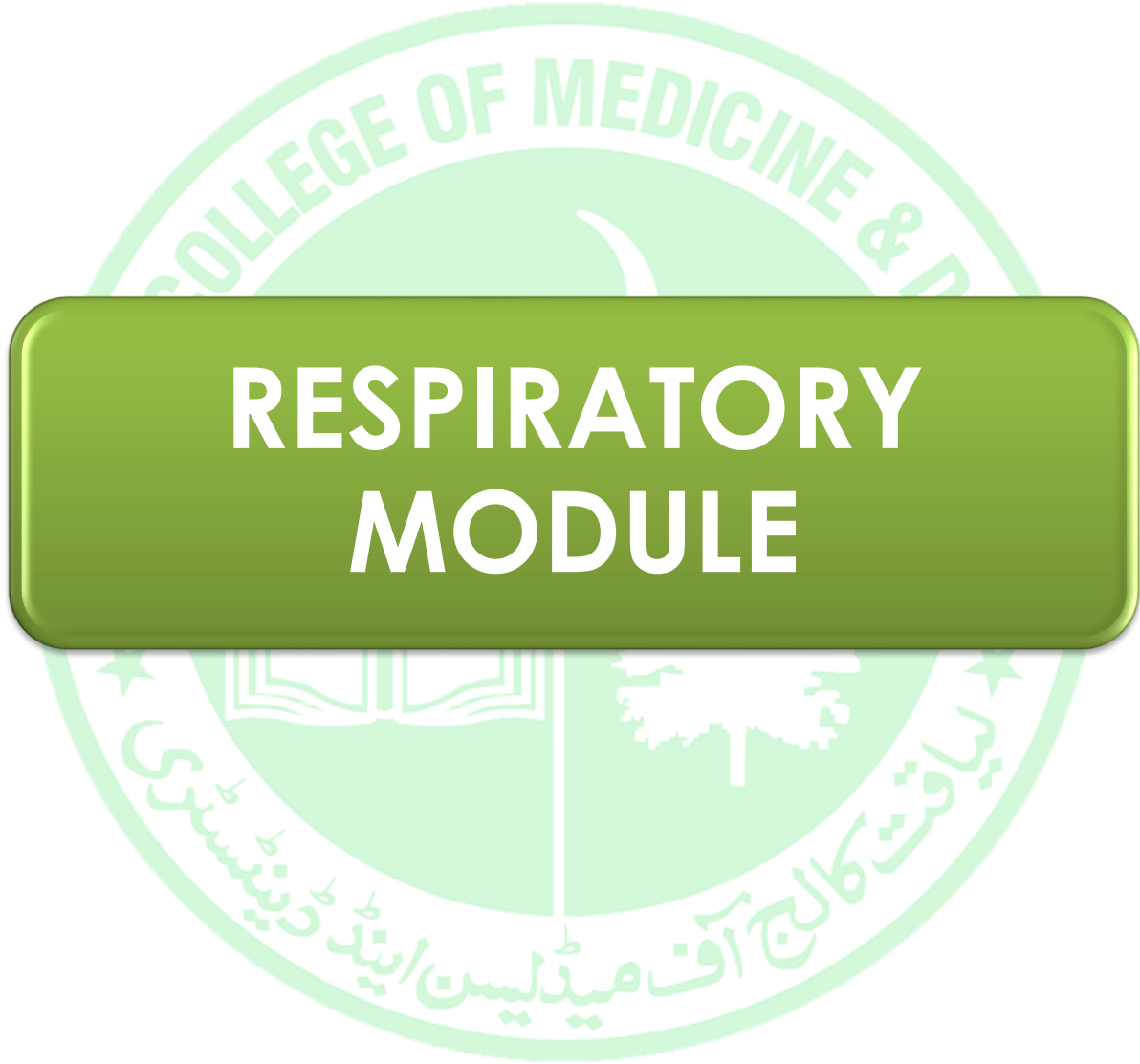




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**RESPIRATORY  
MODULE**





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<b>CODES</b>			
<b>Subject Name</b>		<b>Abbreviations</b>	<b>Color Codes</b>
<b>ANATOMY</b>	<b>Anatomy Lectures</b>	<b>A</b>	
	<b>General Anatomy</b>	<b>A(Gn)</b>	<b>Navy Blue</b>
	<b>Gross anatomy</b>	<b>A(Gr)</b>	<b>Black</b>
	<b>Histology</b>	<b>A(H)</b>	<b>Light Pink</b>
	<b>Neuro - Anatomy</b>	<b>A(NA)</b>	<b>Red</b>
	<b>Embryology</b>	<b>A(E)</b>	<b>Brown</b>
	<b>Histology Practical</b>	<b>A(P)</b>	<b>Light Pink</b>
<b>PHYSIOLOGY</b>	<b>Lecture</b>	<b>P</b>	<b>Green</b>
	<b>Practical</b>	<b>P(P)</b>	
<b>BIOCHEMISTRY</b>	<b>Lectures</b>	<b>B</b>	<b>Light Blue</b>
	<b>Practical</b>	<b>B(P)</b>	
<b>ORAL BIOLOGY</b>	<b>Oral Biology</b>	<b>O</b>	<b>Purple</b>
	<b>Tooth Morphology</b>	<b>T</b>	<b>Dark Pink</b>



<b>CONTENT</b>					
<b>RESPIRATORY MODULE</b>					
<b>Subject Name</b>		<b>TOTAL NO: OF LECTURES</b>	<b>WEEK PER MODULE</b>	<b>MODE OF TEACHING</b>	
<b>ANATOMY</b>	General Anatomy	<b>01</b>	<b>02 Weeks</b>	Lecture/ Tutorial	
	Gross Anatomy	<b>02</b>		Lecture/ Tutorial	
	Practical	<b>01</b>		Practical	
<b>PHYSIOLOGY</b>	Lecture	<b>13</b>		Lecture/ Tutorial	
	Practical	<b>01</b>		Practical	
<b>BIOCHEMISTRY</b>	Lectures	<b>05</b>		Lecture/ Tutorial	
	Practical	<b>01</b>		Practical	
<b>ORAL BIOLOGY</b>	Oral Biology	<b>14</b>		Lecture	
	Tooth Morphology	<b>03</b>		Lecture	
<b>Total</b>		<b>41</b>			



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Topic	Lecture	Respiratory - Learning Objectives	Learning Strategy	KSA Competencies Knowledge/Skill/ Attitude	Assessment Tools
<b>Introduction</b>	RM-A1(Gn1)	<ul style="list-style-type: none"> <li>State boundaries of thoracic cavity.</li> <li>Identify the contents of thorax at their respective position.</li> </ul>	Lecture	K	MCQ / OSPE
	P1	Describe the functions of different respiratory tract structures	Interactive Lecture	Knowledge	MCQ
		Differentiate between the conducting and respiratory zones of respiratory passages		Knowledge	MCQ
		Describe the dead space air its significance Define the minute ventilation and alveolar Ventilation		Knowledge	MCQ
<b>Mechanics Of Respiration</b>	P2	Explain mechanics of respiration	Interactive Lecture /tutorial with flipped class room	Knowledge	MCQ
		Name the muscles of respiration and describe their roles in breathing		Knowledge	MCQ / OSPE
		Explain how pressure gradients account for the flow of air in and out of the lungs; how these pressure gradients are produced		Knowledge	MCQ / OSPE
		Explain Boyle's law		Knowledge	MCQ / OSPE
<b>Nose &amp;Paranasal Air Sinuses</b>	RM-A2(Gr1)	<ul style="list-style-type: none"> <li>Describe the features of external nose, nasal cavity and the openings in meatuses.</li> <li>Name the bones forming the nasal cavity &amp; septum.</li> <li>Discuss the formation and clinical importance of anastomoses at little's area.</li> <li>List the paranasal sinuses &amp; their location.</li> <li>Describe boundaries of maxillary sinus and its clinically important relation with maxillary teeth.</li> </ul>	Interactive Lecture / Tutorial / SGD	Knowledge	MCQ / OSPE



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<b>Larynx</b>	RM-A3(Gr2)	<ul style="list-style-type: none"> <li>Describe its extent &amp; location.</li> <li>Enlist the cartilages &amp; membranes of larynx.</li> <li>Tabulate the muscles, their nerve supply &amp; actions.</li> <li>Discuss the clinical conditions related to the innervation.</li> </ul>	Lecture / Tutorial / SGD	K	MCQ / OSPE
	RM-A(P1)	Identify the histological features of trachea under the microscope.	Practical	KSA	MCQ / OSPE
<b>Lung Compliance</b>	P3	Discuss the Work of breathing	Interactive Lecture/ Tutorial	Knowledge	
		Describe lung compliance especially with reference to the role of surfactant		Knowledge	MCQ
<b>Alveolar Ventilation</b>	P4	Discuss ventilation/perfusion ratio	Interactive Lecture	Knowledge	MCQ
<b>Respiratory Membrane &amp; Gases Exchange</b>	P5	Explain the respiratory membrane and factors affecting diffusion of gases across the respiratory membrane	Interactive Lecture/ tutorial SGD	Knowledge	MCQ / OSPE/ google assignment
		Define partial pressure		Knowledge	MCQ
		Discuss its relationship to a gas mixture such as air		Knowledge	MCQ
		Contrast composition of inspired air and alveolar air		Knowledge	MCQ
		Discuss the partial pressure of Oxygen and Carbon dioxide in the venous blood, arterial blood, and alveolar air and in tissue cells.		Knowledge	MCQ / OSPE
		Discuss the effect of partial pressure for gas exchange		Knowledge	MCQ
<b>Pulmonary Circulation</b>	P6	Discuss pulmonary circulation with reference to pulmonary edema	Interactive Lecture	Knowledge	MCQ
<b>Lung Volume And Capacities</b>	P7	Describe different lung volumes and capacities along with their physiological importance	Interactive Lecture/ tutorial	Knowledge	MCQ / OSPE
	P(P)1	Interpret different lung volumes and capacities by Spirometry.	Practical	Knowledge, Skills & Attitude	MCQ / OSPE
<b>Oxygen Transport</b>	P8	Discuss oxygen transport in the blood with O <sub>2</sub> -Hb dissociation curve	Interactive Lecture/ Tutorial	Knowledge	MCQ / OSPE/ google classroom assignment
		Explain the information which can be obtained from the oxygen hemoglobin dissociation curve graph and its shift to the left and right sides with especial reference to Bohr's effect		Knowledge	MCQ / OSPE



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<b>Carbandioxide Transport</b>	P9	Explain carbon dioxide transport in the blood with reference to Haldane effect	Interactive Lecture	Knowledge	MCQ/ quiz assign
		Explain 3 ways in which blood transports CO <sub>2</sub>		Knowledge	MCQ
<b>Nervous Regulation</b>	P10	Describe the role of the four main groups of nuclei in the medulla and pons that control breathing	Interactive Lecture/ tutorial with SGD	Knowledge	MCQ
		Discuss the factors that can influence rate and depth of breathing		Knowledge	MCQ with socrative
<b>Chemical Regulation</b>	P11	Describe locations of chemoreceptors that monitor blood pH and gas concentrations	Lecture	Knowledge	MCQ class test
		Discuss the role of chemoreceptors in the regulation of respiration		Knowledge	MCQ
<b>Respiratory Disorders</b>	P12	Define hypoxia, cyanosis, dyspnea, hypercapnea	Lecture	Knowledge	MCQ
		Discuss the types of hypoxia		Knowledge	MCQ
	P13	Define and give the causes of following disorders Emphysema Bronchitis Asthma Pneumonia Pulmonary edema	Flipped class room	Knowledge	MCQ / Assignment
<b>Dentin</b>	O1+2	Discuss the basic structure & composition of dentine	Lecture/ Tutorial	Knowledge	MCQ / OSPE
	O3	Summarize the types of dentine according to development and histology	Lecture/ Tutorial	Knowledge	MCQ / OSPE
	O4	Identify on micrograph various histological feature of dentine	Lecture/ Tutorial	Knowledge	MCQ / OSPE
	O5	Explain structural and functional histology of dental pulp cells.	Lecture/ Tutorial	Knowledge	MCQ / OSPE
	O6	Critically analyze the theories of dentine sensitivity	Lecture/ Tutorial	Knowledge	MCQ / OSPE
<b>Tooth Supporting Structures</b>	O7-O9	Define periodontium,	Lecture/ Tutorial	Knowledge	MCQ / OSPE
		List the component of periodontium.		Knowledge	MCQ / OSPE
		Explain the biochemical composition of cementum		Knowledge	MCQ / OSPE
	O10-O11	Distinguish among different cementum varieties on histological basis	Lecture/ Tutorial	Knowledge	MCQ / OSPE
	O12-13	Classify periodontal ligament according to architectural arrangement	Lecture/ Tutorial	Knowledge	MCQ / OSPE
Discuss the cells of periodontal		Knowledge		MCQ /	



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		ligament space			OSPE
	O14	Discuss the structure of alveolar bone	Lecture/ Tutorial	Knowledge	MCQ / OSPE
<b>Maxillary Canines</b>	T1-T2	Enumerate the labial, palatal, mesial, distal, and incisal aspects of maxillary canine.		Knowledge	Quiz Assignment
<b>Mandibular Canines</b>	T3	Describe the labial, lingual, mesial, distal, and incisal aspects of mandibular canine.	Lecture/ Tutorial	Knowledge	Quiz Assignment
		Differentiate between maxillary and mandibular canines on the basis of their morphology		Knowledge (THINK PAIR SHARE)	
<b>Water , Ph And Buffers</b>	B1	Explain the biochemical structure of water	Lecture	Knowledge	Quiz Assignment
		Discuss the physical and chemical properties of Water		Knowledge	Quiz
	B2	Define Buffers and name different types of buffers	Lecture	Knowledge	MCQ / Google Assignment ,OSPE
	B3	Discuss acidosis & alkalosis (I)		Knowledge	Quiz / OSPE, google Classroom
	B4	Discuss acidosis & alkalosis (II)	Lecture	Knowledge	
<b>Vitamins</b>	B5	List the sources of Vitamin B1, B2, B3 & B6	Lecture	Knowledge	MCQ/OSPE
		Explain the functions of Vitamin B1, B2, B3 & B6		Knowledge	MCQ/OSPE
		Discuss the clinical abnormalities of Vitamin B1, B2, B3 & B6		Knowledge	MCQ/OSPE
	B6	List the sources of Vitamin E & K	Lecture	Knowledge	MCQ/OSPE
		Explain the functions of Vitamin E & K		Knowledge	MCQ/OSPE
		Discuss the clinical abnormalities of Vitamin E & K		Knowledge	MCQ/OSPE
	B(P)1	Detection of pH by litmus paper of PH meter, & Hypertonic, Hypotonic & isotonic solutions	Practical	Skill	OSPE



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ISLAMIC STUDIES				
Topic	Objectives	Mode of Teaching	KSA Competencies	Assessment Tools
		Lecture/ Tutorials	Knowledge/ Skill/ Attitude	
<b>INTRODUCTION TO THE HOLY QURAN</b>				
<b>Introduction To The Holy Quran</b>	<ul style="list-style-type: none"> <li>Discuss the importance of the Quran in our daily lives</li> </ul>	Lecture	Knowledge	MCQs
	<ul style="list-style-type: none"> <li>Describe briefly the history of revelation of the Quran (Prediction of Warqa bin Naufal, 1st Revelation etc).</li> </ul>	Lecture		
	<ul style="list-style-type: none"> <li>Explain how the Quran is the greatest miracle of Rasool-ullah (S.A.W).</li> </ul>			
	<ul style="list-style-type: none"> <li>Explain how the Quran was compiled in different ways in the era of:                             <ul style="list-style-type: none"> <li>Rasool-ullah (S.A.W)</li> <li>Abu Bakar ( R.A.)</li> <li>Usman Ghani (R.A.)</li> </ul> </li> </ul>			
	<ul style="list-style-type: none"> <li>Discuss the Quranic Sciences (Uloom ul Quran):                             <ul style="list-style-type: none"> <li>Definition and differences between Makkan and Madinah verses or chapters.</li> <li>Explain the Shan e Nuzool / reasons for the revelation (Two examples)</li> </ul> </li> </ul>			
	<ul style="list-style-type: none"> <li>Differentiate between the Abrogator &amp; Abrogated verses (Nasikh &amp; Mansookh) (Two examples)</li> </ul>			



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INTRODUCTION TO ETHICS				
Topic	Objectives	Mode of Teaching	KSA Competencies Knowledge/Skill/ Attitude	Assessment Tools
		Lecture/Tutorials		
Conflict of interest	• Define conflict of interest	Lecture	Knowledge	MCQs
	• Explain the various forms of conflict of interest			





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RESEARCH				
Topic	Objectives	Learning Strategy	KSA Competencies Knowledge/ Skill/ Attitude	Assessment Tools
<b>Hypothesis, its types and errors in hypothesis testing</b>	<ul style="list-style-type: none"><li>• Classify hypothesis</li><li>• Explain types of erosion hypothesis testing</li><li>• Discuss how the errors can be prevented</li></ul>	Lecture	KSA	Summative Assignment
<b>Designing a questionnaire</b>	<ul style="list-style-type: none"><li>• Define purpose and scope of the questionnaire.</li><li>• Identify relevant variables to be measured.</li><li>• Select suitable question types (e.g., multiple-choice, Likert scale).</li><li>• Construct clear, concise, and unambiguous questions.</li><li>• Ensure validity and reliability of the questionnaire.</li></ul>	Lecture	KSA	Summative assignments research based

