

## تم تحميل هذا الملف من موقع المناهج الإماراتية



## الهيكل الامتحاني الوزاري الجديد منهج انسابير

موقع المناهج ← المناهج الإماراتية ← الصف العاشر المتقدم ← فيزياء ← الفصل الثاني ← الامتحان النهائي ← الملف

تاريخ إضافة الملف على موقع المناهج: 20:09:29 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 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 الثاني

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Testing and Assessment Department

إدارة الاختبارات والتقييم للتعليم العام

## Exam Coverage

### الهيكل الامتحاني

الفيزياء

Academic Year	2024/2025
العام الدراسي	
Term	2
الفصل	
Subject	Physics/فيزياء
المادة	
Grade	10
المستوى	
Stream	Advanced
الصف	
Number of MCQ	15
عدد الأسئلة المتعددة الخيارات	
Marks of MCQ	4
حجم الأسئلة المتعددة الخيارات	
Number of FRQ	5
عدد الأسئلة المفتوحة	
Marks per FRQ	8
حجم الأسئلة المفتوحة	
Type of All Questions	MCQ الأسئلة الموضوعية / FRQ الأسئلة المفتوحة
نوع كافة الأسئلة	
Maximum Overall Grade	100
الدرجة القصوى الإجمالي	
Exam Duration	150 minutes
مدة الاختبار - طريقة التطبيق	
Mode of Implementation	SwiftAssess & Paper-Based
Calculator	Allowed
آلة الحاسبة	مسموحة

Question*	Learning Outcome/Performance Criteria**	Reference(s) in the Student Book ( English Version)	
		Example/Exercise	Page
السؤال*	ناتج التعلم /معايير الأداء**	مثال /لمرن	الصفحة
الأسئلة الموضوعية - MCQ	1. Sate Ohm's law and applies it to simple circuits ( $\Delta V=IR$ ), and define a resistor as a device designed to have a specific resistance, and identify its SI unit as ohms (Ω).	Student Book Q.(13 - 18)	P.(93 - 94) P.96
	2. Analyze simple electrical circuits that contain combinations of resistors and batteries, and evaluate the current passing each resistor and the potential difference across it.	Student Book Q.(8 - 12)	P.(91 - 92) P.92
	3. Sate Ohm's law and identify devices which obey Ohm's law and apply it to simple circuits ( $\Delta V=IR$ ).	Student Book Get it; Q.21	P.(93 - 94) P.94; P.97
	4. Explore connecting resistors in series and in parallel and determine the properties and uses of each kind of connection by studying the electric current and the potential difference across each resistor.	Student Book Q.(42 - 46); Q.(52 - 54); Q.(55 - 58)	P.97; P.(104 - 105); P.(109 - 111) P.105; P.109; P.112
	5. Explain how current in transmission lines is altered to reduce thermal energy transformations.	Student Book Q.(31 - 41)	P. (101) P.102
	6. State Kirchhoff's loop / junction rule and relate it to the conservation of energy / charge, and apply Kirchhoff's loop / junction rule to electric circuits.	Student Book Q.(60 - 65)	P.(112 - 113) P.113
	7. Analyze simple electrical circuits that contain combinations of resistors and batteries, and evaluate the current passing each resistor and the potential difference across it.	student Book Q.(42 - 46); Q.(47 - 54); Q.(55 - 58)	P.(104 - 112) P..105; P.(108 - 109); P.112
	8. 1.Explain the importance of a voltage-divider circuit to achieve a desired potential difference. 2.Identify a type of variable-value resistor, whose value depends on the presence of certain factors such as heat, light, etc.	Student Book Figure 22	P. 106 P. 106
	9. 1. Relate the electric power or rate of energy transfer to current and potential difference ( $P=I\Delta V$ ). 2. Identify the appropriate current rating of a fuse in a circuit	Student Book Figure 29	P.(114 - 116) P.115
	10. 1. Describe the properties of magnets. 2. Describe the forces that occur when like or unlike poles of two permanent magnets are brought close together (in terms of the interaction between the magnetic fields and the orientation of the magnetic field lines).	Student Book Practice Problems Q.(1 - 4)	P. (125 - 126); P.(128 - 130) P.128
	11. 1. Describe how magnetic materials can be turned into temporary magnets. 2. Describe magnetic domains and relate them to the magnetic properties of ferromagnetic materials.	Student Book Figure 4; Q.(17, 18)	P.(127 - 128), P.127; ; P.133
	12. Describe a magnetic field and develop a tool, sketches, qualitative description or presentation to describe the morphology of the magnetic field lines around a magnet or around an infinite straight wire, a circular coil, or a solenoid passed by an electric current.	Student Book Figure 10; Q.(5 - 9, 14 - 18)	P.131 P.131; P.133
	13. Defines magnetic flux, and its relation to the number of magnetic field lines that cut perpendicularly through a unit area.	Student Book Q. 11	P.(138 - 129) P.133
	14. Apply the right hand rule to determine the direction of the force acting on a charged particle moving in a magnetic field.	Student Book Q.(25 - 30)	P.(141 - 140) P.141
	15. Explain how a current-carrying conductor placed in an external magnetic field experiences a magnetic force.	Student Book Q24	P.(134 - 136) P.137
* 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 ورت في كتاب الطالب وLMS والدخلة الفصالية.			
*** 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، لهذا يجب الاهتمام بتوجيه الطالب باعطاء الوحدة الفيزيائية المناسبة لكل كمية.			
**** Focusing on science processes (scientific thinking skills), especially basic ones. التركيز على عمليات العلم (مهارات التفكير العلمي) وخاصة الأساس منها.			
الأسئلة المفتوحة - FRQ	Q1. Part A: Determine the magnitude of the current in terms of the rate of flow of electric charge ( $I=q/t$ ). Part B: 1. Use analogy and models to explain and understand an electrical circuit. 2. Identify the direction of conventional current as the direction of motion of positive charges or opposite to the flow of electrons.	Student Book Figure 3 Figure 18	P.89 P.103 P.89 P.103
	Q2. Part A: 1. Define resistance and identify its SI unit as ohms (Ω). 2. Sate Ohm's law and apply it to simple circuits ( $\Delta V=IR$ ). Part B: Calculate the equivalent resistance and the total current passing through a series circuit.	Student Book Health Connection; Q.(13 - 18) Q.(42 - 46); Q.(52 - 54); Q.(55 - 58)	P.(93 - 95) P.(104 - 105); P.(109 - 111), P.95; P.96 P.105; P.109; P.112
	Q3. 1. Identify the commonly used circuit symbols. 2. State the properties of voltmeters and ammeters, in terms of their resistance. 3. Identify the correct placements of ammeters and voltmeters in electric circuits.	Student Book Figure 31; Figure34	P.(117 - 119) P.117; P.119
	Q4. Part A: Describe the properties of magnets, how magnetic materials can be turned into temporary magnets, the Earth's magnetism, the characteristics of magnetic fields and sketch the field lines around a permanent magnet. Part B: 1. Describe how magnetic materials can be turned into temporary magnets. 2. Describe the characteristics of magnetic fields and sketch the field lines around a permanent / temporary magnet. 3. Apply the right-hand rule to indicate the direction of the magnetic field in and around a solenoid carrying current	Student Book Text Figure 7	P.(125 - 130) P.(128 - 130) P.(125 - 130) P.129
	Q5. Part A: 1. Apply the equation $F=ILB(\sin\theta)$ to calculate the magnitude of the force on a straight segment of a current carrying wire placed in a uniform magnetic field. 2. Apply the right-hand rule to find the direction of the force on a current-carrying wire placed in an external magnetic field. Part B: Apply the equation ( $F=qvB\sin\theta$ ) to calculate the magnitude of the force, and apply the right-hand rule to determine the direction of the force acting on a charged particle moving in a magnetic field.	Student Book Q.(19 - 24) Q.(25 - 30)	P.(134 - 135) P.(140 - 141) P.139 P.141