

مسودة الهيكل الوزاري الجديد منهج انسابير



تم تحميل هذا الملف من موقع المناهج الإماراتية

موقع المناهج ⇨ المناهج الإماراتية ⇨ الصف العاشر المتقدم ⇨ فيزياء ⇨ الفصل الأول ⇨ ملفات متنوعة ⇨ الملف

تاريخ إضافة الملف على موقع المناهج: 2025-10-15 22:55:20

ملفات اكتب للمعلم اكتب للطالب ا اختبارات الكترونية ا اختبارات ا حلول ا عروض بوربوينت ا أوراق عمل
منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك ا الامتحان النهائي ا للمدرس

المزيد من مادة
فيزياء:

التواصل الاجتماعي بحسب الصف العاشر المتقدم



صفحة المناهج
الإماراتية على
فيسبوك

الرياضيات

اللغة الانجليزية

اللغة العربية

التربية الاسلامية

المواد على تلغرام

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

مذكرة الوحدة الثالثة lens and refraction منهج انسابير

1

أسئلة مراجعة في الاهتزازات والموجات

2

أوراق عمل درس الحركة الدورية قانون هوك

3

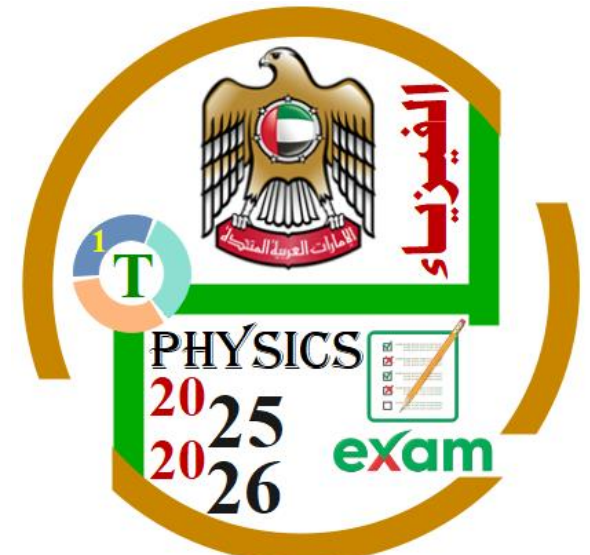
أوراق عمل مراجعة وحدة الاهتزازات والموجات

4

ملخص الوحدة الثالثة Motion Accelerated منهج انسابير مع تدريبات محلولة

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Academic Year العام الدراسي	2K ²⁵ /2K ²⁶
Term/الفصل	①
Subject الموضوع	Physics (INSPIRE)
Grade الصف	10
Stream. المسار	Advanced المتقدم
Number Of MCQ عدد الأسئلة الموضوعية	20
Marks of MCQ درجة الأسئلة الموضوعية	2→4
Number of FRQ عدد الأسئلة المقالية	4
Marks Per FRQ الدرجات للأسئلة المقالية	9→11
Type of All Questions نوع كافة الأسئلة	الأسئلة الموضوعية / MCQ/ الأسئلة المقالية / FRQ
Maximum Overall Grade الدرجة القصوى الممكنة	100
Exam Duration مدة الامتحان	150 min
Mode of implementation طريقة التطبيق	Paper-Based & Swift Assess.
Calculator الآلة الحاسبة	Allowed مسموحة



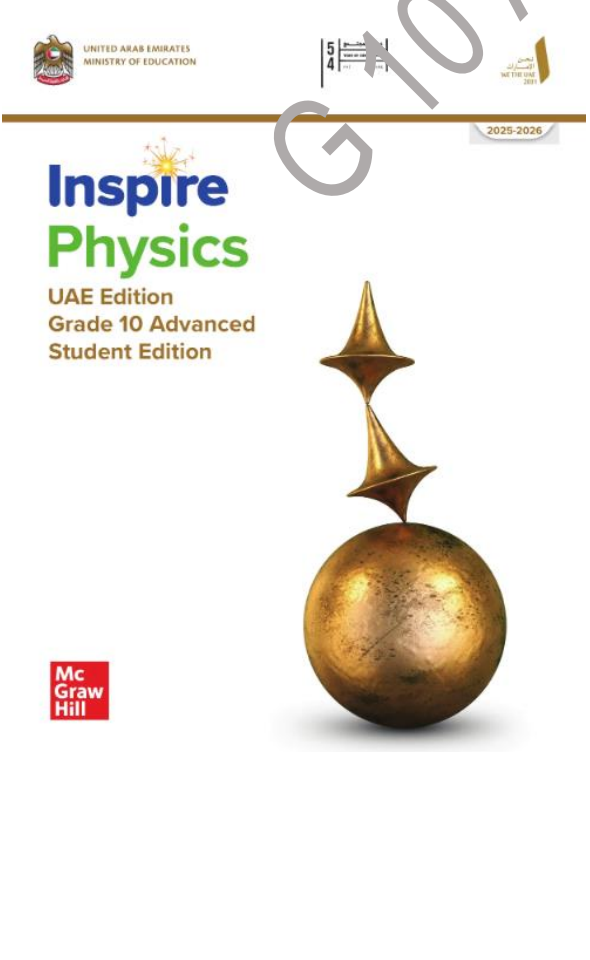
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4

عام المجتمع

YEAR OF COMMUNITY

UAE



Type	Question ن* السؤال	ناتج التعلم / معايير الأداء** Learning Outcome/Performance Criteria**	المرجع في كتاب الطالب (النسخة الانجليزية) Reference(s) in the Student Book (English Version)	
			مثال/تمرين. Example /Exercise.	Page. صفحة
الأسئلة الموضوعية MCQ – [60%]	1	❖ Define periodic motion and quantities associated with periodic motion like period and amplitude. ❖ Describe the characteristics of simple harmonic motion.	Student Book	3
	2	Apply Hooke’s law to calculate the force exerted by a spring, the spring constant, or the distance by which a spring is stretched or compressed.	Student Book Example Problem 1 Practice Problem Q. (3)	4 6 6
	3	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.	Student Book Check Your Progress Q. (9)	5 8
	4	Determine what affects the period of a simple pendulum.	Student Book Get It	7 7
	5	Differentiate between <u>transverse</u> , <u>longitudinal</u> , and <u>surface waves</u> and give examples.	Student Book	9 → 10
	6	Describe wave properties like <u>amplitude</u> , <u>energy</u> of a wave, <u>wavelength</u> , <u>speed</u> , <u>phase</u> , <u>period</u> and <u>frequency</u> .	Student Book	10 → 11
	7	Describe wave properties like <u>amplitude</u> , <u>energy</u> of a wave, <u>wavelength</u> , <u>speed</u> , <u>phase</u> , <u>period</u> and <u>frequency</u> .	Student Book	10 → 11
	8	Calculate the frequency of a wave from its period and vice-versa ($f=\frac{1}{T}$).	Student Book Practice Problem (21,22,23)	12 14
	9	❖ Describe the behaviour of mechanical waves at boundaries (reflection and refraction). ❖ Describe that a mechanical wave is inverted if reflected from a fixed end and remains upright if reflected from a free end.	Student Book	15 → 16
	10	State and apply the principle of superposition to show that two overlapping waves add algebraically to give a resultant (or net) wave.	Student Book	16 → 17
	11	❖ Describe the formation of standing waves on a string. ❖ Define nodes and antinodes and describe how they are formed.	Student Book	18
	12	❖ Describe the representation of waves in two-dimensions. ❖ Use a ripple tank to model wave behaviour in two dimensions (such as reflection and refraction of waves traveling on the surface of water).	Student Book	18 → 20
	13	Explain that the speed of sound varies with different mediums and temperatures.	Student Book	27 → 28
	14	❖ Define sound pitch and relate it to the frequency of a sound wave. ❖ Define loudness and relate it to the amplitude of a sound wave.	Student Book	29
	15	❖ Define the Doppler Effect. ❖ Explain the Doppler Effect of sound.	Student Book	30 → 31
	16	Define nodes and antinodes and discuss pressure and displacements at these points in case of open and closed pipes.	Student Book	36 → 37
	17	❖ Use the relation between resonance length and wave-length to solve problems for closed and open pipes. ❖ Explain resonance on strings and identify the relations between wavelength, frequency, and the string length.	Student Book Get It	36 → 39 38
	18	Explain the factors that affect the speed of travel of a wave on a string.	Student Book	39
	19	❖ Define timbre in music as the difference between sound waves of different instruments. ❖ Define the fundamental frequency and harmonics and their relation with the timbre of a musical instrument.	Student Book	41
	20	❖ Define a beat as oscillating high and low sound levels produced from the interference of two sound waves of nearly identical frequencies. ❖ Calculate the frequency of a beat as the magnitude of the difference between the frequencies of the two waves	Student Book	43
الأسئلة المقالية - [40%] FRQ –	21	1 PART ↳ Describe the characteristics of simple harmonic motion. ↳ Describe simple harmonic motion (mass – spring oscillator and a simple pendulum) at maximum displacement and at equilibrium positions in terms of velocity, acceleration, restoring force, and kinetic and potential energy.	Student Book Figure 1	3 3
		2 PART ↳ Describe the energy transformations between potential energy and kinetic energy for both a horizontal oscillating (mass – spring) system and a simple pendulum.	Student Book	5
	22	1 PART ↳ Calculate the potential energy stored in a spring graphically from the area under a force vs extension graph. ↳ Calculate the spring constant graphically from the slope of force vs extension graph.	Student Book Example, Problem 1 Practice Problem Q.(1,2)	4 6 6
		2 PART ↳ Describe the motion of an oscillating simple pendulum. ↳ Apply the equation ($T=2\pi\sqrt{\frac{l}{g}}$) to calculate the period of a simple pendulum for small-angle oscillations.	Student Book Example, Problem 2 Practice Problem Q.(6,7)	7 8 8
	23	1 PART ↳ Determine wave properties such as wavelength, period, frequency, amplitude, and speed using a graphical or a visual representation of a periodic mechanical wave. ↳ Apply the relation ($v=\lambda f$) to calculate the speed, wavelength, or frequency of a wave.	Student Book Example, Problem 3 Practice Problem Q.(14,20)	12 13 14
		2 PART Apply the Doppler effect equation ($f_d=f_s[\frac{\theta-\theta_d}{\theta-\theta_d}]$) to calculate different frequencies and velocities.	Student Book Example, Problem 1 Practice Problem Q.(2,3,4)	30 → 31 32 32
	24	1 PART Use the relation between resonance length and wave-length to solve problems for closed and open pipes.	Student Book Example, Problem 2 Practice Problem Q.(15,16)	36 → 37 40 40
		2 PART Apply the equation for illuminance of a point source to numerical problems.	Student Book Example, Problem 1 Practice Problem Q.(3,5,6)	55 56 56
*	قد تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي، أو على ورقة الامتحان. / Questions might appear in a different order in the actual exam, or on the exam paper.			
**	كما وردت في كتاب الطالب وLMS والخطة الفصلية. / As it appears in the textbook, LMS, and (Main_IP).			