

Academic Year العام الدراسي	2023/2024
Term المصطل	1
Subject المادة	Science / Inspire العلوم / إلهام
Grade الصف	8
Stream المسار	General العام
Number of MCQ عدد الأسئلة الموضوعية	15
Marks of MCQ درجة الأسئلة الموضوعية	60
Number of FRQ عدد الأسئلة المقالية	5
Marks per FRQ الدرجات للأسئلة المقالية	40
Type of All Questions نوع كافة الأسئلة	أسئلة مقالية / Paper Part أسئلة موضوعية / MCQs
Maximum Overall Grade الدرجة القصوى الممكنة	100
Exam Duration - مدة الامتحان	150 minutes
Mode of Implementation طريقة التطبيق	Swift/Assess & Paper-Based
Calculator الآلة الحاسبة	Allowed مسموحة

Question* السؤال	Learning Outcome/Performance Criteria** ناتج التعلم / معايير الأداء**	Reference(s) in the Student Book (English Version& Arabic Version) المراجع في كتاب الطالب (النسخة الإنجليزية والنسخة العربية)	
		Example/Exercise مثال/تمرين	Page الصفحة
أسئلة المقالية - Paper part	1	Construct a scientific explanation based on evidence from rock layers for how the geologic time scale is used to build a timeline and organise Earth's history. Define index fossils and recognise	Textbook, figures, 3D 36, 39
	2	Define mutation, identify different types of mutations, and explain the cause of mutations and how mutation affect organisms	Textbook, figures, investigation, 3D 71, 74, 77
	3	Sate the evidence found on the Galapagos island and how it supported the claim that variations helped individuals survive in their environment and eventually evolve by Natural selection	Textbook, figures, 3D 89, 90, 91
	4	Compare between relative-age dating and absolute-age dating according to precision and accuracy given for the fossil age and the proceduer (way) used to determine the age of a fossil	textbook, table 137
	5	1. Analyze distance–time graphs used to represent a journey traveled over a period of time, calculate speed. 2. represent forces on any object and define balanced force and explain why object are stationary, 3. describe and list the estimated values of kinetic and potential energy for projectile objects	textbook, figures, 3D, review 29, 32, 49, 52, 55, 185
أسئلة الموضوعية - MCQ	6	List and explain the principles and methods that geologists use to assign the relative age to rocks layers and features	textbook, figures 10, 11
	7	Analyze a rock sequence to predict the principle used to assign the relative age for the rock	textbook, figures, 3D 17, 18
	8	Compare and contrast between types of unconformity using examples and diagrams	textbook, figures 32, 33
	9	Compare and contrast between the structure and function of DNA and RNA, and Define key terms associated with the structure of DNA	textbook, figures 64, 68
	10	Define adaptation, identify different types of adaptation, and explain why organism that unable to adapt, it becomes extinct	textbook, figures 94
	11	Define adaptation, identify different types of adaptation, and explain why organism that unable to adapt, it becomes extinct	textbook, figures 97
	12	Compare natural and artificial selection in terms of time spans, genetic variation, and level of human interference, suggest characteristics that may be selected for in given examples of animal or plant species, describe some advantages of artificial selection, including the production of desired animals	textbook, lab 106, 108
	13	Define genetic engineering and genetically modified organisms or GMOs, and their advantage and disadvantage, Define the process used genetic engineering to produce insulin or other chemicals to treat cancer	textbook, figures 109, 110
	14	List the five types of fossils, Describe each type and recognise a figure example on it	Textbook, table 135
	15	Explain how natural selection support the theory of evolution, study relatedness of organisms traits, use the comparative anatomy to relate species to their common ancestor	textbook, figures, investigation 153, 154
	16	Compare between distance and displacement, and give the value for each for an object movement	Textbook, figures 19
	17	Calculate acceleration using Newton's second law of motion	Textbook, Example 44
	18	Explain Newton's second and third law, identify the action and reaction in forces, identify force pairs from giving scenario examples	Textbook, figure, 3D 64, 66, 73
	19	Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects and their distance	textbook, figures, 3D 83 - 86, 93
	20	Define kinetic energy as the energy of motion, Describe the relationship between mass and velocity in determining the amount of kinetic energy.	textbook, figures, 3D 116, 123
* Questions might appear in a different order in the actual exam			
** As it appears in the two textbooks(UAE Edition Grade 8 Inspire Student Edition U1 & U2) , LMS, and (Main_IP).			
كما وردت في كتاب الطالب(كتاب الطالب الصف الثامن العام إلهام/الأسئلة الوحيدة 1 & 2 طبعة دولة الإمارات العربية المتحدة) و LMS والبطلة الفصلية .			