ZIAUDDIN UNIVERSITY
EXAMINATION BOARD

Higher Secondary School Certificate
(HSSC)

Examination Syllabus

Hematology
and
Blood Banking
XI

Based on Curriculum of Medical Technology developed by Curriculum Wing Ministry of Education, Islamabad

You can approach us:

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PREFACE

The Ziauddin University Examination Board (ZUEB) was established under **Sindh ACT XLI 2018**, with the primary objective of enhancing the quality of education in Sindh. ZUEB is responsible for administering examinations for the **Secondary School Certificate (SSC)** and **Higher Secondary School Certificate (HSSC)** in alignment with the curriculum of Medical Technology set by the **Curriculum Wing, Ministry of Education, Islamabad.** Through its ordinance, ZUEB is mandated to provide examination services for both English, Urdu, and Sindhi medium candidates from private schools across Sindh. This examination syllabus reflects ZUEB's dedication to achieving the educational goals set by the provincial authorities.

In collaboration with subject professors, ZUEB has developed a comprehensive syllabus for each subject. It is important to distinguish between the syllabus and the curriculum. The syllabus serves as a guide for both teachers and students, outlining the key areas of focus within the subject. It provides students with a clear understanding of what is expected of them in their studies and helps them prepare effectively for their exams.

This examination syllabus incorporates all cognitive outcomes derived from the **Curriculum of Medical Technology**, ensuring that assessments are both valid and reliable. While the focus is primarily on the cognitive domain, significant emphasis is placed on the application of knowledge and understanding.

The syllabus is made available to all stakeholders via the ZUEB website to assist affiliated schools in planning their teaching. It is crucial to note that the syllabus, rather than the prescribed textbook, forms the foundation of ZUEB examinations. Additionally, this syllabus supports the development of learning materials for both students and teachers. ZUEB remains committed to supporting students undertaking the SSC and HSSC courses by facilitating their learning outcomes through this detailed syllabus document.

To further assist in the learning process, ZUEB plans to provide a dedicated **e-resource tab** on its website, offering both text-based and video content on various subjects. These 15-20 minute instructional videos, created around key subject concepts, allow students to learn at their own pace and convenience. The videos can be used as a reinforcement tool to revisit lessons already taught or as pre-lesson material. This initiative is an ongoing effort, and new videos will continue to be uploaded.

We encourage all students and educators to make the most of these resources for a more enriched and flexible learning experience.

Sincerely,
Shahbaz Nasim
Head – Measurement & Testing
Ziauddin University Examination Board

Reviewed by:
Sana Anwer Ali
Manager Sciences
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Rationale For The Reviewed Provincial Curriculum

The process of revising the National Curriculum 2006 began in August 2004, when the newly elected government of Pakistan initiated education reforms across the country. These reforms included the introduction of a new National Education Policy, a National Education Census, and a revision of curricula (Ministry of Education, 2009).

In practice, the overhaul of the secondary school curriculum began in 2006, leading to a review of the scheme of studies for classes I to XII and the revision of curricula for 25 compulsory subjects.

The 18th Amendment to the Constitution of Pakistan, enacted in 2010, significantly altered the federal-provincial relationship by abolishing the "concurrent legislative list." This amendment granted provinces greater legislative and financial autonomy in sectors such as education and health. The most notable implication of the 18th Amendment for education was the transfer of responsibility for curriculum development, syllabus planning, policy formation, and educational standards to the provinces, marking a significant step forward for education.

The School Education Department tasked a Curriculum Review Team with revising the National Curriculum 2006 for all subjects. The goal was to create a curriculum better suited to the needs of students and teachers while aligning with the principles of the 18th Amendment. Subject-specific curriculum review committees were established to critically examine and align the curriculum's content, both contextually and textually, ensuring coherence across various subjects. The Bureau of Curriculum (BoC) played a crucial role in organizing workshops and meetings in Hyderabad to facilitate the completion of this task. The support of numerous educationists, researchers, and teachers was invaluable in successfully revising the curriculum.

The Ziauddin University Examination Board (ZUEB) SSC and HSSC syllabi are developed in accordance with the Revised Curriculum. To date, textbooks for various subjects have been developed based on the revised curriculum.

ZIAUDDIN UNIVERSITY EXAMINATION BOARD

SLOs CATEGORIZATION

XI-Hematology and Blood Banking

Detailed Syllabus

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
A	Introduction	A-01	Define hematology and describe its importance in medical science.		✓	
		A-02	Identify the scope of hematology including clinical, laboratory, and transfusion branches.		✓	
		A-03	Explain the relationship of hematology with other branches of pathology.			✓
		A-04	Describe the basic structure, nature, and functions of blood.		✓	
		A-05	Classify the components of blood into cellular and plasma constituents.		✓	
		A-06	Discuss the morphology, functions, and life span of RBCs, WBCs, and platelets.			✓
		A-07	Differentiate between granulocytes and agranulocytes.		✓	
		A-08	Define hematopoiesis and identify its primary sites during different life stages.		✓	
		A-09	Describe the role of bone marrow, liver, spleen, and thymus in blood cell formation.			✓
		A-10	Interpret the role of blood in transport, protection, and regulation functions.			✓
		A-11	Identify common hematological disorders (e.g., anemia, leukemia and thalassemia).		✓	

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
		A-12	Explain the diagnostic importance of tests like CBC, peripheral smear, and bone marrow examination.			✓
		A-13	Describe the function of plasma proteins and electrolytes.		✓	
		A-14	Recognize the role of hematology in modern medical diagnosis and therapy including cancer treatment.			✓
		A-15	Correlate the abnormalities in blood tests with clinical conditions.			✓
		A-16	Study of haemocytometer - Neubaur chamber - W.B.C and R.B.C. pipette (Practical).			✓
		A-17	Introduction and general requirements for hematological laboratory (Practical).			✓
B	White Blood Cell	B-01	Define white blood cells (WBCs) and describe their general role in immunity and defense.	✓		
		B-02	Classify white blood cells into granulocytes and agranulocytes with examples.		✓	
		B-03	Explain the process of hematopoiesis and describe how WBCs originate from hematopoietic stem cells.		✓	
		B-04	Differentiate between the myeloid and lymphoid cell lineages with reference to WBC types.		✓	
		B-05	Describe the maturation stages of granulocytes, monocytes, and lymphocytes.		✓	
		B-06	Identify and explain the morphological characteristics of mature WBCs under microscope.			✓

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
		B-07	Discuss the specific functions of neutrophils, eosinophils, basophils, monocytes, and lymphocytes.		✓	
		B-08	Interpret total leukocyte count (TLC) and differential leukocyte count (DLC) in clinical settings.			✓
		B-09	Recognize and interpret abnormal WBC conditions such as leukocytosis, leukopenia, and leukemia.			✓
		B-10	Correlate changes in WBC count with clinical conditions (e.g., infection, allergy, leukemia).			✓
		B-11	To estimate the total number of leucocytes (white blood cells) per cubic millimeter of blood using a hemocytometer (Practical).			✓
		B-12	To prepare a stained blood smear and identify different types of white blood cells (WBCs) under the microscope, determining their percentage distribution in the blood (Practical).			✓
C	Red Blood Cells (Erythrocytes)	C-01	Define and describe the structure and morphology of Red Blood Cells (RBCs).		✓	
		C-02	Identify and explain the stages of erythropoiesis from proerythroblast to mature erythrocyte.			✓
		C-03	Explain the structural composition and types of hemoglobin in RBCs.		✓	
		C-04	Define reticulocyte and describe its morphology, function, and clinical significance.			✓
		C-05	Describe the procedure, principle, and interpretation of the Osmotic Fragility Test.			✓

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
		C-06	Recognize and classify abnormalities in size, shape, and color of RBCs (anisocytosis, poikilocytosis, etc.).			✓
		C-07	Correlate RBC morphology with hematologic conditions and diagnostic indicators.			✓
		C-08	Preparation of blood film for red cell morphology and study of morphology of Red Blood Cells (Practical).			✓
		C-09	Determine the percentage of reticulocytes (immature red blood cells) in a blood sample as an indicator of bone marrow activity (Practical).			✓
D	Hemoglobin	D-01	Define hemoglobin and describe its physiological role in oxygen and carbon dioxide transport.		✓	
		D-02	Identify and describe the composition and structure of hemoglobin (heme and globin chains).		✓	
		D-03	Explain the types of hemoglobin (HbA, HbF, HbA_2) and their clinical relevance.			✓
		D-04	Describe the process of hemoglobin synthesis and regulatory factors.		✓	
		D-05	State the normal values of hemoglobin across different age groups and genders.		✓	
		D-06	Define anemia and classify it based on morphology and etiology.		✓	
		D-07	Describe causes, symptoms, and types of anemia including nutritional and genetic types.			✓

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
		D-08	Identify key laboratory investigations used in the diagnosis of anemia.		✓	
		D-09	Discuss preventive measures for common forms of anemia.			✓
		D-10	Explain the significance of hemoglobinopathies such as thalassemia and sickle cell disease.			✓
E	Erythrocyte Sedimentation Rate	E-01	Define Erythrocyte Sedimentation Rate (ESR) and state its normal reference values for different age groups.	✓		
		E-02	Describe the basic principle and physiological mechanism of ESR including rouleaux formation.		✓	
		E-03	Compare the Westergren and Wintrobe methods of ESR estimation.		✓	
		E-04	Explain the significance of automated ESR methods in modern laboratory practice.		✓	
		E-05	Identify physiological and pathological factors that influence ESR values.		✓	
		E-06	Interpret increased or decreased ESR values in various clinical conditions such as infections, anemia, or malignancy.			✓
		E-07	Evaluate the clinical usefulness of ESR in monitoring disease progression and treatment response.			✓
		E-08	List pathological conditions that elevate or decrease ESR and correlate with patient symptoms.		✓	
		E-09	Apply knowledge of ESR			✓

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
			interpretation to differentiate inflammatory from non-inflammatory conditions.			
		E-10	Determine the rate at which red blood cells (erythrocytes) settle at the bottom of a vertical tube in a specified time by using Wintrobe's method and Westergren's method (Practical).			✓
F	Blood Parasites	F-01	Define parasite and classify blood parasites with relevant examples.		✓	
		F-02	Describe the modes of transmission of Plasmodium, Leishmania, and filarial parasites.		✓	
		F-03	Explain the life cycle of Plasmodium in human and mosquito hosts.		✓	
		F-04	Describe diagnostic methods for malaria including microscopy, RDT, and PCR.			✓
		F-05	Explain the life cycle and pathophysiology of Wuchereria bancrofti.		✓	
		F-06	Discuss laboratory diagnostic methods and hematological findings in filariasis.			✓
		F-07	Explain the types, clinical symptoms, and life cycle of Leishmania.		✓	
		F-08	Describe diagnostic techniques for visceral leishmaniasis including microscopy and serology.			✓
		F-09	Prepare and examine thick and thin blood films for the detection and identification of blood parasites such as malaria, filariasis, and leishmaniasis (Practical).			✓

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
G	Coagulation Mechanism	G-01	Define coagulation and hemostasis, and describe the phases of hemostasis.		✓	
		G-02	Explain the importance of coagulation and outline the consequences of its disturbances.		✓	
		G-03	Identify the cellular and chemical components of the coagulation system.			✓
		G-04	Describe the coagulation factors and their respective names and functions.		✓	
		G-05	Explain the coagulation cascade, including intrinsic, extrinsic, and common pathways.			✓
		G-06	Describe laboratory tests for evaluating coagulation and their clinical significance.			✓
		G-07	Classify common coagulation disorders and correlate them with specific lab findings.			✓
H	Bone Marrow Study	H-01	Define bone marrow and differentiate between red and yellow marrow.		✓	
		H-02	Explain the functions of bone marrow in hematopoiesis and immunity.		✓	
		H-03	Describe the stages and sites of hematopoiesis from embryonic to adult life.		✓	
		H-04	Illustrate the differentiation pathways of hematopoietic stem cells into myeloid and lymphoid lineages.			✓
		H-05	Describe the bone marrow microenvironment and the role of cytokines and growth factors.		✓	

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
		H-06	Explain the regulation mechanisms of hematopoiesis including demand-based control and apoptosis.		✓	
		H-07	Describe the procedure and purpose of bone marrow aspiration.			✓
		H-08	Describe the procedure and purpose of bone marrow biopsy.			✓
		H-09	Interpret common findings from bone marrow examinations and their diagnostic significance.			✓
		H-10	Identify common bone marrow disorders based on cellularity, infiltration, or fibrosis.		✓	
		H-11	List and define key terms related to bone marrow study such as dry tap, blasts, myelofibrosis, etc.		✓	
I	Leukemia	I-01	Define leukemia and describe its major characteristics.		✓	
		I-02	Classify leukemia based on cell lineage and clinical progression.			✓
		I-03	Differentiate between ALL, AML, CLL, and CML based on key features.			✓
		I-04	Identify major etiological and risk factors of leukemia.		✓	
		I-05	Explain the pathophysiology and clinical features of leukemia.			✓
		I-06	Describe diagnostic methods used in the identification and classification of leukemia.			✓
		I-07	Summarize treatment options for different types of leukemia.			✓
		I-08	Identify key prognostic indicators and complications related to		✓	

	Content	SLO No.	SLOs Student Learning Outcomes	K	U	A
			leukemia treatment.			
J	Blood banking	J-01	Define blood bank and explain its organization and role in transfusion medicine.		✓	
		J-02	Classify blood components and describe their clinical applications.		✓	
		J-03	Explain the ABO and Rh blood group systems and their clinical significance.			✓
		J-04	Describe the principles and procedures of crossmatching and Coombs test.			✓
		J-05	List donor eligibility criteria and outline the process of blood donation.		✓	
		J-06	Discuss the storage requirements and shelf life of blood components.		✓	
		J-07	Identify transfusion reactions and apply methods for their prevention and management.			✓
		J-08	Determine Rh (Rhesus) blood grouping of an individual using slide and tube methods, and the clinical importance of the Du factor (Practical).			✓
		J-09	Determine ABO blood group using slide and tube methods, and confirm the result by reverse grouping (Practical).			✓

Ziauddin University Examination Board

Grade XI

Hematology and Blood Banking

Table of Specification (TOS)

S.No	Domains	Weightage in assessment 100%	MCQs 1 mark each	PBAs 1 mark each	CRQs 4 marks each	ERQs 8 marks each
1	Introduction	4%	1	-	1	-
2	White Blood Cell	13%	2	2	1	1
3	Red Blood Cells (Erythrocytes)	16%	2	2	2	1
4	Hemoglobin	13%	2	2	1	1
5	Erythrocyte Sedimentation Rate	5%	1	2	1	-
6	Blood Parasites	7%	1	-	-	1
7	Coagulation Mechanism	16%	2	2	2	1
8	Bone Marrow Study	4%	1	-	1	-
9	Leukemia	5%	1	2	1	-
10	Blood Banking	18%	4	3	2	1
Total # of Questions asked			**17**	**15**	**12**	**3 (with sub parts a and b, each of 8 marks)**
Total # of Questions to be attempted			**17**	**15**	**9**	**2 (with sub parts)**
Maximum marks attainable			**17 marks**	**15 marks**	**36 marks**	**32 marks**

Ziauddin University Examination Board
Grade XI
Hematology and Blood Banking
Scheme of Assessment

Maximum marks: 100

Section "A"

Multiple Choice Questions (MCQs) **(17 x 1 = 17)**

- Attempt 17 MCQs: Each carries equal marks.

Practical based assessments (PBAs) **(15 x 1 = 15)**

- Attempt 15 MCQs: Each carries equal marks.

Section "B" (Constructed Response Questions)

Constructed Response Questions (CRQs) **(9 x 4 = 36)**

- Attempt any 9 questions out of 12. Each carries equal marks.

Section "C" (Extended Response Questions)

Extended Response Questions (ERQs) **(4 x 8 = 32)**

- Attempt any 2 questions with its both sub parts (a and b) out of three questions.
- Each sub part consists of eight (08) marks.

DEFINITIONS OF COGNITIVE LEVELS

Remember

Remembering is the act of retrieving knowledge and can be used to produce things like definitions or lists. The student must be able to recall or recognise information and concepts. The teacher must present information about a subject to the student, ask questions that require the student to recall that information and provide written or verbal assessment that can be answered by remembering the information learnt.

Question Stems

- Can you name all the …?
- Describe what happens when …?
- How is (are) …?
- How would you define …?
- How would you identify …?
- How would you outline …?
- How would you recognise…?
- List the … in order.
- What do you remember about …?
- What does it mean?
- What happened after?
- What is (are) …?
- What is the best one?
- What would you choose …?
- When did …?
- Where is (are) …?
- Which one …?
- Who spoke to …?
- Who was …?
- Why did …?

Understand

The next level in the taxonomic structure is Understanding, which is defined as the construction of meaning and relationships. Here the student must understand the main idea of material heard, viewed, or read and interpret or summarise the ideas in their own words. The teacher must ask questions that the student can answer in their own words by identifying the main idea.

Question Stems

- Can you clarify…?
- Can you illustrate …?
- Condense this paragraph.
- Contrast …
- Does everyone think in the way that … does?
- Elaborate on …
- Explain why …
- Give an example
- How can you describe...?
- How would you clarify the meaning...?
- How would you compare …?
- How would you differentiate between…...?
- How would you describe…?
- How would you generalise…?
- How would you identify …?
- Is it valid that …?
- Is this the same as …?
- Outline …
- Select the best definition...
- State in your own words...
- This represents …
- What are they saying?
- What can you infer from …?
- What can you say about …?
- What could have happened next?
- What did you observe?

	• What does this mean? • What expectations are there? • What information can you infer from…? • What is the main idea of …? • What restrictions would you add? • What seems likely? • What seems to be …? • What would happen if …? • What might happen if …? • Which are the facts? • Which statements support …?
Apply The third level in Bloom's taxonomy, Applying, marks a fundamental shift from the pre-Bloom's learning era because it involves remembering what has been learnt, having a good understanding of the knowledge, and applying it to real-world exercises, challenges or situations. Students must apply an abstract idea in a concrete case to solve a problem or relate it to prior experience. The teacher must provide opportunities for students to use theories and problem-solving techniques in new situations and review and check their work. Assessment questions should be provided that allow students to define and solve problems. **Question Stems** • Can you group by characteristics such as …? • Choose the best statements that apply... • Clarify why … • Do you know of another instance where …? • Draw a story map... • Explain why a character acted in the way that he did... • From the information given, can you develop a set of instructions about …? • How would you develop …? • How would you change …? • How would you demonstrate…?	**Analyse** Analysing is the cognitive level where students can take the knowledge they have remembered, understood and applied, then delve into that knowledge to make associations, discernments or comparisons. Students should break down a concept or idea into parts and show relationships between these parts. Teachers must give students time to examine concepts and their requisite elements. Students are required to explain why they chose a solution. **Question Stems** • Can you distinguish between …? • Can you explain what must have happened when …? • Determine the point of view, bias, values, or intent underlying the presented material... • Discuss the pros and cons of … • How can you classify … according to …? • How can you compare the different parts? • How can you sort the different parts…? • How is … connected to …? • How is … similar to …? • How would you categorise…? • How would you explain...?

• How would you develop? • How would you explain …? • How would you modify …? • How would you present…? • How would you solve …? • Identify the results of … • Illustrate the … • Judge the effects of … What would result …? • Predict what would happen if … • Tell how much change there would be if … • Tell what would happen if … • What actions would you take to perform …? • What do you think could have happened next? • What examples can you find that? • What other way would you choose to …? • What questions would you ask of …? • What was the main idea …? • What would the result be if …? • Which factors would you change if …? • Who do you think…? • Why does this work? • Write a brief outline … • Write in your own words …	• What could the ending have been if ... had taken place? • State the point of view of … • What are some of the problems of …? • What assumptions …? • What can you infer about…? • What can you point out about….? • What conclusions …? • What do you see as other possible outcomes? • What does the author assume? • What explanation do you have for …? • What ideas justify the conclusion? • What ideas validate…? • What is the analysis of …? • What is the function of …? • What is the problem with …? • What motive is there? • What persuasive technique is used? • What statement is relevant? • What was the turning point? • What were some of the motives behind …? • What's fact? Opinion? • What's the main idea? • What's the relationship between? • Which events could not have happened? • Why did … changes occur? • Why do you think ?

BLOOM'S TAXONOMY WITH EXAMPLES

If you are a teacher looking for ways to engage your students in learning, this LIST of questions might be interesting for your classroom practice. Bloom's Taxonomy question stems can help elicit higher-order thinking skills and promote critical thinking among learners at different taxonomy levels. These question stems can also encourage students to think about their knowledge through reflection before answering questions.

ACTION WORDS FOR COGNITIVE LEVELS

Knowledge	Understand	Apply	Analyze	Evaluate	Create
					
define	explain	solve	analyze	reframe	design
identify	describe	apply	appraise	criticize	compose
describe	interpret	illustrate	judge	evaluate	create
label	paraphrase	modify	support	order	plan
list	summarize	use	compare	compare	combine
name	classify	calculate	decide	classify	formulate
state	compare	change	discriminate	contrast	invent
match	differentiate	choose	recommend	distinguish	hypothesize
recognize	discuss	demonstrate	summarize	infer	substitute
select	distinguish	discover	assess	separate	write
examine	extend	experiment	choose	explain	compile
locate	predict	relate	convince	select	construct
memorize	associate	show	defend	categorize	develop
quote	contrast	sketch	estimate	connect	generalize
recall	convert	complete	grade	differentiate	integrate
reproduce	demonstrate	construct	measure	divide	modify
tabulate	estimate	dramatize	predict	order	organize
tell	express	interpret	rank	prioritize	prepare
Copy	identify	manipulate	score	survey	produce

discover	indicate	paint	select	calculate	rearrange
duplicate	infer	prepare	test	conclude	rewrite
enumerate	relate	teach	argue	correlate	adapt
listen	restate	act	conclude	deduce	anticipate
observe	select	collect	consider	devise	arrange
omit	translate	compute	critique	diagram	assemble
read	ask	explain	debate	dissect	choose
recite	cite	list	distinguish	estimate	collaborate
record	discover	operate	editorialize	evaluate	facilitate
repeat	generalize	practice	justify	experiment	imagine
retell	group	simulate	persuade	focus	intervene
visualize	illustrate	transfer	rate	illustrate	make
	judge	write	weigh	organize	manage
	observe			outline	originate
	order			plan	propose
	report			question	simulate
	represent			test	solve
	research				support
	review				test
	rewrite				validate
	show				

HSSC PART I EXAMINATION
MARKS BREAKUP GRID FOR EXAMINATION 2026

GROUP: PRE-MEDICAL

SUBJECT	THEORY	PBA	TOTAL
ENGLISH	100	-	100
URDU NORMAL / URDU EASY	100	-	100
ISLAMIYAT / RELIGIOUS STUDIES	50	-	50
PHYSICS	85	15	100
CHEMISTRY	85	15	100
BIOLOGY	85	15	100
TOTAL	505	45	550

GROUP: PRE-ENGINEERING

SUBJECT	THEORY	PBA	TOTAL
ENGLISH	100	-	100
URDU NORMAL / URDU EASY	100	-	100
ISLAMIYAT / RELIGIOUS STUDIES	50	-	50
PHYSICS	85	15	100
CHEMISTRY	85	15	100
MATHEMATICS	100	--	100
TOTAL	520	30	550

GROUP: GENERAL SCIENCE

SUBJECT	THEORY	PBA	TOTAL
ENGLISH	100	-	100
URDU NORMAL / URDU EASY	100	-	100
ISLAMIYAT / RELIGIOUS STUDIES	50	-	50
PHYSICS	85	15	100
COMPUTER SCIENCE	75	25	100
MATHEMATICS	100	--	100
TOTAL	510	40	550

GROUP: COMMERCE

SUBJECT	THEORY	PBA	TOTAL
ENGLISH	100	-	100
URDU NORMAL / URDU EASY	100	-	100
ISLAMIYAT / RELIGIOUS STUDIES	50	-	50
ECONOMICS	75	-	75
P.O.C	75	-	75
ACCOUNTING	100	--	100
BUSINESS MATHEMATICS	50		50
TOTAL	550	---	550

GROUP: HUMANITIES

(Any Three Electives)

SUBJECT	THEORY	PBA	TOTAL
ENGLISH	100	-	100
URDU NORMAL / URDU EASY	100	-	100
ISLAMIYAT / RELIGIOUS STUDIES	50	-	50
COMPUTER SCIENCE	75	25	100
ISLAMIC STUDIES	100		100
MATHEMATICS	100	-	100
SOCIOLOGY	100	--	100
ECONOMICS	100		100
EDUCATION	100		100
CIVICS	100		100
NURSING	85	15	100
TOTAL	550	---	550

GROUP: MEDICAL TECHNOLOGY

SUBJECT	THEORY	PBA	TOTAL
ENGLISH	100	-	100
URDU NORMAL / URDU EASY	100	-	100
ISLAMIYAT / RELIGIOUS STUDIES	50	-	50
MICROBIOLOGY	85	15	100
HEMATOLOGY & BLOOD BANKING	85	15	100
ANATOMY & PHYSIOLOGY	85	15	100
TOTAL	505	45	550

GROUP: PRE-NURSING

SUBJECT	THEORY	PBA	TOTAL
ENGLISH	100	-	100
URDU NORMAL / URDU EASY	100	-	100
ISLAMIYAT / RELIGIOUS STUDIES	50	-	50
BIO-CHEMISTRY	85	15	100
FUNDAMENTALS OF NURSING	85	15	100
ELEMENTARY ANATOMY & MICRO TECHNIQUE	85	15	100
TOTAL	505	45	550