

تم تحميل هذا الملف من موقع المناهج الإماراتية



## الهيكل الوزاري الجديد منهج بريدج المسار المتقدم

[موقع المناهج](#) ⇨ [المناهج الإماراتية](#) ⇨ [الصف الثاني عشر المتقدم](#) ⇨ [فيزياء](#) ⇨ [الفصل الثالث](#) ⇨ [الملف](#)

تاريخ إضافة الملف على موقع المناهج: 2024-05-20 10:49:28

## التواصل الاجتماعي بحسب الصف الثاني عشر المتقدم



اضغط هنا للحصول على جميع روابط "الصف الثاني عشر المتقدم"

## روابط مواد الصف الثاني عشر المتقدم على تلغرام

[الرياضيات](#)

[اللغة الانجليزية](#)

[اللغة العربية](#)

[التربية الاسلامية](#)

## المزيد من الملفات بحسب الصف الثاني عشر المتقدم والمادة فيزياء في الفصل الثالث

<a href="#">أسئلة الامتحان النهائي الالكتروني والورقي</a>	1
<a href="#">أسئلة اختبار دوري في الدروس الثلاثة الأولى من الوحدة التاسعة</a>	2
<a href="#">ملزمة الوحدة العاشرة دارات التيار المتناوب مع تدريبات</a>	3
<a href="#">الدروس المحذوفة من مقرر الفيزياء</a>	4
<a href="#">أسئلة الاختبار التكويني الأول الوحدة التاسعة الحث الكهرومغناطيسي</a>	5

Academic Year العام الدراسي	2023/2024
Term الفصل	3
Subject المادة	Physics/Bridge الفيزياء / جسر
Grade الصف	12
Stream	Advanced المقدم
Number of MCQ عدد الأسئلة الموضوعية	15
Marks per MCQ الدرجات لكل سؤال	4
Number of FRQ عدد الأسئلة المقالية	5
Marks per FRQ الدرجات لكل سؤال	6-12
*** Type of All Questions نوع كافة الأسئلة	Part (1) MCQ Part (2) FRQ
* 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 indicator (Topic) نتائج التعلم / مؤشر الأداء (عنوان)	Reference(s) in the Student Book المراجع في كتاب الطالب	
		Example/Exercise مثال/تمرين	Page الصفحة
1	Describe experiments to show that changing magnetic field inside a conducting loop induces a current in the loop.	As mentioned in the textbook Q. 9.5	226 251
2	Calculate the magnetic flux $\phi$ B through a given surface.	As mentioned in the textbook	227-228
3	Describe, based on the equation of Faraday's Law, that potential difference could be induced in a loop either by varying the magnetic field 'B' with time (A and $\theta$ are constant), changing the area 'A' of the loop with time (B and $\theta$ are constant), or changing the angle ' $\theta$ ' between the magnetic field and the normal to the loop with time (A and B are constant), and demonstrate that by mathematical equations	As mentioned in the textbook	229-230
4	State Lenz's Law as: 'An induced current in a loop will have a direction such that the magnetic field due to the induced current opposes the change in the magnetic flux that induces the current' Induced Potential Difference on a Wire Moving in a Magnetic Field Solve problems related to Lenz's Law, and motional emf	As mentioned in the textbook FIGURE 9.10	232-235
5	Induced Potential Difference on a Wire Moving in a Magnetic Field Solve problems related to Lenz's Law, and motional emf Induced potential difference as a function of time for a generator	As mentioned in the textbook EXAMPLE 9.4 Q. 9.9	235-237 236 251
6	Generators and Motors Identify electric generators and electric motors as everyday applications of electromagnetic induction and electromagnetic force.	As mentioned in the textbook FIGURE 9.20	239-240 240
7	Induced Electric Field Solve problems related to induced electric field by changing magnetic flux.	As mentioned in the textbook	240-241
8	Unit of inductance Define the inductance of a device as a measure of its opposition to changes in current flowing through it, measured in henry (H)	As mentioned in the textbok	240-241
9	constant ( $\tau$ ) in RL circuit Calculate the inductive time constant $\tau$ RL for an RL circuit	As mentioned in the textbook SOLVED PROBLEM 9.3 Q. 9.49	245-246 246 254
10	LC Circuits Recall that the energy stored in the electric field of a capacitor of capacitance C, at any instant, is given by $U_E = \frac{1}{2} \frac{q^2}{C}$ Recall that the energy stored in the magnetic field of an inductor with inductance L, at any instant, is $U_B = \frac{1}{2} L I^2$	As mentioned in the textbook Q. 10.28 Q. 10.29	258-260 285
11	Self-Induction Define self-induction and mutual induction	As mentioned in the textbook	242
12	Mutual Induction Solve problems related to self-induction and mutual induction	As mentioned in the textbook SOLVED PROBLEM 9.2	242-244
13	Alternating current circuit Describe the alternating sinusoidal current, induced in a circuit containing a sinusoidal time varying source	As mentioned in the textbook FIGURE 10.8	264-265
14	Single-loop circuit with a resistor and a source of time-varying emf varying voltage across the resistor, for a circuit consisting of a resistor and a source of time varying emf.	As mentioned in the textbook	264-265
15	Derive an expression for the current across the resistor, in a circuit consisting of a resistor and a source of time varying emf, as $i_R = \frac{V_R}{R} = \frac{V_B}{R} \sin(\omega t) = I_R \sin(\omega t)$	As mentioned in the textbook	264-265
1	Solve problems related to Self Inductance of a Solenoid	As mentioned in the textbook	241
2	Apply the ideal transformer equation ( $\frac{I_S}{I_P} = \frac{V_P}{V_S} = \frac{N_P}{N_S}$ ) to solve numerical problems.	As mentioned in the textbook	279-281
3	Solve problems related to Mutual Induction of a Solenoid and a Coil	SOLVED PROBLEM 9.2	242-244
4	Solve problems related to Lenz's Law	Example 9.3 and Example 9.4	236-237
5	Solve problems related to LC oscillator showing the variations of charge, current, energy stored in elect	As mentioned in the textbook	258-260
**	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 scheme of work (SoW). كما وردت في كتاب الطالب وLMS والعطة الفصلية.		