شكراً لتحميلك هذا الملف من موقع المناهج الإماراتية

نموذج الهيكل الوزاري الجديد انسباير

تاريخ نشر الملف على موقع المناهج: 03-11-2023 12:19:20

التواصل الاجتماعي بحسب الصف العاشر المتقدم

المزيد من الملفات بحسب الصف العاشر المتقدم والمادة فيزياء في الفصل الأول

1	ملخص شامل مع حلول للاختبارات المقننة
2	حل أسئلة الامتحان الوزاري النهائي
3	حل أسئلة الامتحان النهائي
4	ملخص أهم قوانين المادة
5	حل تجميعة أسئلة وفق الهيكل الوزاري انسباير

Academic Year	2023/2024
العام الدراسي	
Term	1
الفصل	
Subject	Pysics/Inspire
المادة	الفيزياء/انسباير
Grade	10
الصف	
Stream	Advanced
المسار	المتقدم
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	(6-9)
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	Paper-Based
Calculator	Allowed
الآلة الحاسبة	مسموحة

	Question* السؤال*	Learning Outcome/Performance Criteria** ناتج 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	Define periodic motion and quantities associated with periodic motion like period and amplitude.	Student Book Q8, Q13	4 9
	2	1- Determine what affects the period of a simple pendulum. 2- Apply the equation ( ) to calculate the period of a simple pendulum for small-angle oscillations.	Student Book Q5-Q7, Q11	8-9 9
	3	1- Apply the law of conservation of energy for both a horizontal oscillating mass-spring system and simple pendulum to relate the total energy of each system at one instant to the total energy at another instant. 2- Describe the energy transformations between potential energy and kinetic energy for both a horizontal oscillating mass-spring system and a simple pendulum.	Student Book Q9, Figure 3	5-7 9
	4	Differentiate between transverse, longitudinal, and surface waves and give examples.	Student Book Q25-Q27	10-11 15
	5	1- Relate the wavelength, frequency, and the speed of a sound wave by the equation = /f . 2- Conduct an experiment to investigate the speed of sound .	Student Book Q14-Q23	11-14 15
	6	Describe the sound level and define the decibel (dB) as a unit of measuring sound level.	Student Book Q9	31-32 35
	7	Define sound pitch and relate it to the frequency of a sound wave.	Student Book Q6-Q8, Q13	31-32, 37-40 35, 42
	8	Calculate the Doppler shifted frequency of a sound or light wave by an observer in relative motion with the source.	Student Book Q1-Q5	32-35 34
	9	Evaluate the resonant frequencies in strings and air pipes (open- and closed-pipe resonators).	Student Book Q13-Q16, Q18-Q19, Q21	37-42 42, 46
	10	1- Explain that the speed of sound varies with different mediums and temperatures. 2- Use the relation between resonance length and wave length to solve problems for closed and open pipes.	Student Book Q14-Q15	29-30, 37-40 42
	11	Sketch the electric field lines to model the electric field around single point charges (positive or negative) and for a pair of electric charges	Student Book Figure 19 & Figure 20	70-71
	12	Demonstrate knowledge of electrostatic charge, differentiate materials based on their electrical conductivity, and describe the methods of electrical charging of objects	Student Book Q1-Q8	52-55 56
	13	Demonstrate an understanding that the spacing between the field lines indicates the strength of the electric field in a given region.	Student Book Q38	66-67, 70-71 72
	14	Develop a tool, sketches, descriptive text or presentation to show the morphology of electric field lines of a single or multiple charge system with positive and/or negative charges.	Student Book Figure 19 & Figure 20	70 70-71
	15	Develop a tool, equation, or sketch, to obtain the resultant electric field strength at a point generated by a nearby system of point charges using the superposition principle.	Student Book Q24-Q37	67-69 68-69
FRQ - الأسئلة المقالية	16	1- Apply Hookefs law to calculate the force exerted by a spring, the spring constant, or the distance by which a spring is stretched or compressed. 2- Solve problems related to an oscillating mass . spring system and a simple pendulum to calculate different physical quantities (velocities, kinetic energy, potential energy, period or length of simple pendulum...).	Student Book Q1-Q4; Q9	4-7 7; 9
	17	1- Sketch snapshots for the superposition of two overlapping wave pulses (same wavelength) traveling in opposite directions showing the resultant wave. 2- Determine wave properties such as wavelength, period, frequency, amplitude, and speed using a graphical or a visual representation of a periodic mechanical wave.	Student Book	17-18; 10-14
	18	1- Compare the wavelengths and resonant frequencies for pipes with closed ends with those for open end pipes (open- and closed-pipe resonators). 2- Discuss resonance frequencies and colulmn lengths for a closed pipe and an open pipe.	Student Book Q13-Q16, Q18-Q19, Q21	37-40 42. 46
	19	1- Solve problems involving the electrostatic force acting on charged particles by making use of Coulomb's Law 2- Develop a tool, equation or sketch, to obtain the resultant electric force exerted on a point charge by a nearby system of charges using the superposition principle.	Student Book Q13-Q14, Q22-Q23	61-64 64, 65
	20	1- Distinguish between electrical conductors and insulators giving typical examples. 2- Explore the Doppler effect of sound or light.	Student Book	55-56, 32-35

*	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 وردت في كتاب الطالب وLMS والخطة الفصلية .