

Academic Year	2023/2024
السنة الدراسية	
Term	2
الفصل	
Subject	Chemistry forridge
المادة	الكيمياء / بيريدج
Grade	12
الصف	
Stream	General
التيار	الععم
Number of MCQ	20
عدد الأسئلة الموضوعية	
Marks of MCQ	5
درجة الأسئلة الموضوعية	
Number of FRQ	0
عدد الأسئلة التفسيرية	
Marks per FRQ	0
الدرجات للأسئلة التفسيرية	
Type of All Questions	MCQ/ الأسئلة الموضوعية
نوع أسئلة الأسئلة	
Maximum Overall Grade	100
الدرجة القصوى الإجمالية	
Exam Duration	120 minutes
مدة الامتحان	
Mode of Implementation	SwiftAssess
طريقة التطبيق	
Calculator	Allowed
الإلة الحاسبة	مسموحة

Question*	Learning Outcome/Performance Criteria**	Reference(s) in the Student Book (English Version& Arabic Version)	
		Example/Exercise	Page
السؤال*	نتائج التعلم معايير الأداء**	مثال/تمرين	الصفحة
1	CHM5.4.02.001.05 Describe chemical equilibrium using reactant and product concentration-time graph or particulate diagrams	نص الكتاب + المثال 2 و 3 Textbook+ figure2 and 3	83, 84
2	CHM5.4.02.005.01 Write chemical equilibrium expression for a homogeneous equilibrium system (K _{eq} , K _c and K _p) CHM5.4.02.005.02 Write chemical equilibrium expression for a heterogeneous equilibrium system (K _{eq} , K _c and K _p)	نص الكتاب+مثال 1 و مثال2 + التطبيقات Textbook+example 2+example 3+ applications	89,91
3	CHM5.4.02.006.02 Calculate the equilibrium concentrations of a reactant given the concentration of other reactants, products and equilibrium constant at a certain temperatures	نص الكتاب + 3 التطبيقات Textbook+example 3+ applications	93
4	CHM5.4.02.003.02 Explain the effect of changing the concentration (Adding reactants or removing products or adding products) on an equilibrium system	نص الكتاب + المثال 12 Textbook+ figure12	96,95
5	CHM5.4.02.003.03 Explain the effect of changing the volume and pressure on an equilibrium system	نص الكتاب + المثال 13 Textbook+ figure 13	97,96
6	CHM5.4.02.003.04 Explain the effect of changing temperature on an equilibrium system	نص الكتاب + المثال 14 و المثال 15 Textbook+ figure14 &15	97,98
7	CHM5.3.04.001.01 List six general properties of aqueous acids (taste, color of indicators, reaction with metals, metal carbonates and bases, and electrical conductivity)	نص الكتاب + 2 التطبيقات Textbook+ figure 2+ application	122,123
8	CHM5.3.04.001.03 Differentiate among acidic, basic and neutral solutions (in terms of the relative amounts of hydrogen ions and hydroxide ions)	نص الكتاب+ المثال 3 Textbook+ figure3	124
9	CHM5.3.04.001.08 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, formulae or space-filling models are given	نص الكتاب Textbook	126,127
10	CHM5.3.04.001.11 Define acids and bases according to Lewis theory	نص الكتاب + المثال 2 Textbook+ table62	129,130
11	CHM5.3.04.003.03 Compare between strong and weak bases (using examples, particulate diagrams and ionization equations)	نص الكتاب + المثال 6, 5 Textbook+ table65 &66	136,137
12	CHM5.3.04.003.04 Identify the relationship between the strength of an acid and its conjugate base and the strength of a base and its conjugate acid	نص الكتاب Textbook	134
13	CHM5.3.04.003.02 Relate the strength of weak acids to the numerical values of K _a	نص الكتاب + المثال 4 Textbook+ table64	135
14	CHM5.3.04.006.03 Relate the acidity and basicity of an aqueous solution to the hydronium and hydroxide ion concentrations and pH at 25°C or 298 K	نص الكتاب+مثال 1 + التطبيقات Textbook+example 1+ applications	139, 138
15	CHM5.3.04.005.03 Define pH and write its mathematical formulae	نص الكتاب + المثال 14 و المثال 15 Textbook+ figure14 &15	141,140
16	CHM5.3.04.007.06 Calculate [H ⁺] and [OH ⁻] from pH	نص الكتاب+مثال3 و مثال4 + التطبيقات Textbook+example 3+example 4+ applications	142,143
17	CHM5.3.04.006.04 Calculate the acid dissociation constant, K _a , given acid concentration, [H ⁺] and pH	نص الكتاب+مثال 5 + التطبيقات Textbook+example 5+ applications	145,144
18	CHM5.3.04.004.01 Define neutralization reaction while writing the neutralization equation (Complete ionic and net ionic equations)and define salt	نص الكتاب Textbook	147
19	CHM5.3.04.009.01 Describe the titration curve of acid with base with respect to pH and nature of solution at equivalence point, indicator used and its color change and volume of titrant needed for changing color of indicator	نص الكتاب + المثال 22 و المثال 24 Textbook+ figure22 &24	151,150,149,148
20	CHM5.3.04.004.06 Calculate the molarity (concentration) and volume of a solution using titration data	نص الكتاب+مثال 6 + التطبيقات +مواز التوازن حل المسائل Textbook+example 6+ applications+ problem solving strategy	151,152
* Questions might appear in a different order in the actual exam			
* تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي			
** As it appears in the textbook(UAE Edition Grade 12 Advance Student Edition) , LMS, and (Main, IP).2023-2024			
كما ورتت في كتاب الطالب/ كتاب الطالب الصف الثاني عشر طبعه دولة الإمارات العربية المتحدة) LMS و نسخة القصية . 2024-2023			