

تم تحميل هذا الملف من موقع المناهج الإماراتية



## الهيكل الامتحاني الوزاري الجديد منهج بريدج الخطة M

موقع المناهج ← المناهج الإماراتية ← الصف الثاني عشر المتقدم ← فيزياء ← الفصل الثاني ← ملفات المدرس ← الملف

تاريخ إضافة الملف على موقع المناهج: 19:50:17 2025-02-13

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

المزيد من مادة  
فيزياء:

## التواصل الاجتماعي بحسب الصف الثاني عشر المتقدم



صفحة المناهج  
الإماراتية على  
فيسبوك

الرياضيات

اللغة الانجليزية

اللغة العربية

التربية الاسلامية

المواد على تلغرام

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

الهيكل الامتحاني الوزاري الجديد منهج بريدج الخطة C

1

مراجعة الوحدة السادسة دوائر التيار المستمر

2

عرض بوربوينت شرح القسم السادس المغناطيسية

3

عرض بوربوينت شرح المجالات المغناطيسية للتيار الكهربائي المستمر

4

عرض بوربوينت درس التيار والمقاومة

5

Academic Year السنة الدراسية	2024/2025
Term الفصل	2
Subject المادة	Physics/Bridge M.102.A الفيزياء / بريدج
Grade الصف	12
Stream المستوى	Advanced المتقدم
Number of Questions عدد الأسئلة	SWIFT 15 Paper Part 4
Type of All Questions نوع كافة الأسئلة	SWIFT: MCQ Paper Part: FRQ
Maximum Overall Grade الدرجة القصوى الممكنة	100

Mode of Implementation - طريقة التطبيق	SwiftAssess & Paper-Based
Calculator الآلة الحاسبة	Allowed مسموحة
Exam Duration - مدة الامتحان	150 minutes

Part الجزء	Question السؤال	Learning Outcome* نتائج التعلم*	Reference(s) in the Student Book المراجع في كتاب الطالب	
			Example/Exercise مثال/تمرين	Page الصفحة
SWIFT	1	Show that by definition the electric current is related to net charge through the equation between current and charge related to time ..... Apply the relations to calculate electric current at a point and the $(I=dq/dt)$ net amount of charge passing a given point in time t.	As mentioned in the textbook	117
SWIFT	2	Define the current density J as the current per unit area flowing through a conductor.	As mentioned in the textbook	119
SWIFT	3	Apply the equation $(R_{pl}/A)$ in solving problems to calculate an unknown quantity given the other quantities. Analyse the equation $(R_{pl}/A)$	As mentioned in the textbook As mentioned in EXERCISE 5.32	121-123 141
SWIFT	4		As mentioned in Self-Test Opportunity 5.2	125- 127
SWIFT	5 6 7	Calculate the equivalent resistance for resistors connected in series as the sum of their individual resistances. Apply Ohm's Law $(I=\Delta V/R)$ considering internal resistance of a battery. Calculate the equivalent resistance for resistors in parallel arrangements $(1/R_{eq}=1/R_1+1/R_2+...)$ .	As mentioned in FIGURE 5.12 As mentioned in EXAMPLE 6.3 As mentioned in Concept Check 5.6	127- 128 128 130- 133
SWIFT	8	Apply the equations of power $(P=I\Delta V)$ for any electric device and $(P=I^2R=(\Delta V)^2/R)$ a resistor to solve numerical problems.	As mentioned in the textbook As mentioned in EXERCISE 5.57 b	134 143
SWIFT	9	Define the electric capacitance of a conductor as the quotient of division of the electric charge on the conductor by the electric potential on the conductor, and express that in an equation.	As mentioned in the textbook	88-89
SWIFT	10	Recall that in a single loop circuit, the current is the same everywhere in the circuit Analyse single loop circuits containing two sources of emf and circuit elements.	As mentioned in FIGURE 4.8	90
SWIFT	11	Show that the capacitance of a parallel plate capacitor depends on the geometry of the capacitor which is on the area of the plates and the distance between them and not on the charge or the potential difference across the capacitor. Solve problems on parallel plate capacitor.	As mentioned in the textbook	91-92
SWIFT	12 13	Develop a tool, experimental setup, mathematical equation or simulation to describe the equivalent capacitance of a set of capacitors connected in parallel and in series, and estimate the potential difference and charge of each capacitor.	As mentioned in FIGURE 4.8 As mentioned in EXAMPLE 4.2	94-95 96-97
SWIFT	14	Apply the relationship between the potential energy U stored in a capacitor, the capacitance C or charge q of the capacitor, and the potential difference $\Delta V (U = 0.5q^2/C = 0.5q\Delta V)$ .	As mentioned in the textbook As mentioned in EXERCISES 5.45 and 5.46	97-99 111
SWIFT	15	Develop a method such as schematic representations and a mathematical equation to show the effect of dielectric insulators on the capacitance and energy stored in capacitors and other variables.	As mentioned in the textbook As mentioned in Concept Check 4.11	101-103

**Important note: Please pay attention to specifying the units of measurement when solving problems, as grades will be calculated based on the units. Drawing relationships between variables, identifying and drawing the best fit line connecting the points, and finding values from the graph.**  
 ملاحظة هامة: يرجى ضرورة الاهتمام بتحديد وحدات القياس عند حل المسائل، حيث سيرصد درجات على الوحدات كما يرجى تدريب الطلبة على رسم العلاقات بين متغيرات وتحديد أفضل خط يصل بين النقاط وإيجاد قيم من الرسم البياني

Paper part	1	Distinguish between ohmic and non-ohmic resistors and give examples. Recall and apply Ohm's Law $(I=\Delta V/R)$ .	As mentioned in the textbook As mentioned in FIGURE 5.2	125-127
Paper part	2	Calculate currents, voltages, and equivalent resistances for circuit arrangements containing resistors in series and in parallel. Solve problems involving resistors connected in series and parallel in a circuit.	As mentioned in the textbook As mentioned in EXAMPLE 5.4	130-132
Paper part	3	Apply the relationship between the magnitude of charge q on either plate of a capacitor, the potential difference $\Delta V$ across the capacitor, and the capacitance C of the capacitor.	As mentioned in the textbook	88-89
Paper part	4	Solve problems on parallel plate capacitor. Show that the capacitance of a parallel plate capacitor depends on the geometry of the capacitor which is on the area of the plates and the distance between them and not on the charge or the potential difference across the capacitor.	As mentioned in EXAMPLE 4.1	90-92