis of Insane
- Haemorrhage	- Tabes dorsalis
- Retina	- Disseminated scleroses
0.1	- Neuromyelitic optica
	- Congenital, Hereditary and Degenerative
• Torn	Diseases
Haemorrhage	- Ophthalmoplegia
- Otic Nerved	- Hereditary Ataxy
Head Injury	- Syringomyelia
- Perforating Injuries	- Little's Disease
- Sharp instrument	
- Foreign bodies	- Head Injuries
- Wounds of conjunctiva	- Diseases of Adnexa of the Eye
- Cornea	- Lids
- Sclera	Inflammation Glands of the Lids
- Lens	Chalazion
<ul> <li>Retention of foreign bodies</li> </ul>	Stye
- Operation of the eye ball	Ectroion
- Errors of refraction and anoma	Trachoma
accommodation	Tumours
	Dacryocystitis
- Retinoscopy	Diseases of Orbit
- Ametropia	E.N.T
- Myopia	The Nose
- Hypermetropia	- Anatomy and Physiology of the Nose
- Astigmatism	- Examination of the Nose
- Aphakia	- Symptoms of Nasal diseases
- Anisometropia	1 Obstruction
- Anomalies of Accommodation	- Discharge
- Presbyopia	e
- Cycloplegia	- Pain
- Spasm of accommodation	- External deformity
1 1	- Diseases of external Nose



**Course Content Basic Medical Sciences** Third Professional MBBS



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SPECIAL PATHALOGY

	SPECIAL PATH
	Miscellaneous Conditions - Bronchial cyst and fistula - Thyroglossalcysts and fistula
	<ul> <li>Salivary lands</li> <li>Lymph nodes</li> </ul>
5.	<ul> <li>Endoscopy</li> <li>Onstruments and examination</li> <li>Diseases of laryngo pharynx</li> <li>Diverticula</li> <li>Globes hysterics</li> <li>Paterno Kelly syndrome</li> <li>Tumorus</li> <li>Diseases of Lungs and Oesophagus</li> <li>Bronchiectasis</li> <li>Injuries</li> <li>Tumorus</li> <li>Congenital abnormalities of the lungs</li> <li>Cardio spasm</li> <li>Foreign bodies</li> </ul>
6.	<ul> <li>Toreign bodies</li> <li>THE EAR</li> <li>Anatomy</li> <li>External</li> <li>Middle</li> <li>Internal</li> <li>Examination</li> <li>Eustachian tube</li> <li>Physiology of the ear</li> <li>Examination of hearing</li> <li>Test for vestibular functions</li> <li>Diseases of external ear</li> <li>Malformation</li> <li>Injuries</li> <li>Affection of auricle and ext. ameatnus</li> <li>Wax</li> <li>Foreign bodies</li> <li>Malignant diseases</li> <li>Timpani membrane</li> <li>Injuries</li> <li>Perforations</li> <li>Eustachian tube</li> <li>Acute otitis media</li> <li>Etiology</li> <li>Diagnosis</li> <li>Treatment</li> <li>Otitis medical in children</li> <li>Myringotomy</li> </ul>

-	Types of diseases
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- Mucous otitis
- Attic antral disease
- Cholesteatoma
- Tympanoplasty

Complications of otitis media

- Acute mastoiditis, treatment
- Pet sinus abscess
- Lateral sinus thrombosis
- Cavernous sinus thrombosis
- Labyrinthitis

Operatives for mastoiditis and its complications

- Schwartz operation
- Radical operation
- Operation on the sinus and labyrinth

Intra cranial complication of otitis media

- Extra Dural abscess
- Brain abscess
- Meningitis
- Porosities

Non-suppurative diseases of the middle ear: -

- Adhesive deafness
- Otitis barotrauma
- Otosclerosis
- Injuries
- Tumours

Sensorineural deafness and hearing adis

- Toxic deafness
- Acoustic injury
- Psychogenic deafness
- Sensor neural deafness in children
- Artificial aids to hearing
- Vertigo
- Menier's disease
- Benign positional vertigo
- Vestibular neuronitis
- Psychogenic vertigo
- Nuchal vertigo
- Neural affection of the ear
- Eighth nerve tumours
- Facial paralysis
- Herpes zoste otitis
- Chemotherapy
- Antibiotics
- Cancer

- Sensor



**Course Content Basic Medical Sciences** 

**Third Professional MBBS** 

	Epidemiology and prevention of non- communicable diseases and conditions.
	- Heart Disease
	- Hypertension
	- Smoking
	- Stroke
1.	- Cancer
	- Diabetes
	- Accidents
	<ul><li>Obesity</li><li>Blindness</li></ul>
	- Blindness
	- Dental Anomalies
	- Disturbances and control and metal II
	Health.
	Prevention of diseases of mothers and
2.	children. Preventive medicine in family
2.	health and school health, demography and
	family planning
3.	Principals of Applied Nutrition in Health and
	Disease
4.	Health research project preparation and
	documentation
5.	Health Planning, Organization and
	Management MEDICINE 4 <sup>TH</sup> YEAR MBBS
1.	Endocrine Disorders
2.	Respiratory Diseases
3.	Genite Urinary Systems
	Diseases of Connective Tissue Joints and
4.	Bones.
LE	CTURES GYNAE / OBST 4 <sup>th</sup> YEAR
1.	Menstrual disorders amenorrhea menorrhagia
2.	Dub, Dysmenorrhea
	Inflammatory conditions
3.	a) Of the PID genital tract
5.	b) Pelvic T.B
	c) STD's
4.	Endometriosis
5.	Pelvic pain
6.	Molar Pregnancy
7.	Preterm labour
8.	Pregnancy induced hypertension
9.	Preg with diabetes
10.	Pregnant with medical disorders
	- Renal

	- Cardial
	- Autoimmune
	- GIT
11.	Fetal malpositon and its management at term
12.	Intra partum monitoring
13.	Abnormal labour
14.	РРН
15.	Puerpurium
	SURGERY
1.	The oesopheogous diseases, diagnosis clinical feature tigations, management treatment.
2.	The Stomach Duodenum Disease Diagnosis, Clinical Management, Treatment Gall bladder, bile duct diclinical feature, management treatment.
3.	Pancreas diagmps clinical featre investigations management
4.	Peritoniom
5.	Small intestine
6.	Large intestine
7.	Intestinal obstruction
8.	Veramiform appendix
9.	Rectum, anus, axil canal in hernia
10.	Clinical features diagnosis investigation treatment
r	TOPIC IN E.N.T 4 <sup>TH</sup> YEAR MBBS
LARYN	X AND TRACHCO BRONCHIAL TREE
1.	Anatomy of Larynx and trachco bronchial
	tree stridor
2.	V. cord palsy
3.	F.T. trachco bronchial tree
4.	Ac. Laryngitis
5.	Ch. Laryngitis
6.	Vocal modules
7.	Acute laryngo trachco bronchitis
8.	Epiglotits
9.	Perichondritis of the larynx
10.	Tracheostomy
11.	Laryngeal tumours
NOSE, PARA NASAL SINUSES AND NASOPHARYNX	



**Course Content Basic Medical Sciences** 

### **Third Professional MBBS**

1.	Anatomy of nose, paranasal sinuses and nasopharynx Boil nose
	Diseases of the septum
	- DNS
	- SMR
2.	- Septoplesty
	- Epistexis
	- Haematoma and abcess
	Acute rhinitis and Chronic Rhinitis
	Atrophic Rhinitis
	Nasal Polyp (Mucous and A/C polyp)
	Ac. And CH. Sinusitis
_	Procedure on nose and sinuses
3.	- Proof puncture
	- Intra nasal antrostomy
	- Caldwel-luc's operation
	Ca nasopharynx
	Angiopfibroma
LEC	TURES GYNAE / OBST FINAL YEAR
1.	Contraception
	Infertility
2.	- Male
۷.	- Female
	- 2 Lectures
3.	Menopause
4.	Benign and malignanat tomours of vulvs /
	vagiva
5.	Benign and malignant tumours of Uterus
6.	Benign and malignant tumours of Ovary
7.	A – Urogenital prolapse
8.	B – Urogenital prolapse
9.	Urogynecology
10.	Statistics
11.	Revision of important lectures
	BOOKS RECOMMENDED
	Pharmacology
1.	Basic and Clinical Pharmacology
	By Bertram G. Katzang
	Pathology, Bacteriology and Parasitology
	- Basic Pathology By Robin and Kumar
2.	- Medical Micro Biology and Immunology
	by Lavinson and Tawetz
	- A guide to Parasitology by Black Lock's
3.	Forensic Medicine

	150	
	- By Keith Simpson or Bernord Knight or	
	Perikh's Textbook of Medical	
	Jurisprudence and T 5 <sup>th</sup> Edition	
	Clinical Method	
4.	- By Hutchinson and Ali	
	- Surgical Clinical Method	
5.	Text Book of Community of Medicine	
5.	By Ilyas Ansari Dothers	
	4 <sup>TH</sup> YEAR MBBS	
1.	Special Pathology	
1.	Robin's Basic Pathology	
	Community Medicine	
2.	Text Book of Community Medicine by Ilyas	
	Ansari Dothers	
3.	Disease of Nose, Throat and Ear	
	By I. Simson Hall, Bernord H Colman or By	
	Ghani and Latif	
4.	Person's Disease of the Eye	
	Or Chatter Jee	



**Course Content Basic Medical Sciences** 

### **Final Professional MBBS**

1.	Diseases of Cardiovascular System
2.	Kidneys and Genito-Urinary Tract Disorders
3.	Electrolytes and Acid Base Equilibrium Disturbance
4.	Blood Disorders
5.	Retkiculoendothelial System Diseases
6.	Diseases of Respiratory System
7.	Diseases of Connective tissue, Joints and Bones
8.	Disorders of Endocrine
9.	Metabolic Disorders
10.	Poisoning and Diseases Caused by Physical Agents
11.	Tropical diseases and Infections
12.	Disorders of Allergy and Immunity
13.	Disease of Nervous System
14.	Psychiatric Disorders
15.	Skin and Veneraeal Diseases
16.	Alimentary Tract Disorders
17.	Diseases of Live Biliary Tract and Pancreas
18.	Nutritional Disorders
	PAEDIATRICS
1.	Infectious Diseases
2.	Chromosomal Abnormalities
3.	Inborn Errors of Metabolism
	NEONATOLOGY
1.	Physical characteristics of Newborn
2.	Asphyxia neonatoum
3.	Prematurity small for dates (SFD)
4.	Neonatal Jaundice
5.	Infant feeding and common feeding problems
	C.N.S
1.	Meningitis
2.	Mental Retardation and Cerebral Palsy
3.	Intracranial Neoplasms
4.	Convulsive Disorders in Children
5.	Degenerative disease of the brain
1	CHEST DISEASES
1.	ART
2.	Bronchiolitis
3.	Emphysema, Pneumothouaxe
4.	Asthma in children (wheezy child)

5.	Pulmonary Tuberculosis
	GASTROENTEROLOGY
1.	Acute Infantile Gastroenteritis and I/V fluid Therap
2.	Malabsorption Syndrome
	IAEMATOLOGICAL DISORDERS
1.	Acute deficiency Anaemia in children
2. 3.	Haemolytic Anemias Leukaemias
4.	Other malignancies in children
5.	Bleeding disorders in children
	HEAR DISEASE
1.	Rheumatic feve
2.	Congential heart disease
	TH AND DEVELOPMENT, INCLUDING
	ENCY DISORDER COMMON
	RINE DISORDERS MISCELLANEOUS
1.	Growth and development
2.	Common musculoskeletal disorders
3.	Accidents and poisoning
4.	Common skin and veneral disease
	SURGERY
1.	Injuries of bones and joints
2.	Diseases of bones and joints
3.	Muscle, tendons and bursae
4.	Deformities
5.	Head and Spine
6.	Central and Peripheral Nervous System
7.	Face, Lips and Palate
8.	Teeth Gums, Jaws , Nse and orbit
9.	Mouth, Tongue, Cheeks, Salivary Glands
10.	Neck
11.	Thyroid, Parathyroid, Thymus and Adrnal Glands
12.	Torsion of pelvic organs
13.	Infection affecting individual organs
14.	Chronic epithelial dystrophies
15.	Sterilization and termination of pregnancy
	Retention of urine and types of incontinence
16.	of ruine
17.	Gynaecological cytology
18.	Sex hormones therapy
10.	Ser normones morupy



**Course Content Basic Medical Sciences** 

### **Final Professional MBBS**

19.	Preoperative and post-operative management and post operative complications
20.	New trends and new methods, of gynecologic
	diagnosis, and treatment
	Text Books
	MEDICINE
1	Davidson's Principals and practice of
1.	medicine of Edward CAR Boucher IAD et al.
2.	Hutchinson's Clinical Methods by Michael
	Swash
	PEDIATRIC
1.	Text book of Pediatrics for development
	countries by Pakistan pediatric association
2.	Essential pediatric by David Hull
3.	Practical pediatric problem by Hutchinson
	SURGERY
1.	Love and Baily Short Practice of Surgery 18 <sup>th</sup>
	Rains and Titche.
2.	Clinical Methods of Surgery
	YNECOLOGY AND OBSTETRICS
1.	Principles of Gynecology by T.N Jeffcoat
2.	Obstetrics by Ten Teachers by Lewis Clayton Pink Edition ???????
3.	All their endocrine systems
4.	Breast
5.	Pharynx
6.	Larynx
7.	Acute infections and wounds
8.	Chronic infection disease and parasites
9.	Ulcerations and Gangrene (General)
10.	Tumors and Cysts
11.	Hemorrhage, Blood Transfusion and shocks
12.	Fluid electrolytes and Acid base balance
13.	Skin, Burns
14.	Arteries and Veins
15.	Lymphatics and Lymph nodes
16.	Infections of Hand Feet
17.	Thorax including organs
18.	Oesophagus
19.	Stomach and duodenum
20.	Spleen, Liver and extra hepatic biliary system
21.	Pancreas
22.	Peritoneum

<b>b</b> 5 Cou	rse
23.	Intestines including intestinal obstruction
24.	Variform appendix
25.	Rectum and anal canal
26.	Umbilicus and abdominal wall
27.	Hernias
28.	Genitourinary system
	BSTETRICS AND GYNECOLOGY
	Obstetrics
1.	Anatomy of bony pelvis foetal head circulation
2.	Development, functions and anomalies of placenta and the cord.
3.	Changes in the mother during pregnancy
4.	Antenatal care
5.	Normal labour
6.	General management of labour
7.	Foetal positions and mechanism of labour
8.	Clinical signs and diagnosis of pregnancy
9.	The puerperium
10.	Hyperemesis gravidarum
11.	Plydramnios and oligohydramnios
12.	Multiple pregnancy
13.	Pre-eclampsia and eclampsia
	Essential hypertension and chronic renal
14.	disease during pregnancy
15.	Diseases associated with pregnancy anemia, Jaundice, diabetes, Urinary tract disease, tuberculosis, mental disease and Rh impartibility
16.	Abnormal uterine action
17.	Obstructed labour
18.	Abnormal presentation i.e. Occipital- Posterior, brow, face, breech, shoulder, cord.
19.	Pelvic abnormalities and cephalon-pelvic disproportion
20.	Maternal birth trauma including rupture of uterus and episiotomy.
21.	Antepartum hemorrhage
22.	Post partum hemorrhage
23.	Retained placenta
24.	Placenta insufficiency, foeta distress, and itra uterine death
25.	Post maturity and prematurity
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### Course Content Basic Medical Sciences Final Professional MBBS

26.	Relied of pain during labour
27.	Induction of labour
28.	Obstetric operations i.e. interla version, external version, forces, vacuum extraction, caesarean section, symphysiotomy assisted breech delivery
29.	Destructive obstetric operations
30.	Oxytocic drugs
31.	Puerperal pyrexia
	GYNAECOLOGY
1.	Anatomy of the genital tract
2.	Ovarian functions and ovulation
3.	Menstruation
4.	Development of urogenital system
5.	Malformation sand maldevelopments of genital system
6.	Sex determination, asexuality and intersexuality
7.	Abortion
8.	Ectopic pregnancy
9.	Trophoblastic tumors
10.	Injuries including fistulas
11.	Genital prolapsed, other displacements of uterus and inversion of uterus.



### KABIR MEDICAL COLLEGE, PESHAWAR Learning Outcomes for Medical Undergraduates

#### THE MEDICAL GRADUATE MUST DEMONSTRATE THE FOLLOWING:

- The ability to obtain an accurate medical history that covers all essential aspects of the history, including issues related to age, gender, and socio-economicstatus
- The ability to perform both a complete and an organ system specific examination, including a mental status examination
- The ability to perform routine technical procedures including at a minimum venipuncture, inserting an intravenous catheter, arterial puncture, thoracentesis, lumbar puncture, inserting a nasogastric tube, inserting a Foley catheter, and suturing lacerations
- The ability to interpret the results of commonly used diagnostic procedures
- Knowledge of the most frequent clinical, laboratory, roentgenologic, and pathologic manifestations of common maladies
- The ability to reason deductively in solving clinical problems
- The ability to construct appropriate management strategies (both diagnostic and therapeutic) for patients with common conditions, both acute and chronic, including medical, psychiatric, and surgical conditions, and those requiring short- and long-term rehabilitation
- The ability to recognize patients with immediately life threatening cardiac, pulmonary, or neurological conditions regardless of etiology, and to institute appropriate initial therapy
- The ability to recognize and outline an initial course of management for patients with serious conditions requiring critical care
- Knowledge about relieving pain and ameliorating the suffering of patients
- The ability to communicate effectively, both orally and in writing, with patients, patients' families, colleagues, and others with whom physicians must exchange information in carrying out their responsibilities
- Knowledge of the important non-biological determinants of poor health and of the economic, psychological, social, and cultural factors that contribute to the development and/or continuation of maladies
- Knowledge of the epidemiology of common maladies within a defined population, and the systematic approaches useful in reducing the incidence and prevalence of those maladies
- The ability to identify factors that place individuals at risk for disease or injury, to select appropriate tests for detecting patients at risk for specific diseases or
- in the early stage of disease, and to determine strategies for responding appropriately
- The ability to retrieve (from electronic databases and other resources), manage, and utilize biomedical information for solving problems and making decisions that are relevant to the care of individuals and populations
- Knowledge of various approaches to the organization, financing, and delivery of health care
- A commitment to provide care to patients who are unable to pay and to advocate for access to health care for members of traditionally underserved populations