

Academic Year السنة الدراسية	2023/2024
Term الفصل	1
Subject المادة	Physics- Bridge
Grade الصف	9
Stream المسار	Advanced
Number of MCQ عدد الأسئلة الموضوعية	15
Marks of MCQ درجة الأسئلة الموضوعية	4
Number of FRQ عدد الأسئلة المقالية	5
Marks per FRQ الدرجات للأسئلة المقالية	10
Type of All Questions نوع كافة الأسئلة	MCQ/ الأسئلة الموضوعية FRQ/ الأسئلة المقالية
Maximum Overall Grade الدرجة القصوى الممكنة	100
Exam Duration مدة الامتحان	150 minutes
Mode of Implementation طريقة التطبيق	SwiftAssess & Paper-Based
Calculator آلة الحاسبة	Allowed مسموحة

Question* السؤال*	Learning Outcome/Performance Criteria** نتائج التعلم/معايير الأداء**	Reference(s) in the Student Book المراجع في كتاب الطالب	
		Example/Exercise مثال/تمرين	Page الصفحة
1	Differentiate between average, instantaneous and free fall acceleration	as mentioned in the book	64,75
2	Apply the equation of motion relating the final velocity of an object to its initial velocity, uniform acceleration, and time ($v_f = v_i + at$)	problems 5,6	67
3	Use appropriate significant figures to record answers from a mathematical operation, with the correct number of digits	problem 12	13
4	Differentiate between distance travelled and displacement	figure 10	40
5	Apply the equation of motion, ($xf = vavg t + xi$) or ($xf - xi = vavg t$), in numerical problems to calculate the position or other physical quantities	exple 4	50
6	List the common steps of scientific method used in investigations	figure 2	9
7	Apply the alternative equation of motion relating an object's final velocity to its initial velocity, its constant acceleration, and its initial and final positions ($v_f^2 = v_i^2 + 2a(x_f - x_i)$)	problem 16	69
8	Apply the equations of motion for objects under free fall to calculate the unknown parameters	problem 43, 44	78
9	Describe the motion of an object if its velocity and acceleration are either in the same directions or opposite directions, hence state if an object is slowing down or speeding up	as mentioned in the book	61
10	Define and calculate the average acceleration	problem 12	67
11	Compare and contrast precision and accuracy with examples	figure 11	15
12	Calculate the displacement as the area under the curve of a velocity-time graph	problem 3	70
13	Classify physical quantities into vector and scalar quantities (distance, mass, displacement, speed, velocity, acceleration, force, work, energy, pressure)	as mentioned in the book	38
14	Recognize uniform or non-uniform motion from a motion diagram or a particle model	figure 2	61
15	List the seven fundamental base quantities and their SI units	table 1	10
16	Identify the shape of a position-time and velocity-time graph for an object with constant acceleration Interpret the velocity-time graph for a single or multiple objects in motion	22 13	70 67
17	Represent data in graphical form, draw the best fit line, and identify from the shape of the graph if the relationship between the variables is linear, quadratic or inverse Find the slope from the graph of a linear relationship	as mentioned in the book	20-22
18	Apply the equation of motion relating the final position of an object to its initial position, initial velocity, uniform acceleration, and time	example 4	72
19	Define and identify independent and dependent variables for a given data set	as mentioned in the book	18
20	Interpret a position-time graph that represents the motion of a single object Interpret a position-time graph that represents the motion of multiple objects	example problem 2	44
*	Questions might appear in a different order in the actual exam, or on the exam paper in the case of G3 and G4.		
*	قد تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي، أو على ورقة الامتحان في حالة الصفين G3 وG4.		
**	As it appears in the textbook, LMS, and (Main_IP).		
**	كما وردت في كتاب الطالب وLMS والخطة الفصلية.		