



**RESPIRATORY
MODULE II
STUDY GUIDE
3RD YEAR MBBS**

Contents

Vision and Mission of KGMC	
Khyber Medical University: Vision	
Khyber Girls Medical College: Vision	
Khyber Girls Medical College: Mission	
Curriculum Committee KGMC	
Module committee	
Outcomes of the curriculum:	
KNOWLEDGE	
PSYCHOMOTOR	
AFFECTIVE	
Introduction to the CourseModule.....	
General Learning Outcomes of the ModuleCourse	
Specific learning objectives of the pharmacology	
Teaching and learning strategies:	
Learning opportunities.....	
Time tables:.....	
Assessment tools:	
Internal Evaluation:.....	
Attendance Requirement:	

Vision and Mission of KGMC

Khyber Medical University: Vision



Khyber Medical University will be the global leader in health sciences academics and research for efficient and compassionate health care.

Khyber Girls Medical College: Vision



Khyber Girls Medical College will promote health care leaders that are critical thinker, ethical, research oriented, culturally and professionally competent

Khyber Girls Medical College: Mission



To develop competent health care leaders by ensuring appropriate policies, procedures which reflect ethical, cultural, community orientated and evidence based practices to achieve best possible health outcomes for society at large.

Curriculum Committee KGMC

Chair:

Professor Dr.Zahid Aman , Dean KGMC.

Co-Chair:

Professor Dr Amir Mohammad , Associate Dean KGMC.

Clinical Sciences:

- Dr. Mohammad Noor Wazir ,Department of Medicine KGMCHMC
- Dr. Bushra Rauf Department of Gynae KGMCHMC.
- Dr. Sofia Iqbal, Department of Ophthalmology KGMCHMC.
- Dr. Said Amin Department of Medicine KGMCHMC.
- Dr. Ghareeb Nawaz Department of ENT KGMCHMC.
- Dr. Jamshed Alam Department of Surgery KGMCHMC.
- Dr. Ambreen Ahmad, Department of Pediatrics KGMCHMC.
- Dr. Ain-ul-Hadi Department of Surgery KGMCHMC.
- Dr. Fawad Rahim Department of Medicine KGMCHMC.

Behavioral Sciences:

- Dr. Ameer Abbas Department of Psychiatry KGMCHMC.

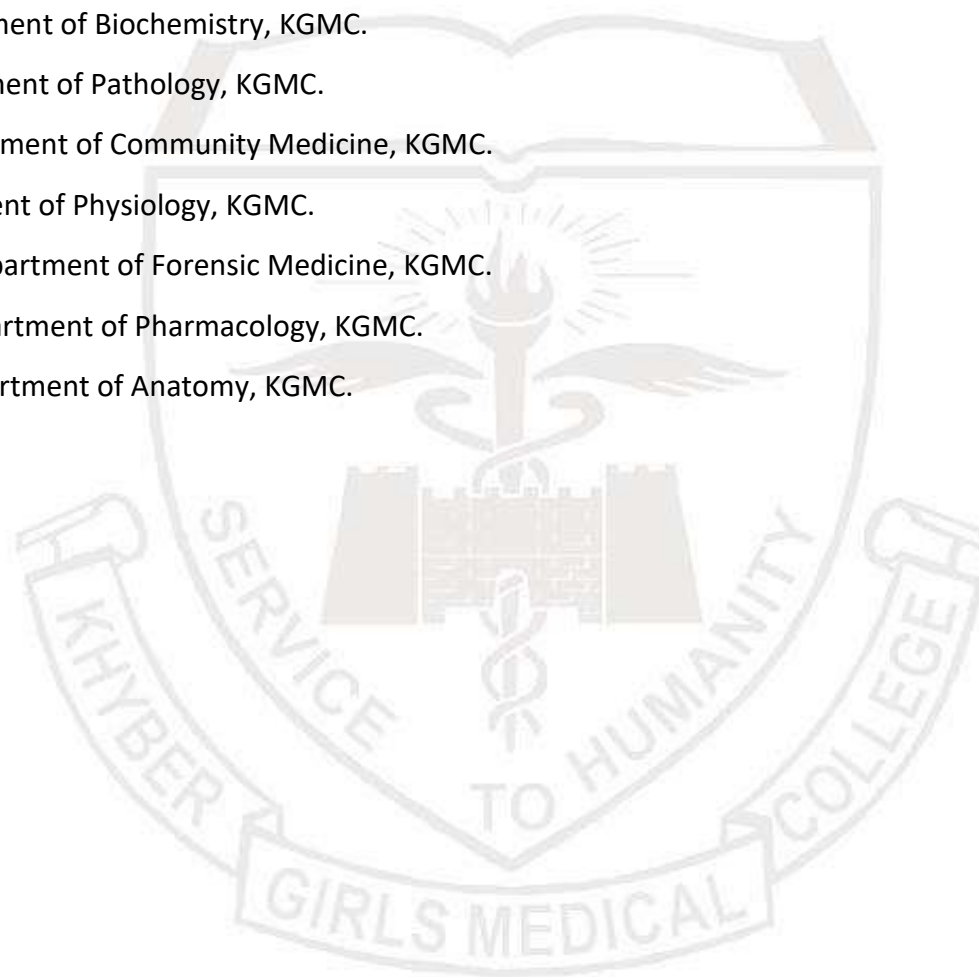
Medical Education

- Dr. Naheed Mahsood, Department of Medical Education, KGMC.
- Dr. Naveed Afzal Khan, Department of Medical Education, KGMC.

- Dr Onaiza Nasim , Department of Medical Education, KGMC

Basic Sciences:

- Dr. Amin-ul-Haq Department of Biochemistry, KGMC.
- Dr. Khalid Javed Department of Pathology, KGMC.
- Dr. Raheela Amin Department of Community Medicine, KGMC.
- Dr. Zubia Shah Department of Physiology, KGMC.
- Dr. Naheed Siddique Department of Forensic Medicine, KGMC.
- Dr. Shams Suleman Department of Pharmacology, KGMC.
- Dr. Shahab-ud-Din, Department of Anatomy, KGMC.



Integrated curriculum:

An integrated curriculum is all about making connections, whether to real life or across the disciplines, about skills or about knowledge. An integrated curriculum fuses subject areas, experiences, and real-life knowledge together to make a more fulfilling and tangible learning environment for students. Integrated teaching means that subjects are presented as a meaningful whole. Students will be able to have better understanding of basic sciences when they repeatedly learn in relation to clinical examples. Case based discussions, computer-based assignments, early exposure to clinics, wards, and skills acquisition in skills lab are characteristics of integrated teaching program.

Outcomes of the curriculum:

The outcomes of the curriculum of MBBS According to the PMDC are as follows

- Knowledgeable
- Skilful
- Community Health Promoter
- Problem-solver
- Professional
- Researcher
- Leader
- Role model

KNOWLEDGE

By the end of five year MBBS program the KGMC student should be able to;

1. Acquire a high level of clinical proficiency in history taking, physical examination, differential diagnosis, and the effective use of medicine's evolving diagnostic and procedural capabilities including therapeutic and palliative modalities
2. Manage the common prevalent diseases in community
3. Identify the common medical emergencies
4. Develop plan for prevention of common community diseases
5. Formulate a referral plan
6. Compose a prescription plan

PSYCHOMOTOR

By the end of five year MBBS program the KGMC student should be able to;

1. Demonstrate the ability to perform the disease specific relevant examination
2. Respond to common medical emergencies
3. Master the skill of first aid

4. Perform BLS

5. Apply the best evidenced practices for local health problems

AFFECTIVE

By the end of five year MBBS program the KGMC student should be able to

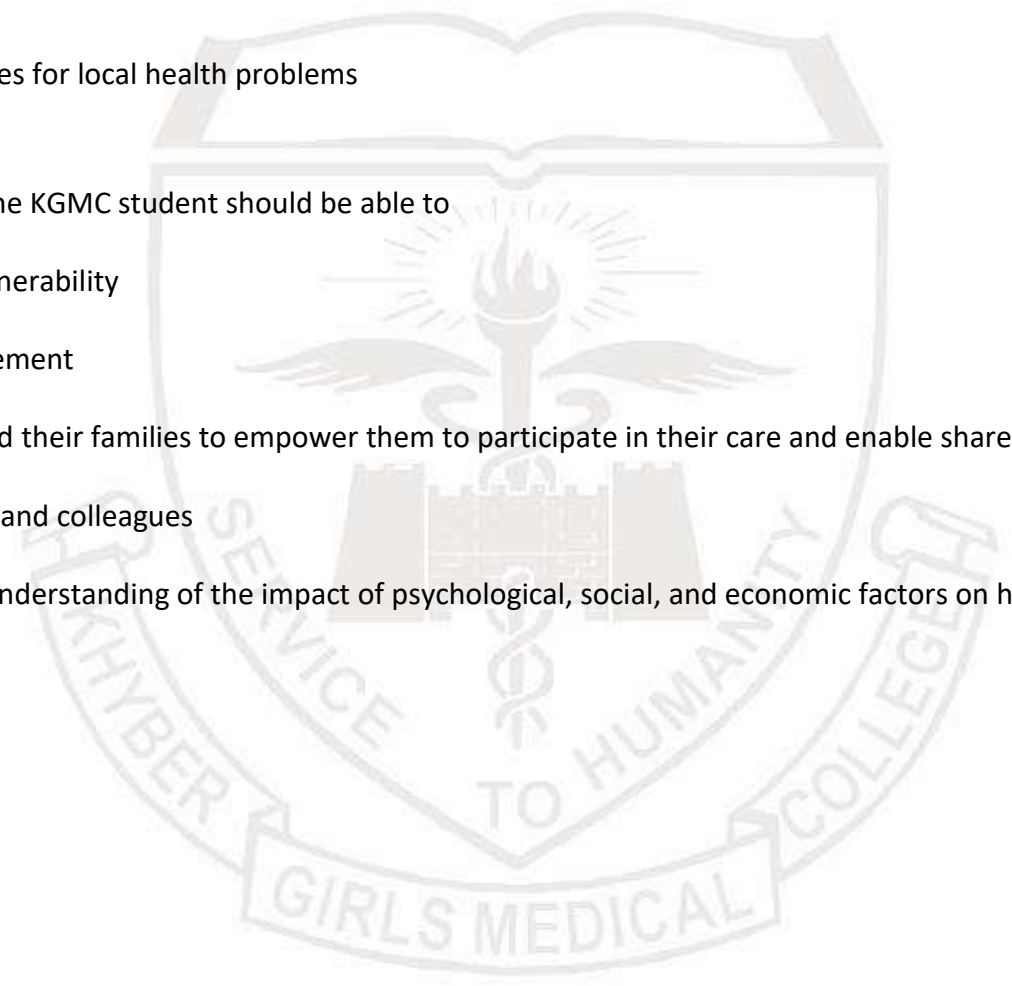
1. Relate to patient and caregivers vulnerability

2. Demonstrate ethical self-management

3. Counsel and educate patients and their families to empower them to participate in their care and enable shared decision-making.

4. Display compassion with patient and colleagues

5. Demonstrate in clinical care an understanding of the impact of psychological, social, and economic factors on human health and disease

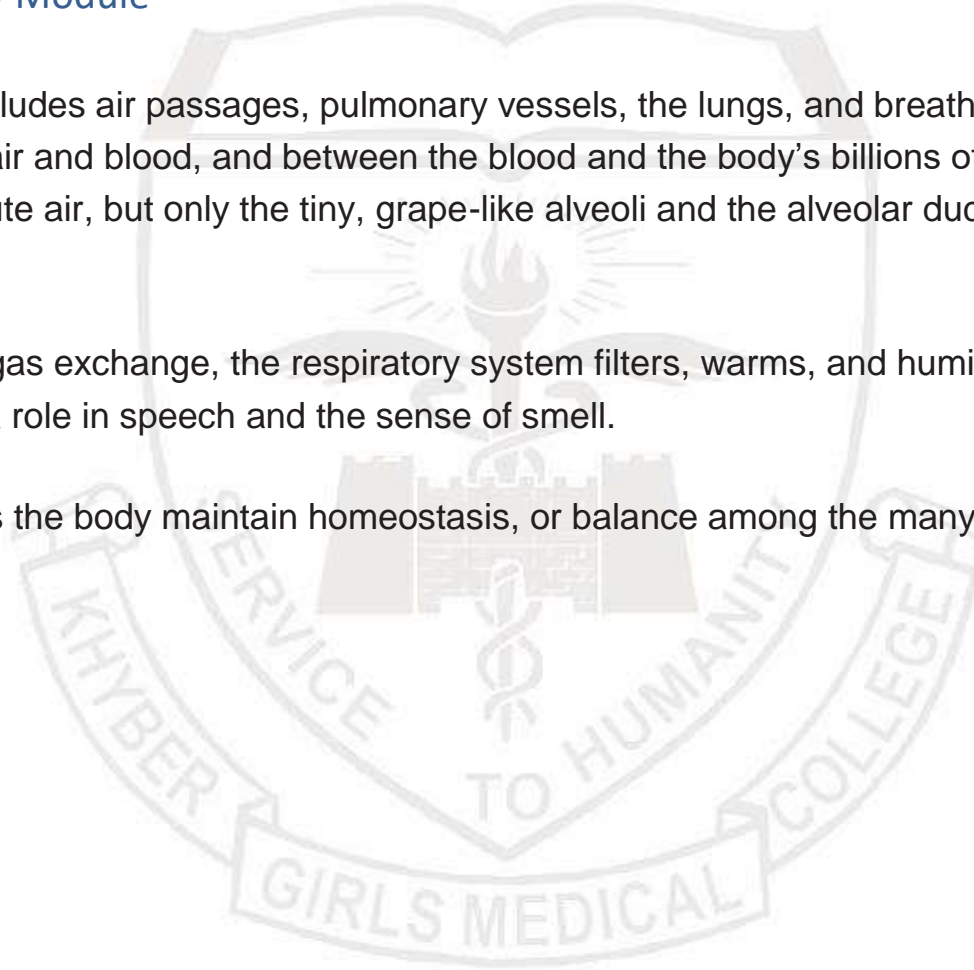


Introduction to the Respiratory Module

The respiratory system, which includes air passages, pulmonary vessels, the lungs, and breathing muscles, aids the body in the exchange of gases between the air and blood, and between the blood and the body's billions of cells. Most of the organs of the respiratory system help to distribute air, but only the tiny, grape-like alveoli and the alveolar ducts are responsible for actual gas exchange.

In addition to air distribution and gas exchange, the respiratory system filters, warms, and humidifies the air you breathe. Organs in the respiratory system also play a role in speech and the sense of smell.

The respiratory system also helps the body maintain homeostasis, or balance among the many elements of the body's internal environment.



Respiratory Module

Year-3

Khyber Medical College Peshawar

S. No	Themes	Duration
1	Cough with sputum, and fever.	Two weeks
2	Wheezy Chest and Shortness of breath	Two weeks

General Learning Outcomes:

At the end of this module, students will be able to:

1. Explain various lower respiratory tract infections.
2. Explain obstructive respiratory diseases.
3. Describe various Granulomatous lung diseases.
4. Prescribe medication according to guidelines for common respiratory disorders.
5. Describe medico legal aspect of asphyxia death.
6. Describe respiratory tract diseases of public health importance with emphasis on agent factors, epidemiology, preventive, and control measures.
7. Describe management of common respiratory problems.

Specific learning objectives

Theme 1: Cough with sputum, & fever					
Subject	Topic	SNo.	Learning Objectives At the end of this module, students will be able to :	Teaching strategy	Assessment
Anatomy		1	Describe clinical anatomy of thorax including thoracic wall, lungs and trachea-bronchial tree anatomy	LGF/SGD	MCQ
		2	Correlate the different developmental stages of lung with its congenital anomalies	LGF/SGD	MCQ
		3	Describe the surface marking of clinically relevant areas of the respiratory system	LGF/SGD	MCQ
Physiology		4	Describe the mechanics of ventilation and different volumes and capacities of lungs	LGF	MCQ
		5	Describe respiratory gas exchange.	LGF	MCQ

Biochemistry		6	Describe the effects of hyperventilation (e.g. Anxiety) and hypoventilation (e.g. COPD) on pH and blood gases, HCO ₃ and electrolytes.	LGF	MCQ
Microbiology	Legionella	7	Describe Pathogenesis, Structure, Clinical Findings & Laboratory Diagnosis of Legionella infection	LGF	MCQ
	Mycoplasma	8	Describe Pathogenesis, Structure, Clinical findings & Laboratory Diagnosis of mycoplasma infection.	LGF	MCQ
	H-Influenza	9	Describe Pathogenesis, Structure, Clinical Findings & Laboratory Diagnosis of H-Influenza infection.	LGF	MCQ
	Bordetella	10	Describe Pathogenesis, Structure, Clinical Findings & Laboratory Diagnosis of Bordetella infection	LGF	MCQ

	Mycobacterium Tuberculosis	11	Describe Pathogenesis, Important Properties, Clinical Findings & Laboratory Diagnosis of Mycobacterium Tuberculosis.	LGF	MCQ
	Pulmonary Infections	12	Describe community acquired pneumonia and its different types.	LGF	MCQ
		13	Describe community acquired atypical Pneumonia.	LGF	MCQ
		14	Describe etiology, pathogenesis & clinical features of nosocomial pneumonia.	LGF	MCQ
		15	Describe etiology, pathogenesis & clinical features of pneumonia.	LGF	MCQ
		16	Describe etiology, pathogenesis & clinical features of chronic pneumonia.	LGF	MCQ
		17	Describe etiology, pathogenesis, clinical & radiologic features of Pulmonary Tuberculosis.	LGF	MCQ
		18	Describe pneumonia in immunocompromised host.	LGF	MCQ

Granulomatous diseases	19	Describe sarcoidosis its etiology, pathogenesis, morphology and clinical course.	LGF	MCQ
	20	Describe etiology, pathogenesis, clinical & radiologic features of hypersensitivity pneumonitis.	LGF	MCQ
	21	Describe etiology, pathogenesis, clinical & radiologic features of pulmonary eosinophilia.	LGF	MCQ
Lung abscess	22	Define Lung Abscess	LGF	MCQ
	23	Describe Pathogenesis, morphology & Clinical Course of Lung abscess	LGF	MCQ

	Empyema	24	Describe empyema & its pathogenesis	LGF	MCQ
	Laryngeal tumors	25	Describe laryngeal tumors.	LGF	MCQ
Pharmacology	Anti-tussives	26	Classify Anti-tussives	LGF/SGD	MCQ
	Cough Suppressants	27	Describe the pharmacology of Cough suppressants	LGF /SGD	MCQ
	Expectorants	28	Describe the pharmacology of Expectorants, Mucolytic agents in cough	LGF/SGD	MCQ
	Tuberculosis	29	Classify Anti tuberculous drugs	LGF/SGD	MCQ
		30	Describe the pharmacology of First line antituberculosis drugs	LGF/S GD	MCQ
31		Describe the pharmacology of 2nd line antituberculosis drugs	LGF/SGD	MCQ	

	32	Discuss the drug treatment & duration of susceptible newly diagnosed pulmonary tuberculosis patient	LGF/SG D	MCQ
	33	Discuss the development of resistance to mycobacterium tuberculosis against conventional antibiotics	LGF/SG D	MCQ
	34	Discuss the classification & duration of therapy in patients having MDR tuberculosis	LGF/SGD	MCQ
	35	Discuss the drug treatment & duration of antitubercular therapy in pregnant woman & patients having Hepatic & Renal insufficiency	LGF/SGD	MCQ
	36	Describe the rationale for the use of Multi Drug therapy against pulmonary tuberculosis.	LGF/SGD	MCQ

Community Medicine	Tuberculosis	37	Describe agent, host and environmental factors for the disease.	LGF/SGD	MCQ
		38	Describe DOTS strategy for Tuberculosis	LGF/SGD	MCQ
		39	Explain different preventive and control measures for Tuberculosis including "stop TB" and "End TB" strategies	LGF/SGD	MCQ
	Influenza	40	Describe types of influenza	LGF/SGD	MCQ
		41	Describe agent, host and environmental factors for the disease.	LGF/SGD	MCQ
		42	Explain the antigenic drift and antigenic shift	LGF/SGD	MCQ
		43	Describe various preventive and control measures for influenza	LGF/S GD	MCQ
Forensic	Asphyxia	44	Define asphyxia	LGF/SGD	MCQ

Medicine	(General Aspects)	45	Define anoxia	LGF/SGD	MCQ
		46	Enlist causes of anoxia	LGF/SGD	MCQ
		47	Explain causes of asphyxia	LGF/SGD	MCQ
		48	Classify mechanical asphyxia	LGF/SGD	MCQ
		49	Describe patho physiology of asphyxia	LGF/SGD	MCQ
		50	Describe general signs of asphyxia	LGF/SGD	MCQ
	Hanging	51	Define hanging	LGF/SGD	MCQ
		52	Describe causes of death in hanging	LGF/SGD	MCQ
		53	Explain mechanism of death in hanging	LGF/SGD	MCQ
		54	Describe the procedure of neck dissection in hanging	LGF/SGD	MCQ

		55	Describe autopsy findings in hanging	LGF/SGD	MCQ
		56	Explain medico legal aspects of hanging	LGF/SGD	MCQ
	Mechanical asphyxia (Strangulation)	57	Define strangulation	LGF/SGD	MCQ
		58	Describe causes of death in strangulation	LGF/SGD	MCQ
		59	Explain mechanism of death in strangulation	LGF/SGD	MCQ
		60	Describe the procedure of neck dissection in strangulation	LGF/SGD	MCQ
		61	Describe autopsy findings in strangulation	LGF/SGD	MCQ
		62	Explain medico legal aspects of strangulation	LGF/SGD	MCQ
	Drowning	63	Define drowning	LGF/SGD	MCQ
		64	Describe causes of death in drowning	LGF/SGD	MCQ
		65	Explain mechanism of death in drowning	LGF/SGD	MCQ
		66	Describe types of drowning	LGF/SGD	MCQ
		67	Describe autopsy findings in drowning	LGF/SGD	MCQ

		68	Differentiate between ante and post mortem drowning	LGF/SGD	MCQ
		69	Explain medico legal aspects of drowning	LGF/SGD	MCQ
	Suffocation	70	Define suffocation and explain its medico legal aspects.	LGF/SGD	MCQ
	Smothering		Define smothering	LGF/SGD	MCQ
		72	Explain medico legal aspects of smothering	LGF/SGD	MCQ
	Chocking	73	Define chocking	LGF/SGD	MCQ
		74	Explain medico legal aspects of chocking	LGF/SGD	MCQ
	Gagging	75	Define Gagging	LGF/SGD	MCQ
		76	Explain medico legal aspects of Gagging	LGF/SGD	MCQ

	Overlaying	77	Define overlying	LGF/SGD	MCQ
		78	Explain medico legal aspects of overlying	LGF/SGD	MCQ
	Traumatic asphyxia	79	Define traumatic asphyxia	LGF/SGD	MCQ
		80	Describe autopsy findings of traumatic asphyxia	LGF/SGD	MCQ
		81	Explain medico legal aspects of traumatic asphyxia	LG F/S GD	M CQ
	Sexual asphyxia	82	Define sexual asphyxia	LGF/SGD	MCQ
ENT	Larynx anatomy	83	Describe clinical anatomy of larynx.	LGF	MCQ
	Laryngitis	84	Describe etiology, clinical feature, management of acute and chronic laryngitis.	LGF	MCQ
Medicine	Respiratory symptoms	85	Describe approach to a patient of respiratory symptomatology	LGF	MCQ
	Differential diagnosis	86	Discuss the differential diagnosis of granulomatous inflammation including TB	LGF	MC Q

	Pulmonary TB	87	Describe the signs & symptoms, investigations, clinical diagnosis, management protocol & prognosis for TB and MDRTB according to WHO categories.	LGF	MCQ
Pediatrics	Childhood Pneumonia	88	Classify pneumonia according to IMNCI (integrated management of neonatal and childhood illnesses)	LGF	MCQ
		89	Describe the risk factors for recurrent pneumonia in childhood.	LGF	MCQ
		90	Describe the etiological agents for Pneumonias according to the age of the child.	LGF	MCQ
		91	Describe the indication for hospitalization of child with pneumonia.	LGF	MCQ
Radiology		92	Describe the common radiological abnormalities on chest x-rays	LGF	MCQ

Theme 2: Wheezy chest & shortness of breath					
Pathology	Atelectasis	93	Define Atelectasis	LGF	MCQ
		94	Describe different types of atelectasis	LGF	MCQ
	Acute Lung injury	95	Define Acute Respiratory distress Syndrome (ARDS)	LGF	MCQ
		96	Describe Pathogenesis and morphological features of ARDS	LG F	MCQ
	Obstructive Pulmonary disease	97	Define obstructive pulmonary disease and enlist its different types	LGF	MCQ
		98	Define Emphysema	LGF	MCQ
		99	Describe different types of emphysema	LGF	MCQ
		100	Describe the pathogenesis morphology and underline course of emphysema	LGF	MCQ
		101	Define chronic bronchitis	LGF	MCQ
		102	Describe its pathogenesis and morphology	LGF	MCQ

	103	Describe asthma and its pathogenesis	LGF	MCQ
	104	Differentiate between types of asthma	LGF	MCQ
	105	Describe morphology and clinical course of asthma	LGF	MCQ
Restrictive or infiltrative lung diseases	106	Define bronchiectasis, describe the causes, morphology, and pathogenesis of bronchiectasis	LGF	MCQ
	107	Define diffuse interstitial lung disease.	LGF	MCQ
	108	Describe pathogenesis of diffuse interstitial lung disease.	LGF	MCQ
	109	Enlist major categories of chronic interstitial lung disease	LGF	MCQ

		110	Describe the fibrosing lung diseases.	LGF	MCQ
		111	Describe pneumoconiosis, its morphology and different types.	LGF	MCQ
		112	Describe drug and radiation induced pulmonary diseases.	LGF	MCQ
	Diseases of vascular origin	113	Describe pulmonary embolism, hemorrhage and infarction.	LGF	MCQ
		114	Describe pulmonary Hypertension.	LGF	MCQ
		115	Describe diffuse alveolar hemorrhage syndromes.	LGF	MCQ
	lung tumors	116	Describe carcinoma of lung, its etiology pathogenesis, morphology and clinical course.	LGF	MCQ
		117	Differentiate between small cell lung carcinoma and non small cell lung carcinoma.	LGF	MCQ
		118	Describe bronchial carcinoids	LGF	MCQ
		119	Describe malignant mesothelioma and its morphology.	LGF	MCQ

	Pleural lesions	120	Describe pleural effusion and pleuritis.	LGF	MCQ
		121	Describe pneumothorax ,Hemothorax and chylothorax	LGF	MCQ
Pharmacology	Asthma	122	Classify the Drugs used in the treatment of asthma	LGF	MCQ
		123	Describe the role of beta 2 agonists used in Asthma	LGF	MCQ
		124	Describe the role of Methylxanthine drugs used in Asthma	LGF	MCQ
		125	Describe the role of Antimuscarinic agents used in Asthma	LGF	MCQ

		126	Describe the role of Corticosteroids used in Asthma	LGF	MCQ
		127	Describe the pharmacokinetic & pharmacodynamic aspects of Mast cell stabilizers used in Asthma	LGF	MCQ
		128	Describe the pharmacokinetic & pharmacodynamic aspects of Leukotriene antagonist used in Asthma	LGF	MCQ
		129	Describe the pharmacokinetic & pharmacodynamic aspects of Anti-IgE antibodies used in Asthma	LGF	MCQ
		130	Describe drug treatment of acute and chronic asthma and status asthmatics	LGF	MCQ
Community Medicine	Asthma	131	Describe the epidemiology & preventive measures of asthma.	LGF	MCQ
		132	Define occupational asthma and describe its preventive measures.	LGF	MCQ
	Pneumoconiosis	133	Describe various pneumoconiosis diseases.	LGF	MCQ

		134	Describe the control and preventive measures of pneumoconiosis	LGF	MCQ
	Diphtheria and Pertussis	135	Describe the epidemiological determinants of Diphtheria and Pertussis	LGF	MCQ
		136	Describe preventive and control measures.	LGF	MCQ
		137	Explain their current public health importance in Pakistan.	LGF	MCQ
Forensic Medicine	Asphyxiant (CO)	138	Explain medico legal aspects of sexual asphyxia	LGF/SGD	MCQ
		139	Enlist sources of CO poisoning	LGF/SGD	MCQ
		140	Describe signs and symptoms of CO poisoning	LGF/SGD	MCQ

		141	Explain treatment plan of CO poisoning	LGF/SGD	MCQ
		142	Describe autopsy findings of CO poisoning	LGF/SGD	MCQ
		143	Explain ML aspects of CO poisoning	LGF/SGD	MCQ
	CO2	144	Enlist sources of CO2 poisoning	LGF/SGD	MCQ
		145	Describe signs and symptoms of CO2 poisoning	LGF/SGD	MCQ
		146	Explain treatment plan of CO2 poisoning	LGF/SGD	MCQ
		147	Describe autopsy findings of CO2 poisoning	LGF/SGD	MCQ
		148	Explain ML aspects of CO2 poisoning	LGF/SGD	MCQ
		149	Enlist sources of H2S poisoning	LGF/SGD	MCQ
		150	Describe signs and symptoms of H2S poisoning.	LGF/SGD	MCQ
	H2S	151	Explain treatment plan of H2S poisoning	LGF/SGD	MCQ
		152	Describe autopsy findings of CO poisoning	LGF/SGD	MCQ
		153	Explain ML aspects of H2S poisoning	LGF/SGD	MCQ
	War gases	154	Define war gases	LGF/SGD	MCQ

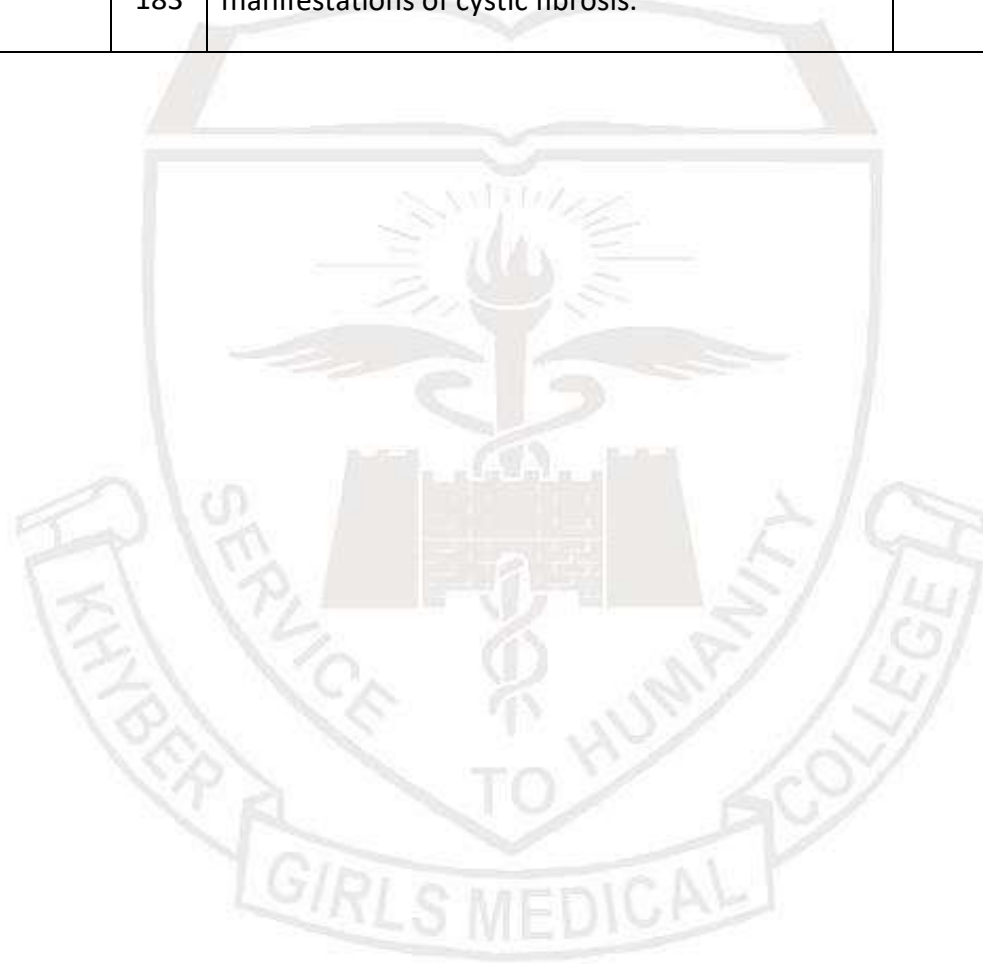
		155	Classify war gases	LGF/SGD	MCQ
		156	Describe medico legal aspects of war gases	LGF/SGD	MCQ
ENT	Non – Neoplastic laryngeal lesions	157	Describe clinical features and management of different non neoplastic laryngeal lesions (Vocal cords nodules, polyps, and laryngocele)	LGF	MCQ
	Neoplastic laryngeal lesions	158	Describe the clinical feature and management of neoplastic laryngeal lesions.	LGF	MCQ
	Vocal cord Palsy	159	Describe the clinical feature and management of vocal cord palsy	LGF	MCQ

	Emergency Tracheotomy	160	Describe the indication, contraindication, complications, and operative steps to perform emergency tracheotomy.	LGF	MCQ
Medicine	COPD	161	Describe the epidemiology, patho-physiology and etiology of COPD	LGF	MCQ
		162	Explain the clinical presentation of COPD	LGF	MCQ
		163	Describe the investigations required for the diagnosis of COPD	LGF	MCQ
		164	Describe the management plan of COPD	LGF	MCQ
	Asthma	165	Describe the epidemiology, pathophysiology, etiology, and contributing factors related to the development of asthma	LGF	MCQ
		166	Describe the clinical presentation, diagnosis and treatment of asthma	LGF	MCQ

	167	Classify asthma on the basis of clinical presentation into mild, moderate, life threatening and near fatal asthma	LGF	MCQ
	168	Explain the stepwise pharmacologic approach for the treatment of asthma status asthmaticus	LGF	MCQ
	169	Describe long-term asthma management plan including pharmacological, physical and occupational health education.	LGF	MCQ
Respiratory failure	170	Describe the long term Oxygen therapy in COPD	LGF	MCQ
Pneumothorax	171	Describe the etiology, classification, diagnosis and management of pneumothorax	LGF	MCQ
Pleural effusion	172	Describe the causes of exudates and transudate effusion.	LGF	MCQ

		173	Differentiate between exudate and transudate effusion.	LGF	MCQ
Pediatrics	ARIs(Croup and Epiglottitis)	174	Differentiate Croup and epiglottitis based on etiology and clinical features.	LGF	MCQ
		175	Explain the management of croup and epiglottitis.	LGF	MCQ
		176	Explain the most effective ways to prevent and control ARIs	LGF	MCQ
	Respiratory distress syndrome(RDS)	177	Describe the risk factors, clinical features, investigation and management for RDS.	LGF	MCQ
	Reactive air way disease.	178	Describe the different types of wheezers in pediatrics.	LGF	MCQ
		179	Discuss the risk factor for persistent wheezing /asthma.	LGF	MCQ
		180	Describe management of bronchiolitis.	LGF	MCQ
	Cystic fibrosis and	181	Define bronchiectasis and its risk factors.	LGF	MCQ
		182	Describe diagnostic criteria for cystic fibrosis.	LGF	MCQ

	bronchiectasis	183	Describe the GI, respiratory and other systemic manifestations of cystic fibrosis.	LGF	MCQ
--	-----------------------	-----	--	-----	-----



Practical's: Theme 1 Cough with sputum and Fever					
Subject	Topic	SNo	Los	Teaching	Assessment
Pharmacology		1.	Write the proper prescription for Pulmonary. Tuberculosis	practical	OSPE
Forensic Medicine		2.	Demonstrate the differences between hanging and strangulation on a model	practical	OSPE
		3	Demonstrate the differences between different types of hanging on a model	practical	OSPE
Community Medicine	Visit	4	Visit to TB control program center	practical	OSPE
	Mask wearin g.	5	Demonstrate Identification of different types of masks and its uses.	practical	OSPE
		6	Demonstrate the proper protocol for wearing a mask	practical	OSPE
Practical's: Theme 2 Wheezy chest and shortness of breath					
Pharmacology		7	Demonstrate the proper stepwise use of metered dose inhaler along with spacer.	practical	OSPE
		8	Write the proper prescription for Acute & Chronic Asthma	practical	OSPE
		9	Write the proper prescription for patients with status asthma	practical	OSPE

Teaching and learning strategies:

The following teaching learning methods are used to promote better understanding:

- Interactive Lectures
- Hospital Clinic visits
- Small Group Discussion
- Skills session
- Self-Directed Study

Interactive lectures:

An interactive lecture is an easy way for instructors to intellectually engage and involve students as active participants in a lecture-based class of any size.

Interactive lectures are classes in which the instructor breaks the lecture at least once per class to have students participate in an activity that lets them work directly with the material.

- The instructor might begin the interactive segment with an engagement trigger that captures and maintains student attention.

- Then the instructor incorporates an activity that allows students to apply what they have learned or give them a context for upcoming lecture material.
- As the instructor feels more comfortable using interactive techniques he or she might begin to call upon a blend of various interactive techniques all in one class period.

Hospital Clinic visits:

In small groups, students observe patients with signs and symptoms in hospital or clinical settings. This helps students to relate knowledge of basic and clinical sciences of the relevant module.

Small group discussion (SGD):

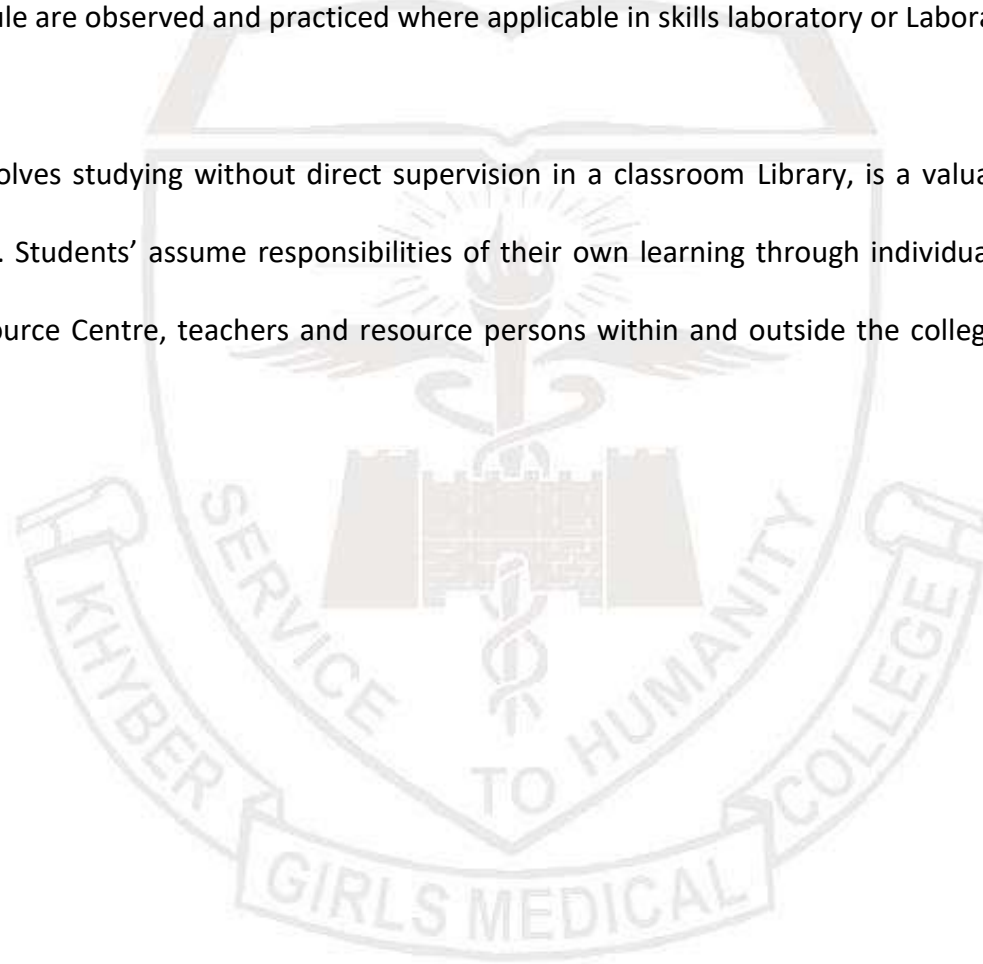
The shy and less articulate are more able to contribute. Students learn from each other. Everyone gets more practice at expressing their ideas. A two way discussion is almost always more creative than individual thoughts. Social skills are practiced in a 'safe' environment e.g. tolerance, cooperation. This format helps students to clarify concepts acquire skills or attitudes. Students exchange opinions and apply knowledge gained from lectures, tutorials and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

Skills Practical session:

Skills relevant to respective module are observed and practiced where applicable in skills laboratory or Laboratories of various departments.

Self-Directed learning (SDL):

Self-directed learning, which involves studying without direct supervision in a classroom Library, is a valuable way to learn and is quickly growing in popularity among parents and students. Students' assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Centre, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.



Time Table:

The timetables for the module will be shared via Edmodo and the notice boards in advance.

Assessment tools:

Theoretical knowledge is tested by a written examination system constituted by multiple choice questions (MCQs). The assessment of practical knowledge involves oral, spot, or objective structured practical examinations (OSPE).

Multiple Choice Questions (MCQs):

- Multiple choice questions (MCQs) are a form of assessment for which students are asked to select the best choice from a list of answers.
- MCQ consists of a stem and a set of options. The stem is usually the first part of the assessment that presents the question as a problem to be solved; the question can be an incomplete statement which requires to be completed and can include a graph, a picture or any other relevant information. The options are the possible answers that the student can choose from, with the correct answer called the key and the incorrect answers called distractors.
- Correct answer carries one mark, and incorrect 'zero mark'. There is NO negative marking.
- Students mark their responses on specified computer-based sheet designed for the college.
- The block exam will comprise of 120 MCQs and will be compiled according to the shared blueprint.

Objective Structured Practical Examination (OSPE)

- The content may assess application of knowledge, or practical skills.
- Student will complete task in define time at one given station.
- All the students are assessed on the same content by the same examiner in the same allocated time.
- A structured examination will have observed, unobserved, interactive and rest stations.
- Observed and interactive stations will be assessed by internal or external examiners.
- Unobserved will be static stations in which students will have to answer the questions related to the given pictures, models or specimens the provided response sheet.
- Rest station is a station where there is no task given, and in this time student can organize their thoughts.
- The Block OSPE will be comprise of 20 examined station and 5 rest stations. The stations will be assigned according to the shred blueprint. There will be 8 stations for viva of core subjects like Pathology, Pharmacology, Forensic Medicine and Community Medicine (2 station for viva of each core subject) and 2 clinical station and rest of 10 out of 20 stations will be assigned according to shared blue prints.

Internal Evaluation:

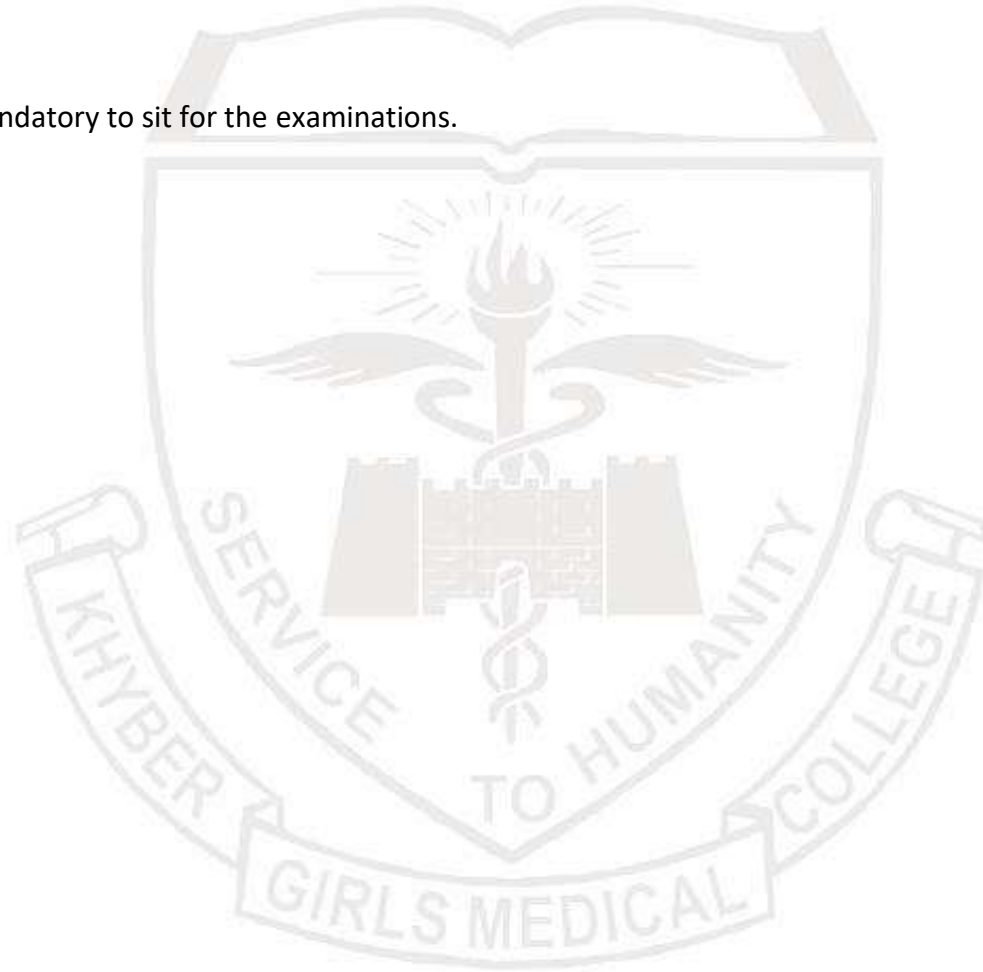
Internal evaluation is a process of quality review undertaken within an institution for its own ends. 10% marks of internal evaluation will be added to final marks. This 10% will be based on

PAPER	
Marks obtained	13 out of total 40 marks of internal assessment in block I Paper

OSPE	
Marks obtained	13 out of total 40 marks of internal assessment in block I Paper

Attendance Requirement:

More than 75% attendance is mandatory to sit for the examinations.



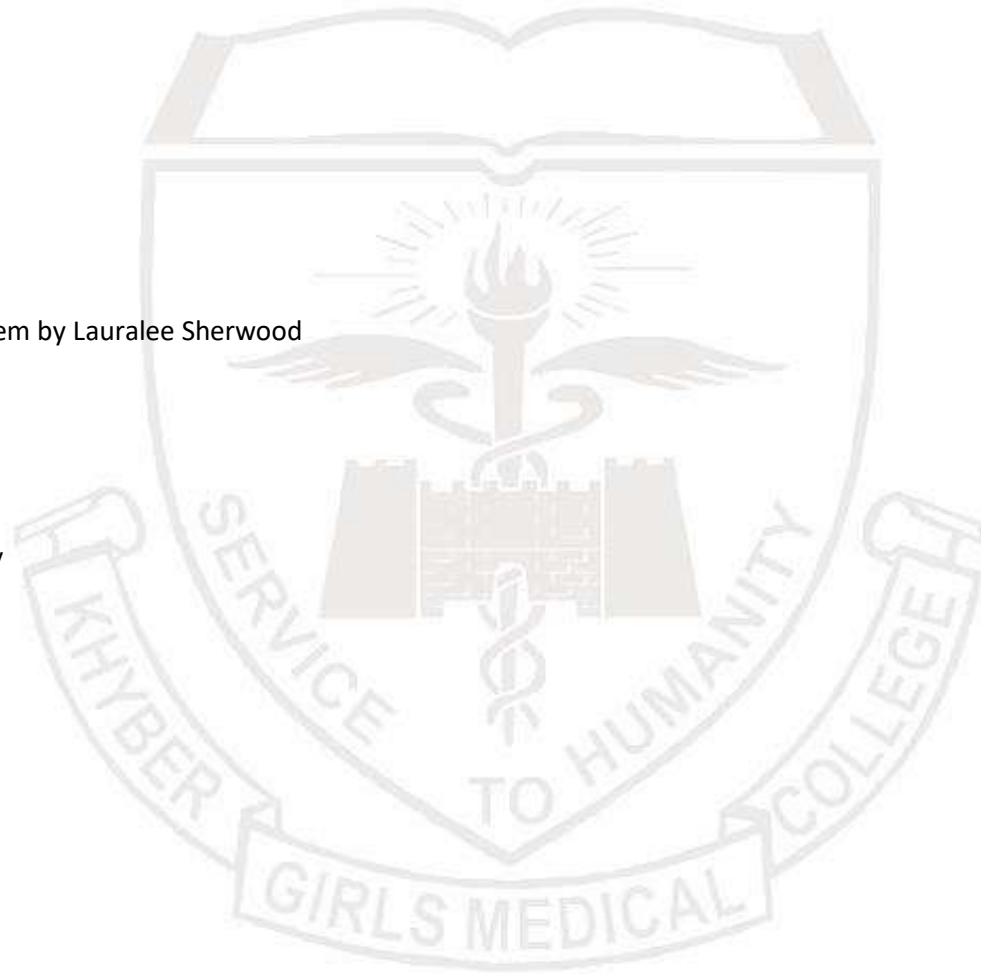
Learning Resources for Students

Physiology

- Guyton Nd Hall physiology
- Gannon physiology
- Human Physiology from cells to system by Lauralee Sherwood
- BRS Physiology
- Neuroscience by Dale Purves

Biochemistry

- Chatterjee text book of Biochemistry
- Harpers Biochemistry
- Lippincott's Biochemistry
- Satya Narayan biochemistry



PATHOLOGY

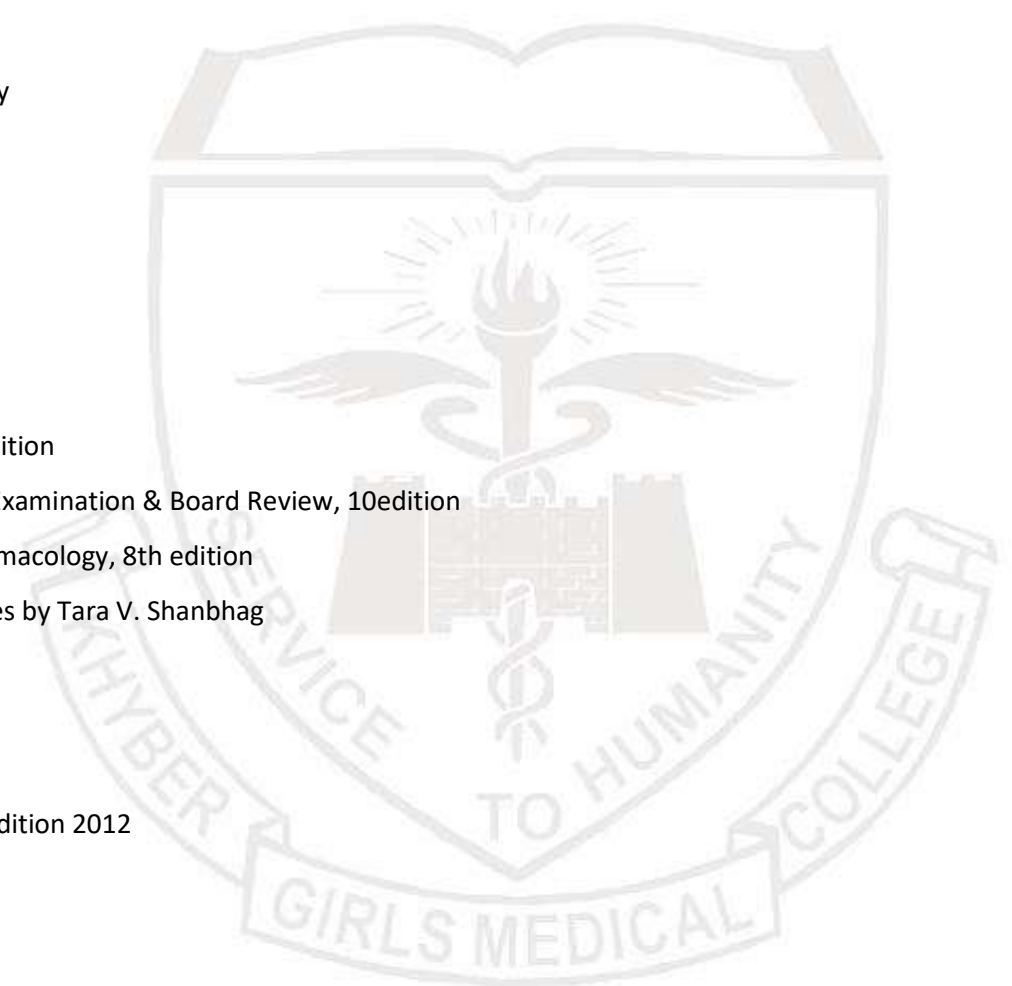
- Robbins textbook of pathology
- Harsh mohan text book of pathology
- Levison text book of microbiology
- Paniker parasitology
- Chatterjee book of parasitology

PHARMACOLOGY

- Basic & Clinical Pharmacology, 14edition
- Katzung & Trevor's Pharmacology: Examination & Board Review, 10edition
- Lippincott Illustrated Reviews: Pharmacology, 8th edition
- Pharmacology for Medical Graduates by Tara V. Shanbhag

GENERAL MEDICINE

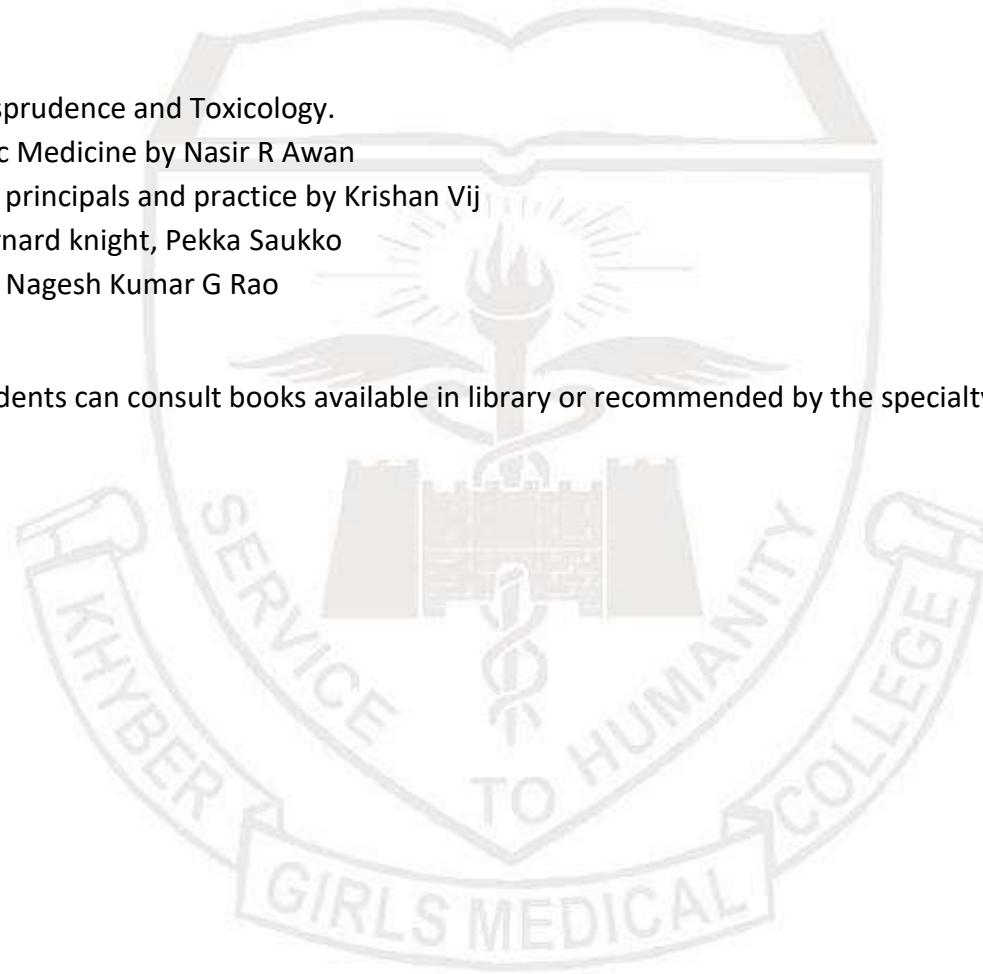
1. Kumar and Clark for Medicine 8th edition 2012
2. Davidson



FORENSIC MEDICINE

- Parikh's textbook of Medical Jurisprudence and Toxicology.
- Principles and Practice of Forensic Medicine by Nasir R Awan
- Forensic medicine and toxicology principals and practice by Krishan Vij
- Knights forensic pathology by Bernard knight, Pekka Saukko
- Forensic medicine and toxicology Nagesh Kumar G Rao

Apart from these resources learning, students can consult books available in library or recommended by the specialty experts.



- Principles and Practice of Forensic Medicine by Nasir R Awan
- Forensic medicine and toxicology principals and practice by Krishan Vij
- Knights forensic pathology by Bernard knight, Pekka sauikko
- Forensic medicine and toxicology Nagesh Kumar G rao

Apart from these resources learning, students can consult books available in library or recommended by the specialty experts.

