المادة الدراسية للاختبارات STUDY LIST

الصف الثاني عشر GRADE 12	اختبارات نهاية الفصل الأول 2026 2027 End of Term 1 Exams 2026 2027

المادة Subject	الوحدات/الدروس Lessons /Units	الصفحات في الكتاب Pages in the book
الرياضيات MATH	UNIT 1, 1.1 Introducing Calculus - Can Change Occur at an Instant? 1.2 Defining Limits and Using Limit Notation 1.3 Estimating Limit Values from Graphs 1.4 Estimating Limit Values from Tables 1.5 Determining Limits Using Algebraic Properties of Limits 1.6 Determining Limits Using Algebraic Manipulation 1.7 Selecting Procedures for Determining Limits 1.8 Determining Limits Using the Squeeze Theorem 1.9 Connecting Multiple Representations of Limits 1.10 Exploring Types of Discontinuities 1.11 Defining Continuity at a Point 1.12 Confirming Continuity over an Interval 1.13 Removing Discontinuities 1.14 Connecting Infinite Limits and Vertical Asymptotes 1.15 Connecting Limits at Infinity and Horizontal Asymptotes 1.16 Working with the Intermediate Value Theorem (IVT) UNIT 2 , 2.1 Defining Average and Instantaneous Rates of Change at a Point 2.2 Defining the Derivative of a Function and Using Derivative Notation 2.3 Estimating Derivatives of a Function at a Point 2.4 Connecting Differentiability and Continuity - Determining When Derivatives Do and Do Not Exist 2.5 Applying the Power Rule 2.6 Derivative Rules - Constant, Sum, Difference, and Constant Multiple 2.7 Derivatives of e^x and lnx 2.8 The Product Rule 2.9 The Quotient Rule2.10 Finding the Derivatives of Tangent, Cotangent, Secant, and/or Cosecant Functions	AP Classroom + Khan Academy + PPT , All unit tests , Quizzes and HWs

	UNIT 3 , 3.1 The Chain Rule 3.2 Implicit Differentiation 3.3 Differentiating Inverse Functions 3.4 Differentiating Inverse Trigonometric Functions 3.5 Selecting Procedures for Calculating Derivatives 3.6 Calculating Higher-Order Derivatives UNIT 4 , 4.1 Interpreting the Meaning of the Derivative in Context 4.2 Straight-Line Motion - Connecting Position, Velocity, and Acceleration 4.3 Rates of Change in Other Applied Contexts (Non motion Problems) 4.4 Introduction to Related Rates 4.5 Solving Related Rates Problems 4.6 Approximating Values of a Function Using Local Linearity and Linearization 4.7 Using L'Hôpital's Rule for Finding Limits of Indeterminate Forms	
	1. أحكام النون الساكنة والتنوين, 18-21 2. أحكام الميم الساكنة , 18-21 3. حفظ سورة الحشر الآيات 1-10, 22-25 4. تقوى الله تعالى والاعتصام بدينه سبحانه وتعالى (تفسير) , 26-36 5. إعجاز القرآن الكريم, 37-46 6. أثر العقيدة في بناء شخصية المسلم, 60-69 7. أحكام الجهاد , 72-80 8. أم المؤمنين السيدة أم سلمة رضي الله عنها, 82-88 9. المدود (الطبيعي- المتصل- المنفصل- اللازم), 96-98 10. من طرق الخير – شرح وحفظ (الحديث ص 115 حفظ), 114-124 11. مقاصد الشريعة الإسلامية, 126-133 12. فضل العفَّة وأثرها, 136-144	**التربية الإسلامية** **Islamic Studies**
,PowerPoints on LMS Khan ,worksheets Academy and AP classroom Assignments	**<u>Unit 5- Hereditary</u>** 5.1 Meiosis 5.2 Meiosis and Genetic Diversity 5.3 Mendelian Genetics 5.4 Non-Mendelian Genetics	**Biology**

	5.5 Environmental Effects on Phenotype 5.6 Chromosomal Inheritance **<u>Unit 6- Gene Expression and Regulation</u>** 6.1 DNA and RNA Structure 6.2 Replication 6.3 Transcription and RNA Processing 6.4 Translation 6.5 Regulation of Gene Expression 6.6 Gene Expression and Cell Specialization 6.7 Mutations 6.8 Biotechnology	
PowerPoints on LMS Booklets and AP classroom Assignments	**<u>Unit 5: Kinetics</u>** 5.1 Reaction Rates 5.2 Introduction to Rate Law 5.3 Concentration Changes Over Time 5.4 Elementary Reactions 5.5 Collision Model 5.6 Reaction Energy Profile 5.7 Introduction to Reaction Mechanisms 5.8 Reaction Mechanism and Rate Law 5.9 Steady-State Approximation 5.10 Multistep Reaction Energy Profile 5.11 Catalysis **<u>Unit 6: Thermochemistry</u>** 6.1 Endothermic and Exothermic Processes 6.2 Energy Diagrams	**Chemistry**

	6.3 Heat Transfer and Thermal Equilibrium 6.4 Heat Capacity and Calorimetry 6.5 Energy of Phase Changes 6.6 Introduction to Enthalpy of Reaction 6.7 Bond Enthalpies 6.8 Enthalpy of Formation 6.9 Hess's Law **Unit 7: Equilibrium** 7.1 Introduction to Equilibrium 7.2 Direction of Reversible Reactions 7.3 Reaction Quotient and Equilibrium Constant 7.4 Calculating the Equilibrium Constant 7.5 Magnitude of the Equilibrium Constant	
AP Classroom (lesson ,topic quizzes ,videos progress checks) PPTs on LMS ,quizzes ,Past HWs ,lab reports ,unit tests practice sheets	Kinematics - Unit 1 1.1 Vectors and Scalars 1.2 Displacement, velocity and Acceleration 1.3 Representing Motion 1.4 Relative Motion 1.5 Motion in 2 and 3 Dimensions Forces and Translational Dynamics - Unit 2 2.1 Systems and Center of Mass 2.2 Forces and free-body diagrams 2.3 Newton's third law 2.4 Newton's first law 2.5 Newton's second law 2.6 Gravitational force 2.7 Kinetic and static friction 2.8 Spring forces 2.9 Resistive forces 2.10 Circular motion Energy and Power ,Unit 3 – Work 3.1 Translational Kinetic energy 3.2 Work 3.3 Potential Energy	**Physics**

	3.4 Conservation of Energy 3.5 Power		
اللغة العربية Arabic	1. أفعال المقاربة والرجاء والشروع ص 56 2. أدوات الشرط الجازمة ص 159. 3. أدوات الشرط غير الجازمة ص 186.	**أولًا: الكلمة والجملة:** (8 أسئلة اختيار من متعدد) 8 درجات.	ص 56: 60 ص 159: 162 ص 186: 190
	1. مسيرة وطن وحكمة قائد ص 36. 2. غربة وحنين ص 80. 3. صدى الحياة ص 177. 4. الخبز المُرُّ ص 217.	**ثانيًا: القراءة:** نص خارجي يحاكي نصوص الكتاب المدرسي: (مقال أو نص شعري أو قصة قصيرة) . 13 درجة.	ص 36: 44 ص 80: 86 ص 177: 148
	1. (التشبيه - الاستعارة) ص :20. 2. المحسنات البديعية ص 23: 26.	**ثالثا: البلاغة:**	ص 20: 22 ص 23: 26
	1. غربة وحنين (حفظ: 1:7) ص 81. 2. صدى الحياة (حفظ: 1: 10) ص 178.	**رابعًا: الحفظ:** ثلاث أبيات (3 درجات)	ص: 81 ص: 178
	1. مدرسة الإحياء والبعث ص 75: 79. 2. المدرسة الرومانسية ص 135: 140.	**خامسًا: القضايا الأدبية:** (4 درجات)	ص: 75: 79. ص 135: 140.
	1. كتابة المقال النقاشي : ص 61. 2. كتابة المقال التفسيري ص 101.	**سادسا: الكتابة:** كتابة موضوع واحد (12 درجة)	ص 61: 64 ص 101: 104
علم الحاسوب Computer Science Eng	CS Engineering:		PowerPoint on LMS
	Variables and Data Types		78–86
	Expressions and Output		87–96
	Assignment Statements and Input (Scanner)		97–108
	Casting and Range of Variables		109–115
	Compound Assignment Operators		116–123
	Documentation with Comments		129–134
	Math Class		157–160
	String Manipulation		184–192
	Boolean Expressions		209–215
	If Statements		216–223
	Nested if Statements		224–232
	Compound Boolean Expressions		233–242
	While Loops		254–261
	For Loops		262–270
	Method Signatures		135–149

150–156	Calling Class Methods	
LMS (Presentations) and all notes given in class + All FRQs sample questions	**1.1 Introduction to Algorithms, Programming, and Compilers** **1.2 Variables and Data Types** **1.3 Expressions and Output** **1.4 Assignment Statements and Input** **1.5 Casting and Range of Variables** **1.6 Compound Assignment Operators"** **1.7 Application Program Interface (API) and Libraries** **1.8 Documentation with Comments** **1.9 Method Signatures** **1.10-1.11 Math Class** **1.12 Objects: Instances of Classes** **1.13 Object Creation and Storage (Instantiation)** **1.14 Calling Instance Methods** **1.15 String Manipulation** **2.1 Algorithms with Selection and Repetition** **2.2 Boolean Expressions** **2.3 if Statements** **2.4 Nested if Statements** **2.5 Compound Boolean Expressions** **2.6 Comparing Boolean Expressions** **2.7 while Loops** **2.8 for Loops** **2.9 Implementing Selection and Iteration Algorithms** **2.10 Implementing String Algorithms** **2.11 Nested Iteration** **2.12 Informal Run-Time Analysis** **4.3 Array Creation and Access** **4.4 Array Traversals** **4.5 Implementing Array Algorithms** **4.7 Wrapper Classes**	**Computer Science CS**
Great Writing - Unit 1, 2 and 4 IXL	Reading Comprehension - main idea, details, sequence, evidence - True/False/Not given - MCQs, Open questions - Inference, Summarize	**اللغة الإنجليزية** **English**

SAT Vocab Lesson 1-3 LMS	Vocab/Grammar - Sat Lesson 1-3; Great Writing Vocab Unit 1, 2 and 4 - Clauses: Independent and Dependent - Subordinating Conjunctions - Coordinating Conjunctions - Sentence Types: Simple, Compound, Complex, and Compound-Complex - Subject-Verb Agreement - Sentence Fragments - Run-On Sentences Writing - Introduction to essays - Essay structure: introduction (hook and thesis statement), body paragraphs (TEEL), conclusion (summary statement and final thought) - Cause-led essay / Effect-led essay	