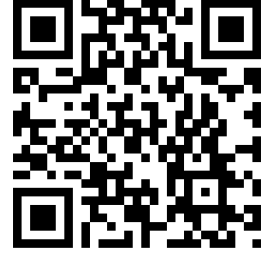


شكراً لتحميلك هذا الملف من موقع المناهج الإماراتية



نموذج الهيكل الوزاري بريدج المسار العام

[موقع المناهج](#) ← [المناهج الإماراتية](#) ← [الصف الحادي عشر العام](#) ← [فيزياء](#) ← [الفصل الثاني](#) ← [الملف](#)

تاريخ نشر الملف على موقع المناهج: 08:25:07 2024-02-20

التواصل الاجتماعي بحسب الصف الحادي عشر العام



روابط مواد الصف الحادي عشر العام على تلغرام

[الرياضيات](#)

[اللغة الانجليزية](#)

[اللغة العربية](#)

[التربية الاسلامية](#)

المزيد من الملفات بحسب الصف الحادي عشر العام والمادة فزياء في الفصل الثاني

نموذج الهيكل الوزاري - بريدج	1
مواصفات الامتحان النهائي للفصل الثاني - منهج انسابير	2
مواصفات الامتحان النهائي للفصل الثاني	3
دليل بالخطوات الفصل الثاني	4
الحركة في بعدين	5

Academic Year السنة الدراسية	2023/2024
Term الفصل	2
Subject المادة	Physics/Bridge الفيزياء/البريدج
Grade الصف	11
Stream المسار	General العام
Number of MCQ عدد الأسئلة الموضوعية	15
Marks of MCQ درجة الأسئلة الموضوعية	4
Number of FRQ عدد الأسئلة المقالية	4
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 الآلة الحاسبة	Allowed مسموحة

Question* السؤال*	Learning Outcome/Performance Criteria** نتائج التعلم / معايير الأداء**	Reference(s) in the Student Book (Arabic Version) المراجع في كتاب الطالب (النسخة العربية)	
		Example/Exercise مثال/تمرين	Page الصفحة
1	1- Calculate the impulse in case of a constant force and in case when the force is not constant by using the average force multiplied by the time interval over which it acts or by finding the area under a force-time graph. 2 - Apply the impulse-momentum theorem to solve relevant problems.	Student Book Q1 - Q5, Q13 - Q14, Q41 - Q59	116 - 119 119, 123, 136-137
2	1- State the impulse-momentum theorem and write it in equation form $F\Delta t = P_f - P_i$. 2- Define the linear momentum of an object as the product of the object's mass and the object's velocity and specify its unit.	Student Book Q1 - Q5, Q13 - Q14, Q41 - Q59	116 - 119 119, 123, 136-137
3	1- Define a closed system as a system that does not gain or lose mass. 2- Define an isolated system as a closed system where the net of external forces is zero. 3- Define the law of conservation of linear momentum.	Student Book Q60, Q63-Q64; Q25	125 137, 161
4	Define the system and apply the law of conservation of linear momentum to different situations in one dimension like recoil, propulsion in space, or others to calculate different physical quantities.	Student Book Q34-Q35, Q61, Q68, Q83-Q86	127-128 133, 137, 138, 139
5	1- Recall that the translational kinetic energy is proportional to the square of the object's speed and object's mass. 2- Define the linear momentum of an object as the product of the object's mass and the object's velocity and specify its unit.	Student Book Q1, Q10, Q36; Q2, Q3, Q26, Q27, Q35, Q37, Q40-Q44	117, 145 119, 123, 136, 145, 161, 164
6	Determine the international unit by which all types and forms of energy are measured.	Student Book	151-152
7	1- Calculate the work done by the gravitational force when an object is lifted or lowered from a reference level. 2- Discuss energy transformations in situations where an object moves vertically upward or downward.	student Book Q10, Q30, Q35, Q48-Q50, Q65	147-149, 152 161, 164, 166
8	Define the term elastic potential energy and give examples.	Student Book Q11; Q8	150-151 152; 169
9	1- Relate the rotational kinetic energy to the object's moment of inertia and its angular velocity: $KE_{rot} = \frac{1}{2} I \omega^2$ 2- Calculate the translational and rotational kinetic energies for objects.	Student Book Q4, Q14-Q15, Q20, Q76	59-62 146, 152, 157, 166
10	Analyze collisions and compare elastic collision and inelastic collision.	Student Book	Figure 13: Types of collisions P.159
11	Identify that heat Q is positive if thermal energy is absorbed by an object and negative if thermal energy is transferred from an object	Student Book Q9, Q42; Q3	174 181, 194; 197
12	1- Explain how a simple calorimeter can be used to measure the specific heat capacity of a substance. 2- Apply the conservation of energy for solving problems on specific heat capacity involving calorimeters.	Student Book	179-180
13	1- Describe what happens during a phase change in terms of the heat energy absorbed or released. 2- Relate the changes of state to the heats of fusion and vaporization, while the temperature remains constant.	Student Book Q53-Q56	183-184 195
14	1- Define the melting and boiling points of a substance. 2- Relate the changes of state to the heats of fusion and vaporization, while the temperature remains constant	Student Book Q19-Q23	182-183 93, 108
15	1- Identify that temperatures do have a lower limit of -273.15°C (zero on kelvin scale). 2- Differentiate between the three temperature scales: Celsius, Fahrenheit, and Kelvin scales. 3- Explain why the term absolute zero is appropriate for the coldest temperature possible. 4- Convert temperatures from Celsius scale to Fahrenheit or Kelvin scales and vice versa. 5- Identify that a change of one degree is the same on the Celsius and Kelvin scale.	Student Book Q10, Q11; Q1	174-176 181; 197
16	1- Explain what happens when a player hits a ball in terms of the acting forces and their effects on the colliding objects before, during, and after collision. 2- Define impulse as the product of average force on an object and the time interval over which it acts. Derive impulse expression from Newton's Second Law of motion and specify its unit 3- Solve problems involving impulse. 4- Apply the impulse-momentum theorem to solve relevant problems.	Student Book Q1-Q5, Q41-Q55	116-119 119, 136-137
17	1- State and explain the law of conservation of energy. 2- Define mechanical energy as the sum of all kinetic and $(K_E + P_E = K_{E_f} + P_{E_f})$ system; $ME = KE + PE$. 3- Apply the law of conservation of mechanical energy to solve problems on different physical situations like roller coaster rides, skiing on ski slopes, motion on inclined planes/ hills, motion of pendulums, or others.	Student Book Q16-Q18, Q29, Q80, Q89; Q6	153-156 157, 161, 167; 169
18	Identify that if a heat transfer Q takes a substance across a phase-change temperature, the transfer must be calculated in steps: (a) a temperature changes to reach the phase change temperature, (b) the phase change, and then (c) any temperature change that moves the substance away from the phase-change temperature.	Student Book Q1-Q3, Q4-Q8, Q19-Q23, Q43-Q52; Q4-Q6	177-180, 182-185 178, 180, 185, 194-195; 197
19	1- Explain how impulse-momentum theorem is used to save lives in case of car air bags. 2- Define mechanical energy as the sum of all kinetic and $(K_E + P_E = K_{E_f} + P_{E_f})$ system; $ME = KE + PE$. 3- Define and describe thermal energy transfer by convection and by radiation and identify common occurrences of thermal energy transfer processes (conduction, convection, and radiation). 4- State and explain the law of conservation of energy. 5- Define mechanical energy as the sum of all kinetic and potential energies of the system; $ME = KE + PE$.	Student Book Q12, Q50, Q81, Q97-Q98; Q9, Q69; Q19, Q30, Q65	119, 176-177, 145, 153-154 123, 136, 139, 140; 181, 195, 157, 161, 166
20			
*	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, LMS, and (Main_IP).		
**			كما وُجدت في كتاب الطالب و LMS والخطة التفصيلية.
***	Physical units are distinctive for any physical quantity, and a distinguishing mark for it. Therefore, care must be taken to guide students by giving the appropriate physical unit for each quantity.		
***			الوحدات الفيزيائية مميزة لأي كمية فيزيائية، وعلامة فارقة لها، ل هذا يجب الاهتمام بتوجيه الطلاب بالاطاء الوحدة الفيزيائية المناسبة لكل كمية.