

## Higher Secondary School Certificate (HSSC)

**Examination Syllabus** 

Foundation of Nursing XII

**Based on Provincial Revised Curriculum (Sindh)** 

S.No.	Table of Contents	Page No.
1	Preface	03
2	Rationale for the reviewed Provincial Curriculum	04
3	Aims and Objectives of the subject	05-06
4	Topics and Student Learning Outcomes of the Examination Syllabus	07-10
5	No of SLOs by Cognitive Levels & Table of Specifications	11-12
6	Skills (Lab work) & Equipment Required	13-14
7	Definition of Cognitive Levels and Command Words in the SLOs	15-19

### You can approach us:

Address: Ziauddin University Examination Board

D / 20 Block 1 Clifton Karachi Phone: 92 21 35148594

E-mail: info@zueb.edu.pk
Website: www.zueb.edu.pk

### 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 most recent revisions to the **National Curriculum**, as outlined by the **Directorate of Curriculum Assessment and Research** (**DCAR**), **Sindh**. 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 **Provincial Curriculum Statement**, 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 provides 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,

Sana Anwer Ali Manager Sciences Ziauddin University Examination Board

### **Acknowledgement**

The Pre-Nursing syllabus has been meticulously developed in alignment with the DCAR (Directorate of Curriculum, Assessment, and Research) Scheme of Studies, ensuring its relevance to contemporary educational standards while enhancing its authenticity and wider acceptance within the academic and healthcare communities. The collective efforts of the faculty members of Ziauddin University Faculty of Nursing — Ms. Fatima Ali Jawad, Ms. Anisa Bhimani, Ms. Aiman Siddiqui, Mr. Kaleem Sarfaraz, and Ms. Iqra Qureshi — with their expertise and dedication, have been instrumental in shaping this curriculum that aligns with both academic and professional standards.

We would also like to extend our heartfelt thanks to the Dean – Ms. Pamela Marshall, Principal – Ms. Sumaira Punjwanu, and Advisor – Ms. Yasmin Noorani Amarsi, College of Nursing, for their collective leadership, guidance, and unwavering support throughout the curriculum development process.

### 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.

In Sindh, 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 revised National Curriculum, along with the original version, is available on the DCAR website at <a href="http://dcar.gos.pk/BoC\_Other\_Pages/curriculum\_dev.html">http://dcar.gos.pk/BoC\_Other\_Pages/curriculum\_dev.html</a> for easy access.

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

### AIMS AND OBJECTIVES:

### **Aims of the Foundation of Nursing Course**

- The Fundamentals of Nursing course aims to:
- Provide a comprehensive foundation for students to understand the core concepts, principles, and practices of nursing.
- Equip students with essential knowledge about nursing history, healthcare systems, and the roles of nursing professionals in diverse healthcare settings.
- Develop fundamental skills related to patient care, communication, vital sign monitoring, infection control, and emergency first aid.
- Foster critical thinking and clinical reasoning to apply nursing principles in various clinical and community settings.
- Promote ethical and professional nursing practices that are aligned with healthcare standards,
   patient rights, and legal and regulatory requirements.
- Enhance students' ability to care for patients holistically, addressing their physical, emotional, and psychological needs.
- Support the development of competent, compassionate, and culturally sensitive nursing professionals ready to contribute to healthcare improvement at various levels.

### **Objectives of the Foundation of Nursing Course**

- Upon successful completion of this course, students will be able to:
- Describe the key components of nursing practice, including its historical background,
   principles, and the role of nurses in various healthcare settings.
- Identify and explain the functions of the healthcare team and describe the different types of healthcare facilities.
- Demonstrate effective communication skills, both verbal and non-verbal, in patient care and teamwork scenarios.
- Assess vital signs, including temperature, pulse, respiration, blood pressure, oxygen saturation, and weight, while understanding the physiological implications of abnormal readings.
- Apply infection control measures to prevent the spread of infectious diseases in healthcare settings, including standard precautions and isolation techniques.
- Understand and manage basic nursing procedures, such as administering medications, caring for wounds, and providing comfort to patients in need.

- Demonstrate knowledge of patient admission, transfer, and discharge processes, ensuring the safety and proper documentation of each phase.
- Implement principles of first aid in emergency situations, such as managing wounds, burns, shock, poisoning, and fractures.
- Recognize and manage the emotional and psychological aspects of care for patients experiencing grief, loss, and the end-of-life process.
- Understand the importance of professional and ethical conduct in nursing practice, demonstrating respect for patient dignity, confidentiality, and autonomy.
- Identify cultural, social, and psychological factors that affect patient care and apply cultural competence when providing nursing services.
- Develop a commitment to continuous learning and personal development in nursing practice, emphasizing the importance of evidence-based practice and clinical decision-making.

## ZIAUDDIN UNIVERSITY EXAMINATION BOARD XII – FOUNDATION OF NURSING

### **SLOs CATEGORIZATION**

### **Detailed Syllabus**

Unit Title	SLO	Description	K	U	A
1.	1.1	Explain the importance of nursing standards and guidelines in maintaining quality and safety in nursing practice.		≪	
Foundation of Nursing Practice	1.2	Describe key concepts of major nursing theories and their contributions to modern nursing practice. (e.g., Nightingale, Watson, Orem)	<		
	1.3	Apply conceptual frameworks such as the nursing process and Maslow's hierarchy to plan and deliver holistic patient care.			8
	1.4 Explain how cultural diversity influences patient beliefs, behaviors, and healthcare outcomes.				
	1.5	Demonstrate culturally competent care that respects patients' diverse backgrounds and values.			
	1.6	Identify strategies that foster diversity, equity, and inclusion within healthcare teams and organizations.	≪		
	1.7	Differentiate between various nursing roles and their scope of practice within the healthcare system.			
	1.8	Explain the professional responsibilities and accountabilities of nurses in ensuring ethical and legal practice.			
	1.9	Demonstrate effective interprofessional collaboration and communication to enhance patient-centered care.			∜
2. Microbiology	2.1	Explain the origin, historical development, and importance of microbiology in health and disease.		≪	
	2.2	Identify and describe major branches of microbiology and their roles in healthcare, research, and industry. (Industrial, Pharmaceutical, Diagnostic and Clinical)	≪		
	2.3		8		
	2.4	Differentiate between major types of microorganisms such as bacteria, algae, and fungi in terms of structure and function.		$ \checkmark $	
	2.5	Explain the basic concepts of immunity (natural and acquired) and the role of the immune system in defending the body against infection.		$ \checkmark $	
	2.6	Apply microbiological techniques to identify and diagnose infectious agents in clinical samples.			
	2.7	Demonstrate understanding of sources and modes of infection and apply appropriate methods for infection prevention and control.			⊗
	2.8	Describe various beneficial applications of microbiology in medicine, industry, and environmental health.	≪		

Unit Title	SLO	Description	K	U	A
3. Anatomy	3.1	Define anatomy and explain its significance in understanding the structure and function of the human body.	≪		
	3.2	Differentiate between the main subdivisions of anatomy and describe their areas of study. (Gross, Microscopic, Developmental, Specialized)		<	
	3.3	Identify and describe body planes, sections, and cavities used to locate and study organs in the human body.	<		
	3.4	Describe and demonstrate different types of body movements in relation to joints and muscle actions.			$ \checkmark $
	3.5	Identify the main parts of each body system, describe the functions of its organs, explain the overall function of the system, and discuss its importance in maintaining body function. (Nervous, Integumentary, Skeletal, Muscular, Cardiovascular, Respiratory, Lymphatic, Digestive, Urinary, Endocrine, Reproductive)		<b>∜</b>	
4. Physiology	4.1	Define physiology and explain its importance in understanding how different parts of the body function together.	≪		
	4.2	Describe the structure of a typical human cell and explain the physiological functions of its main organelles.			
	4.3	Explain the structure and function of muscle tissue, including muscle contraction, excitation, and relaxation processes.			
	4.4	Apply basic physical principles of pressure, flow, and resistance to understand blood circulation and body fluid movement.			8
	4.5	Identify major human blood groups and explain their physiological importance in transfusion and compatibility.	⋖		
	4.6	Describe common blood disorders, their causes, and their effects on body function. (Anemia, Erythrocytosis, Sickle Cell Anemia, Leucopenia, Hemochromatosis)		≪⁄	
5. Pathophysiology	5.1	Explain the basic concepts of pathophysiology and its importance in understanding disease processes.		$ \checkmark $	
	5.2	Describe how changes in cell structure, function, and growth contribute to the development of disease.			
	5.3	Explain the body's natural defense mechanisms that protect tissues from injury and infection.	≪		
	5.4	Identify types of cell injury and describe how cells adapt to maintain survival under stress.		৶	
	5.5	Explain the process of inflammation, its stages, and its role in tissue repair and disease.			
	5.6	Describe the formation, classification, and effects of benign and malignant tumors on body function. (Neoplasm)	≪		
	5.7	Explain the physiological effects and consequences of oxygen deprivation and reduced blood supply in tissues. (Hypoxia and Ischemia)		$ \checkmark $	

	5.8	Describe the role of the immune system in defense, and differentiate between hypersensitivity reactions and immunodeficiency disorders.		≪	
	5.9	Identify the major classes of immunoglobulins and explain their specific roles in immune defense.	8		
6. Chemistry	6.1	Explain the importance of chemistry in understanding physiological processes and safe nursing practices.			
	6.2	Describe the chemical principles involved in medication administration and identify factors influencing drug interactions in the body.			>
	6.3	Explain the role of major ions in maintaining electrolyte balance and their significance in normal body function.			
	6.4	Describe the chemical basis of body fluids and pH regulation and its importance in maintaining health.			
	6.5	Explain the basic principles of the kinetic molecular theory and its relation to gas behavior in the body.	8		
	6.6	Define mole and Avogadro's number and use them to relate mass, particles, and volume in chemical calculations.			8
	6.7	Describe the structure of the atom and explain how the periodic table organizes elements based on atomic properties.			
	6.8	Explain types of chemical bonding and their role in determining the properties of compounds.			
	6.9	Identify oxidation and reduction processes and explain their importance in biological and chemical systems.			
	6.10	Explain major acid—base theories and apply them to understand buffer systems and pH regulation in the body.			8
7. Biochemistry	7.1	Explain the basic principles of biochemistry and their importance in understanding life processes.			
	7.2	Identify the major biochemical components of a cell and describe their structure and function.	≪		
	7.3	Describe the structure and biological functions of major biomolecules such as carbohydrates, proteins, and lipids (fats).		≪	
	7.4	Differentiate between anabolic and catabolic processes and explain their roles in metabolism and energy regulation.			
	7.5	Identify common biochemical reactions and explain how they contribute to molecular transformations in living cells. (Nucleophilic Substitution, Elimination, Addition, Isomerization, Oxidation–Reduction, Hydrolysis)	≪		
	7.6	Explain how complex cellular structures and biochemical systems interact to maintain high internal organization and stability.		≪	
8. Pharmacology	8.1	Classify drugs according to their chemical nature, source, target organ, mode of action, therapeutic use, and physiological system affected.	≪		
	8.2	Differentiate between chemical, generic, and brand names of drugs and explain their importance in safe medication use.		≪	
	8.3	Explain the processes involved in pharmacokinetics and			

		how they influence drug action and dosage in the body.			
	8.4	Describe how drugs interact with receptors and tissues to produce therapeutic and adverse effects.			
	8.5	Identify the various natural and synthetic sources from which drugs are derived.			
	8.6	Compare local and systemic routes of drug administration, including their advantages, disadvantages, and clinical applications.			8
	8.7	Describe modern drug delivery systems and their benefits in improving drug effectiveness and patient compliance.			
9. Ethics of Nursing	9.1	Explain the historical development of the nursing code of ethics and its significance in guiding professional practice.	$  ext{$\checkmark$ }$		
	9.2	Describe the core values and moral principles that influence ethical decision-making in nursing.			
	9.3	Identify and explain major ethical principles such as autonomy, beneficence, non-maleficence, and justice as applied in nursing care.		<	
	9.4	Demonstrate ethical and culturally competent behavior in providing respectful and inclusive patient care.			8
	9.5	Explain the importance of valuing each patient as an individual and providing holistic care that addresses physical, emotional, social, and spiritual needs.			
	9.6	Apply ethical principles to advocate for the patient's rights, safety, and overall well-being.			<b>&gt;</b>
	9.7	Explain the ethical responsibilities of nurses toward their profession, colleagues, and healthcare institutions.			_
	9.8	Identify the fundamental rights of patients and explain the nurse's role in protecting and upholding them.	$ \checkmark $		

# ZIAUDDIN UNIVERSITY EXAMINATION BOARD XII - FOUNDATION OF NURSING Number of SLOs by Cognitive Levels

S. No	Unit Title	К	U	A	Total SLOs
1	Foundation of Nursing Practice	2	4	3	9
2	Microbiology	3	3	2	8
3	Anatomy	2	2	1	5
4	Physiology	2	3	1	6
5	Pathophysiology	3	6	0	9
6	Chemistry	2	5	3	10
7	Biochemistry	2	4	0	6
8	Pharmacology	2	4	1	7
9	Ethics of Nursing	2	4	2	8
	Total	20	35	13	68
	Percentage 100%	29	52	19	-

## ZIAUDDIN UNIVERSITY EXAMINATION BOARD XII – FOUNDATION OF NURSING Table of Specifications (TOS)

S.No	Domains	Weightage in assessment 100%	MCQs 1 mark each	PBAs 5 marks each	CRQs 4 marks each	ERQs 8 marks each
1	Foundation of Nursing Practice	12	2	1	0	1
2	Microbiology	11	2	0	3	0
3	Anatomy	11	2	0	1	1
4	Physiology	8	2	0	2	0
5	Pathophysiology	12	2	1	0	1
6	Chemistry	11	2	0	1	1
7	Biochemistry	13	1	0	2	1
8	Pharmacology	14	2	0	2	1
9	Ethics of Nursing	8	2	1	1	0
Total # of Questions asked			17	3	12	6
T	otal # of Questions to be a	ttempted	17	3	9	4
	Maximum marks attain	able	17 marks	15 marks	36 marks	32 marks

## ZIAUDDIN UNIVERSITY EXAMINATION BOARD XII – FOUNDATION OF NURSING SKILLS (Lab Work)

- 1. Medical and Surgical Handwashing
- 2. Use of Personal Protective Equipment (PPE)
- 3. Handling and Disposal of Biomedical Waste
- 4. Admission and Discharge of a Patient
- 5. Measuring Vital Signs (Temperature, Pulse, Respiration, BP, Oxygen Saturation)
- 6. Height, Weight, and BMI Measurement
- 7. Mouth Care and Back Care
- 8. Bed Bath for a Dependent Patient
- 9. Patient Positioning, Turning, and Lifting
- 10. Range of Motion (ROM) Exercises
- 11. Deep Breathing and Coughing Exercises
- 12. Wound Cleaning and Dressing
- 13. Application of Hot and Cold Therapy
- 14. Catheter Care (Demonstration)
- 15. Collection of Specimens (Urine, Sputum, Stool, Wound Swab)
- 16. Infection Prevention and Control Techniques
- 17. First Aid and Bandaging
- 18. Cardiopulmonary Resuscitation (CPR) Basic Life Support
- 19. Administration of Oral and Topical Medications (Demo)
- 20. Safe Drug Calculation and Conversion
- 21. Oxygen Therapy Setup and Monitoring
- 22. Blood Sugar Monitoring (Glucometer Use)
- 23. Communication and Interviewing Skills
- 24. Documentation and Nursing Notes
- 25. Culturally Competent and Ethical Nursing Practice

## ZIAUDDIN UNIVERSITY EXAMINATION BOARD XII – FOUNDATION OF NURSING EQUIPMENT REQUIRED

- 1. First Aid Kit
- 2. PPE Kit (Gloves, Masks, Gowns, Face Shields)
- 3. Hand Sanitizer and Soap
- 4. Biomedical Waste Bins (Color-coded)
- 5. Mannequin / Patient Simulator
- 6. Hospital Bed with Linens
- 7. Wheelchair and Stretcher
- 8. BP Apparatus (Mercury and Digital)
- 9. Stethoscope
- 10. Thermometers (Digital / Glass)
- 11. Pulse Oximeter
- 12. Weighing Scale with Height Rod
- 13. Sheets, Pillows, and Turning Sheet
- 14. Bedpan and Urinal
- 15. Dressing Tray and Bandages
- 16. Catheterization Set (Demo)
- 17. Oxygen Cylinder with Flowmeter and Mask
- 18. Suction Apparatus (Demo)
- 19. CPR Mannequin
- 20. Microscope (Demo)
- 21. Glass Slides, Beakers, Test Tubes
- 22. Reagents for Basic Biochemical Tests
- 23. Glucometer with Test Strips
- 24. IV Stand and Infusion Set (Demo)
- 25. Nursing Documentation Forms and Charts

### **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 would 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 could you develop ...?
- How would you change ...?
- How would you demonstrate...?
- How would you develop ... to present?
- How would you explain ...?

### 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?
- If ... happened, what might the ending have been?
- State the point of view of ...
- What are some of the problems of ...?

- 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 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**

### **Conclusion**

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
-	UNDERSTAND				
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
Сору	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				