الهيكل الوزاري الجديد المسار العام منهج بريدج الخطة C-101

موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف الحادي عشر العام ⇦ فيزياء ⇦ الفصل الأول ⇦ ملفات المدرس ⇦ الملف
تاريخ إضافة الملف على موقع المناهج: 2024-10-31 08:24:57

المزيد من مادة فيزياء:	ملفات ا كتب للمعلم ا كتب 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

التواصل الاجتماعي بحسب الصف الحادي عشر العام

صفحة المناهج الإماراتية على فيسبوك				
المواد على تلغرام	التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات

المزيد من الملفات بحسب الصف الحادي عشر العام والمادة فيزياء في الفصل الأول

كتاب الطالب المجلد الأول باللغة الانجليزية	1
كتاب الطالب المجلد الأول	2
أسئلة الامتحان النهائي الورقي	3
مراجعة عامة وفق الهيكل الوزاري	4
نموذج الهيكل الوزاري الجديد بريدج	5

Academic Year / العام الدراسي	2025/2024	Question* / السؤال*	Learning Outcome/Performance Criteria** / ناتج التعلم/ معايير الأداء**	المرجع في كتاب الطالب (النسخة الانجليزية) Reference(s) in the Student Book (English Version)	
				Example/Exercise / مثال/تمرين	Page / صفحة
Term / الفصل	①				
Subject / الموضوع	**Physics (Bridge)**	1	(1) Define centripetal acceleration. (2) Relate the centripetal acceleration to the object's speed and the radius of the circular path $a_c = \frac{v^2}{r}$.	Student Textbook Term 1	11,12
Grade / الصف	**11**	2	(1) Define the centripetal/central force. (2) Identify forces like tension, gravity, and friction that cause centripetal acceleration	Student Textbook Term 1	13
Stream. المسار	General/ العام	3	Relate the centripetal acceleration and the speed of an object in uniform circular motion to its period of revolution and use this relation to find unknown parameters. $(v = \frac{2\pi r}{T}$, $a_c = \frac{4\pi^2 r}{T^2})$	Student Textbook Term 1	12
Code	**PHY-C-101-AR**			Q.(23),Q.(58, 60) Q.(9)	15,23 27
Number Of MCQ / عدد الأسئلة الموضوعية	**15**	4	Explain Kepler's Second Law which states that an imaginary line from the Sun to a planet sweeps out equal areas in equal time intervals.	Student Textbook Term 1	31
Markes of MCQ / درجة الأسئلة الموضوعية	**4**	5	Apply Kepler's third Law to solve problems by finding unknown parameters.	Student Textbook Term 1	32
				Example (1) Q.(6)	33
Number of FRQ / عدد الأسئلة المقالية	**4**	6	(1) Calculate the orbital speed of a satellite. (2) Calculate the orbital period of a satellite.	Student Textbook	39
				Example 2 / Q.(15, 17) Q.(21)	40 45
Marks Per FRQ / الدرجات للأسئلة المقالية	**8-12**	7	Calculate the gravitational field strength for an object of mass m at a distance r from its center and specify the units for gravitational field.	Student Textbook Term1	42
				Q.(18.a)	45
Type of All Questions / نوع كافة الأسئلة	الأسئلة الموضوعية /MCQ الأسئلة المقالية /FRQ	8	(1) Define angular displacement. (2) Define a radian and convert degrees to radians and vice-versa. (3) Identify that counterclockwise motion is in the positive direction and clockwise motion is in the negative direction	Student Textbook Term1	56-57
Maximum Overall Grade / الدرجة القصوى الممكنة	**100**	9	Relate the linear acceleration (a) to the angular acceleration (α) and the distance (r) from the axis of rotation.	Student Textbook Term1	58
				Q.[3 , 8]	59
Exam Duration / مدة الامتحان	**150 min**	10	(1) Define the term torque. (2) Identify that a torque on a body involves a force and a lever arm which is the perpendicular distance from the axis of rotation to the point where the force is applied	Student Textbook Term1	60-61
				Q.(63)	81
Mode of Implementation / طريقة التطبيق	Paper-Based & Swift Assess.	11	(1) State the conditions for an object to be in static equilibrium- both translational and rotational equilibrium. (2) Solve problems related to objects in equilibrium	Student Textbook Term1	63 , 73
				Example 2 / Q.(18) Example 5 / Q.(39)	64 / 65 74 / 75
Calculator / الآلة الحاسبة	Allowed / مسموحة	12	(1) Define moment of inertia as the resistance to rotation. (2) Find the total moment of inertia due to many point masses. (3) Determine the moment of inertia of extended objects like the hoop, solid uniform cylinder, uniform sphere, long uniform rod and rectangular plate.	Student Textbook Term1	65 - 66
				Example 3 Example 4 Q.(68)	67 69 81
		13	(1) State newton's second law for rotational motion which relates the net torque on a body to the body's moment of inertia and rotational acceleration, all calculated relative to a specified axis of rotation. (2) Apply newton's second law for rotation to solve problems.	Student Textbook Term1	68
				Example 4 Q.(29,30,33,66) Q.(66)	69 70 81
		14	Apply the relationship between power, the work done by a force, and the time interval in which that work is done (P=W/t).	Student Textbook Term2	95
				Example 3 Q.(10,13) / Q.(55)	96 96 / 109
		15	(1) Apply the work–energy theorem to relate the net work done on a system and the resulting change in kinetic energy. (2) Solve problems related to work and kinetic energy.	Student Textbook Term 2	94
				Q.(11)	96
		16	❖ Demonstrate that the velocity vector at any time is tangent to the circular path for an object in uniform circular motion. ❖ Show how an object moving with a constant speed along a circle can have acceleration towards the center of the circular path. ❖ Apply the relation of centripetal acceleration, tangential speed, and radius of circular path to calculate unknown parameters. ❖ Apply the expression for centripetal/central force to solve problems on relevant systems.	Student Textbook Term 1	11,12
				SECTION 2 REVIEW. Q (22.24) STP.MCQ. (2, 3 , 4)	15 27
		17	❖ Apply the law of universal gravitation to calculate the gravitational force or other unknown parameters. ❖ Calculate the orbital period of a satellite.	Student Textbook Term 1	34,39
				EXAMPLE. (2) SECTION 1 REVIEW. Q (9) CH 2 Assess.Q.[42,43] / Q. [68]	40 37 48 /50
		18	❖ Relate the arc length (x) to the angular displacement (ө) and the distance (r) from the axis of rotation. ❖ Apply the relationship between average angular velocity, angular displacement, and the time interval for that displacement. ❖ Solve problems that involve torque.	Student Textbook Term 1	57-58 60-61
				EXAMPLE. (1) APPLICATIONS. Q [12.13] CH 3 Assess.Q.[53,55,64,65]	62 81-82
		19	❖ Calculate the work done by a force (exerted at an angle to the direction of motion) as a product of the component of the force in the direction of the displacement and the displacement. ❖ Calculate the net work done by multiple forces acting on a system as the sum of the work done by each force.	Student Textbook Term 2	88-93
				EXAMPLE. (1) EXAMPLE. (2) APPLICATIONS. Q [6,8] CH 4 Assess.Q.[47,48,53]	92 93 93 108

MCQ (60%) / الأسئلة الموضوعية — applies to questions 1–15
FRQ (40%) / الأسئلة المقالية — applies to questions 16–19

*	Questions might appear in a different order in the actual exam, or on the exam paper. قد تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي، أو على ورقة/ الامتحان.
**	As it appears in the textbook, LMS, and (Main_IP). كما وردت في كتاب الطالب وLMS والخطة الفصلية.

الفيزياء

PHYSICS

20 24 k 25

الفصل Term 1

الفيزياء
نسخة الإمارات العربية المتحدة
2024-2025

الصف 11 عام