Academic Year العام الدراسي	2023/2024
Term الفصل	2
Subject المادة	Chemistry /INSPIRE الكيمياء / إنسبير
Grade الصف	11
PLAN -C	
Stream المسار	Advanced المتقدم
Number of MCQ عدد الأسئلة الموضوعية	20
Marks of MCQ درجة الأسئلة الموضوعية	5
Number of FRQ عدد الأسئلة المقالية	0
Marks per FRQ الدرجات للأسئلة المقالية	0
Type of All Questions نوع كافة الأسئلة	الأسئلة الموضوعية/ MCQ
Maximum Overall Grade الدرجة القصوى الممكنة	100
Exam Duration - مدة الامتحان	150 minutes
Mode of Implementation - طريقة التطبيق	SwiftAssess
Calculator الآلة الحاسبة	Allowed مسموحة

Question* السؤال*		Learning Outcome/Performance Criteria** نتائج التعلم/ معايير الأداء**	Reference(s) in the Student Book (English Version) المرجع في كتاب الطالب (النسخة الانجليزية)	
			Example/Exercise مثال/تمرين	Page الصفحة
MCQ - الأسئلة الموضوعية	1	CHM.5.3.04.001.01 List six general properties of aqueous acids (taste, color of indicators, reaction with metals, metal carbonates and bases, and electrical conductivity)	Text book+ Practice problems	116,117
	2	CHM.5.3.04.001.08 Define acids and bases according to Brønsted-Lowry theory, indicating the acid, base, conjugate acid, conjugate base and conjugate acid-base pairs, when chemical equations, formula or space-filling models are given	Text book + Practice problems	119,120,121
	3	CHM.5.3.04.001.11 Define acids and bases according to Lewis theory	Text book	123,124
	4	CHM.5.3.04.003.03 Compare between strong and weak bases (using examples, particulate diagrams and ionization equations)	Text book+ Practice problems	130,131
	5	CHM.5.3.04.006.01 Define acid ionization constant, Ka, while writing the ionization constant expression for different weak acids	Text book+ Practice problems	129
	6	CHM.5.3.04.003.04 Identify the relationship between the strength of an acid and its conjugate base and the strength of a base and its conjugate acid	Text book	128
	7	CHM.5.3.04.007.07 Calculate the pH of a strong acid and weak acid given its concentration	Example Problems 2&3+ Practice problems	134,135,136
	8	CHM.5.3.04.006.04 Calculate the acid dissociation constant, Ka, given acid concentration, [H+] and pH	Example Problem5+ Practice problems	139
	9	CHM.5.3.04.009.01 Describe the titration curve of acid with base with respect to type of pH and nature of solution at equivalence point, indicator used and its color change and volume of titrant needed for changing color of indicator	Text book+ fiqures20	142,143
	10	CHM.5.3.04.009.01 Describe the titration curve of acid with base with respect to type of pH and nature of solution at equivalence point, indicator used and its color change and volume of titrant needed for changing color of indicator	Text book+ fiqures22	144,145
	11	CHM.5.3.04.004.06 Calculate the molarity (concentration) and volume of a solution using titration data	Example Problem6+ Practice problems +problem solving strategy	145,146
	12	CHM.5.3.05.001.01 Distinguish between oxidation and reduction in terms of loss and gain of electrons, oxygen and hydrogen	Text book	156,157
	13	CHM.5.3.05.001.04 Distinguish between oxidation and reduction in terms of change in oxidation number	Text book +table 1	158
	14	CHM.5.3.05.001.08 Identify oxidizing agent and reducing agent in a redox reaction	Text book +table 2	159
	15	CHM.5.3.05.001.03 Assign oxidation number to atoms, ions and compounds according to a set of rules	Example Problem2+ Practice problems+ table 3	162,163,164
	16	CHM.5.3.05.002.05 Balance redox reaction in basic medium using half-reaction method	Example Problem5+ Practice problems + problem solving strategy	169,170,171,172
	17	CHM.5.3.05.007.02 Identify components of a voltaic or galvanic cell (anode, cathode, salt bridge or porous barrier, wires, electrolyte compartments); while explaining the role of each component, when does the reaction start and determining the direction of electron and current flow	Text book	178,179
	18	CHM.5.3.05.004.02 Describe standard hydrogen electrode (SHE), while identifying the importance of its E° value and writing the half-cell reactions of the two possible reactions that could occur at the hydrogen electrode	Text book +fiqures 5&6+table 1	182,183,184
	19	CHM.5.3.05.007.05 Use the half-cell standard reduction potentials to calculate the electrochemical cell standard potential, while determining whether the redox reactions are spontaneous or non-spontaneous	Example Problem1+ Practice problems	185,186,187,188
	20	CHM.5.3.05.011.03 Compare between electrolytic cell and voltaic cell in terms of identifying where will reduction and oxidation processes take place, anode, cathode, direction of electron flow and current flow and spontaneity of the reaction occurring	Text book	200

*	Questions might appear in a different order in the actual exam
*	قد تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي
**	As it appears in the textbook(UAE Edition Grade 12 Aavance Student Edition) , LMS, and (Main_IP).
**	كما وردت في كتاب الطالب(كتاب الطالب الصف الثاني عشر المتقدم طبعة دولة الإمارات العربية المتحدة) وLMS والخطة الفصلية .