

## الهيكل الوزاري الجديد 2025 منهج بريدج الخطة C-101



### تم تحميل هذا الملف من موقع المناهج الإماراتية

موقع المناهج ← المناهج الإماراتية ← الصف الحادي عشر المتقدم ← فيزياء ← الفصل الثالث ← ملفات متنوعة ← الملف

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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 الحادي عشر المتقدم



صفحة المناهج  
الإماراتية على  
فيسبوك

الرياضيات

اللغة الانجليزية

اللغة العربية

التربية الاسلامية

المواد على تلغرام

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

حل مراجعة أسئلة وفق الهيكل الوزاري منهج انسابير

1

الهيكل الوزاري الجديد 2025 مع الترجمة

2

شرح وملخص وأسئلة مهمة وفق الهيكل الفصل الثامن من الكتاب

3

تجميع أسئلة اختبارات في الوحدة التاسعة الحركة الدائرية باللغتين العربية والانجليزية بدون الإجابات

4

حل أسئلة الامتحان النهائي القسم الورقي منهج بريدج

5

**PHYSICS** (G11 ADV-**Bridge**) End of Term 3 Exam Coverage. (2025-2024). **هيكل امتحان الفيزياء (11 متقدم-بريدج) نهاية الفصل الدراسي الثالث.**

Academic Year		2025/2024	السؤال / Question *	Learning Outcome/Performance Criteria ناتج التعلم / معايير الأداء**	المرجع في كتاب الطالب (النسخة الإنجليزية+ النسخة العربية) Reference(s) in the Student Book (English+ Arabic) Version	
العام الدراسي					مثال/تمرين.Example/Exercise	Page. صفحة.
Term / الفصل						
Subject		Physics ( BRIDGE )				
الموضوع						
Grade		11				
الصف						
Stream / المسار		المقدم/Advanced				
Code		PHY-C-101				
Number Of MCQ		15				
عدد الأسئلة الموضوعية						
Markes of MCQ		4				
درجة الأسئلة الموضوعية						
Number of FRQ		4				
عدد الأسئلة المقالية						
Marks Per FRQ		8~12				
الدرجات للأسئلة المقالية						
Type of All Questions	الأسئلة الموضوعية/ MCQ					
نوع كافة الأسئلة		الأسئلة المقالية/ FRQ				
Maximum Overall Grade		100				
الدرجة القصوى الممكنة						
Exam Duration		150 min				
مدة الامتحان						
Mode of Implementation		Paper-Based & Swift Assess.				
طريقة التطبيق						
Calculator		Allowed				
الآلة الحاسبة		مسموحة				

MCQ - الأسئلة الموضوعية	1	Locate the center of mass of an extended, symmetric object of uniform mass distribution by using the symmetry. Recall that center of gravity is equivalent to center of mass in situations where the gravitational force is constant everywhere throughout the object.	Student Book	226
	2	Describe that the center of mass of two-point masses (or two objects each of which can be replaced by a particle having its mass and located at its center) always lies on the connecting line between the two masses.	Student Book Figure 8.2 Solved problem 8.1	227
	3	Express the Cartesian coordinates (x, y) in terms of the polar coordinates (r, θ) and vice versa. Convert polar coordinates to Cartesian coordinates and vice versa.	Student Book Example 9.1	255~256 256
	4	Recall that the common unit for angular velocity is radian per second (rad/s).	Student Book	256,258
	5	Relate the magnitudes of linear (tangential) and angular velocities for circular motion as $v = r\omega$ , and explain that this relation does not hold for tangential and angular velocity vectors which point in different directions	M.C.Q(9.13) Additional Exe.Q. (9.62/a)	278 282
	6	Sketch the path taken in circular motion (uniform and non-uniform) and explain the velocity and acceleration vectors (magnitudes and directions) during the motion.	Student Book	261~262
	7	Relate the magnitude of the net acceleration in circular motion to the tangential acceleration and centripetal acceleration as: $a = \sqrt{a_c^2 + a_t^2} = \sqrt{(r\alpha)^2 + (r\omega^2)^2} = r\sqrt{\alpha^2 + \omega^4}$	Exercises Q. (9.46)	281
	8	Describe centripetal force as the net inward force (towards the center of the circular path) needed to provide the centripetal acceleration necessary for circular motion. Solve problems related to acceleration in circular motion.	Student Book M.C.Q(9.7) Q.(9.90 / 9.9)	264 278 283
	9	Identify that the centripetal force can be provided by different forces (frictional force, tension, gravitational force, Coulomb force, or the normal force.....). Solve problems related to centripetal force	Student Book Solved Problem 9.1 Additional Exercises 9.76	264 266 283
	10	Define angular acceleration as the rate of change of an object's angular velocity Solve problems related to rotation with constant angular acceleration.	M.C.Q(9.8) Q.(9.60,9.61)	278 282
	11	Solve problems related to circular motion.	Solved Problem 9.4 Q. (9.59)	275 282
	12	Describe that the moment of inertia plays the same role for rotational (or circular) motion as the mass does for linear motion.	Student Book Solved Problem10.1	285~286 294
	13	Identify that torque is a vector quantity, measured in the SI units of Nm.	Student Book	297~298
	14	Describe that a torque ( $\vec{\tau}$ ) on a body involves a force ( $\vec{F}$ ) and a position vector ( $\vec{r}$ ), which extends from a rotation axis to the point where the force is applied.	Student Book Concept Check 10.4	297~298 298
	15	Calculate the torque due to a force on a particle by taking the cross product of the particle's position vector and the force vector. $\vec{\tau} = \vec{r} \times \vec{F}$ , , $\tau = rFsin(\theta)$	Student Book Q.(10.47 / 10.48) Q.(10.49/a)	297~298 318 319
FRQ - الأسئلة المقالية	16	<div><div>1<sup>st</sup> Part</div> Determine the location of the center of mass of two or several particles or extended objects with uniform mass distribution (the object can be divided into simple geometric figures, each of which can be replaced by a particle at its center) by applying suitable mathematical equations.</div> <div><div>2<sup>nd</sup> Part</div> Convert angle measurements between degrees and radians.  Relate the arc length (s), to the radius (r) of the circular path and the angle (θ), measured in radians, by (<math>S=r\theta</math> ), and solve problems.</div>	Exercises Q. (8.30,8.58)	249,252
	17	<div><div>1<sup>st</sup> Part</div> Relate the magnitudes of linear (tangential) and angular velocities for circular motion as <math>v = r\omega</math> , and explain that this relation does not hold for tangential and angular velocity vectors which point in different directions.  Solve problems related to angular velocity, angular frequency and period.</div> <div><div>2<sup>nd</sup> Part</div> Apply the kinematic relationships for circular motion with constant angular acceleration to calculate angular position, angular displacement, angular velocity, angular acceleration, or time.</div>	Q.9.44(c,d)  Q.9.44(a) Q.9.45(d) Q.9.64	281  281 282
	18	<div><div>1<sup>st</sup> Part</div> Relate the magnitude of the centripetal force to the centripetal acceleration by applying Newton's Second Law in the radial direction as: <math>F_c = ma_c = mv\omega = mr\omega^2 = m\frac{v^2}{r}</math> and Slove problems related to centripetal force.</div> <div><div>2<sup>nd</sup> Part</div> Solve problems related to rotation with constant angular acceleration. <math>\theta = \theta_o + \omega_o + \frac{1}{2}\alpha t^2</math> “    <math>\theta = \theta_o + \bar{\omega}t</math> “    <math>\omega = \omega_o + \alpha t</math> “    <math>\bar{\omega} = \frac{1}{2}(\omega + \omega_o)</math> <math>\omega^2 = \omega_o^2 + 2\alpha(\theta - \theta_o)</math></div>	Solved Problem 9.1 Q.9.76  Q.9.35 Q.9.63/9.67	266 283  280 282
	19	Calculate the moment of inertia of a point particle or a group of several point particles rotating about an axis of rotation. $I = mr^2$ , , $I = \sum_{i=1}^n m_i r_i^2$ Calculate the rotational kinetic energy of a point particle, or several point particles, rotating about a fixed axis of rotation by applying the expression for the rotational kinetic energy in terms of the rational inertia and angular speed. $K_{Rot} = \frac{1}{2} \sum_{i=1}^n m_i r_i^2 \omega_i^2 = \frac{1}{2} I \omega^2$	Exercises Q. (10.38,10.39)	318
	*	Questions might appear in a different order in the actual exam, or on the exam paper.قد تظهر الاسئلة 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 .			