

شكراً لتحميلك هذا الملف من موقع المناهج الإماراتية



نموذج الهيكل الوزاري انسابير المسار المتقدم

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تاريخ نشر الملف على موقع المناهج: 08:39:00 2024-02-20

التواصل الاجتماعي بحسب الصف العاشر المتقدم



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

أسئلة الامتحان النهائي - انسابير	1
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Academic Year السنة الدراسية	2023/2024
Term الفصل	2
Subject المادة	Physics/Inspire الفيزياء/الانسباير
Grade الصف	10
Stream المسار	Advanced المتقدم
Number of MCQ عدد الأسئلة الموضوعية	15
Marks of MCQ درجة الأسئلة الموضوعية	4
Number of FRQ عدد الأسئلة المقالية	4
Marks per FRQ الدرجات للأسئلة المقالية	10
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 minutes
Mode of Implementation - طريقة التطبيق	SwiftAssess & Paper-Based
Calculator الآلة الحاسبة	Allowed مسموحة

Question* السؤال*	Learning Outcome/Performance Criteria** نتائج التعلم / معايير الأداء**	Reference(s) in the Student Book (Arabic Version) المرجع في كتاب الطالب (النسخة العربية)		
		Example/Exercise مثال / تمرين	Page الصفحة	
الأسئلة الموضوعية - MCQ	1	1. Identify the direction of conventional current as the direction of motion of positive charges or opposite to the flow of electrons. 2. Define an electric circuit and describe the flow of charges through it.	Student Book (Figure 1) Q8, Q9, Q20	90 95, 100
	2	1. Identify the correct placements of ammeters and voltmeters in electric circuits. 2. Draw schematic circuit diagrams with different components along with ammeters and voltmeters correctly connected to measure current and voltage. 3. Identify what ammeters and voltmeters measure and how they are connected.	Student Book (Figure 5) Q8-Q12, Q20, Q23, Q47, Q48, Q73	94-95, 100, 120-122 95, 122
	3	1. Apply the relationship between power, current and potential difference to solve numerical problems. 2. Rephrase the equation of power in terms of potential difference and resistance using Ohm's law: Power is equal to potential difference squared divided by the resistance.	Student Book Q26-Q30, Q36, Q41	102 103, 105
	4	Explain the factors (like length, cross-sectional area, temperature, and material of the conductor) that affect the resistance of a conductor.	Student Book (Table 1)	96-97
	5	1. Explain how charge and energy are conserved in an electric circuit. 2. State Kirchhoff's junction rule and relate it to the conservation of charge.	Student Book Q46, Q60, Q61, Q64	106-107, 115-116 108, 116
	6	Define superconductors and demonstrate their importance.	Student Book	102
	7	State Kirchhoff's loop rule and relate it to the conservation of energy.	student Book Q63, Q64	115 116
	8	Define a short circuit and describe its effects.	Student Book	117
	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. Identify a fuse, a circuit breaker, and a ground-fault interrupter 3. Explain how fuses, circuit breakers and ground-fault interrupters protect electric circuits and make them safe to operate.	Student Book Q1-Q7, Q49, Q75	92, 118-119 93, 111, 122
	10	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 Q10-Q13, Q16, Q17	130-133 136
	11	Define magnetic flux.	Student Book Q11, Q12, Q13	132 136
	12	Describe the relationship between magnetic fields and electric currents.	Student Book Q5-Q9, Q18	133-134 136
	13	Define magnetic fields and its SI unit.	Student Book	138
	14	Explain how a current-carrying conductor placed in an external magnetic field experiences a magnetic force	Student Book	138-139
	الأسئلة المقالية - FRQ	15	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.	Student Book Q19-Q23
16		1. Define resistance and identify its SI unit as ohms (Ω) 2. Define a resistor as a device designed to have a specific resistance. 3. State Ohm's law and apply it to simple circuits ($\Delta V=RI$). 4. Deriving resistance from the electrical (voltage - current) curve. 5. Identify devices which obey Ohm's law. 6. Relate the electric power or rate of energy transfer to current and potential difference ($P=I\Delta V$).	Student Book Q1-Q7, Q13-Q18, Q21-Q25	92-99 93, 99, 100
17		1. Define a resistor as a device designed to have a specific resistance. 2. Link the state of skin moisture in the human body to the amount of body resistance, and the effect of the intensity of the current passing through the human body.	Student Book Q13-Q16, Q25	96-98 99-100
18		1. Explain the characteristics of a series and parallel circuits. 2. Define an equivalent resistance of a series and parallel circuits. 3. Calculate the equivalent resistance and the total current passing through a series and parallel circuits. 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 Q42-Q46, Q47-Q51, Q52-Q54, Q55-Q58, Q70-Q74	107-114 108, 111, 112, 115, 122
19		1. Calculate the equivalent resistance of combined series-parallel circuits. 2. Calculate the voltage, current, and power dissipation for any resistor in a combined series-parallel circuit. 3. Describe how magnetic materials can be turned into temporary magnets. 4. Describe the characteristics of magnetic fields and sketch the field lines around a permanent magnet. 5. Apply the right-hand rule to indicate the direction of the magnetic field in and around a solenoid carrying current.	Student Book Q66-Q68, Q69-Q74; Q5-Q16	119-122 121, 122; 131-135
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*	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 وُدت في كتاب الطالب وLMS والخطة الفصلية .	
***	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، لذلك يجب الاهتمام بتوجيه الطلاب بإعطاء الوحدة الفيزيائية المناسبة لكل كمية.	