



## LEARNING TRAILS AY 2024-25

GRADE: 11

TERM 2\_WEEK 5 (3<sup>rd</sup> February to 7<sup>th</sup> February 2025)

IT	MATHEMATICS
<p><b>Topics:</b> Expert system. Video and Audio editing</p> <p><b>Learning Objectives:</b> Editing a video clip to meet the requirements of its intended application and audience, including: adding audio to a video clip editing audio within a video clip altering the speed of a video clip exporting a video clip in different file formats (including: MP4, AVI, MOV, WMV). compressing a video to different resolutions to suit different media (including: DVD, internet, mobile devices).</p> <p>Describe how expert systems are used to produce possible solutions for different scenarios. Explain the functions of different components in expert system.</p> <p><b>Resources needed:</b> PPT, Smart board, computer system, task sheets.</p> <p><b>Homework/Assignments:</b> Solve past paper questions.</p>	<p><b>Topics:</b> INTEGRATION</p> <p><b>Learning Objectives:</b></p> <ul style="list-style-type: none"> <li>evaluate definite integrals Including simple cases of ‘improper’ integrals, such as <math>\int_0^1 x^{-\frac{1}{2}} dx</math> and <math>\int_1^{\infty} x^{-2} dx</math></li> <li>use definite integration to find the area of a region bounded by a curve and lines parallel to the axes, or between a curve and a line or between two curves</li> <li>use definite integration to find a volume of revolution about one of the axes</li> </ul> <p><b>Resources needed:</b> Smartboards, PPTs, Textbook, Topic-wise Past Paper questions on Integration</p> <p><b>Homework/Assignments:</b> <a href="#">Search Results</a>  <a href="#">Search Results</a></p>



ADVANCED ARABIC	GENERAL ARABIC
<p><b>Topics:</b> <u>قصيدة الطين</u></p> <p><b>Learning Objectives:</b> <u>أن يحدد المتعلم الفكرة الرئيسية والفكر الفرعية للنص</u> <u>أن يستنتج الدلالات التعبيرية والإيحائية في النص</u> <u>أن يفسر معاني المفردات مستخدماً المعجم الورقي والرقمي</u></p> <p><b>Resources needed:</b> <u>الكتاب المدرسي - العرض التقديمي - أنشطة تعليمية</u></p> <p><b>Homework/Assignments:</b> <u>حل أسئلة الكتاب المدرسي - كتابة موضوع تعبير</u></p>	<p><b>Topics:</b> <u>رحلة إلى الصحراء</u></p> <p><b>Learning Objectives:</b> <u>أن يتعرف على أنواع الصحراء</u> <u>أن يحدد الفكرة الرئيسية والفرعية للفقرة</u> <u>أن يقرأ الكلمات الجديدة</u></p> <p><b>Resources needed:</b> <u>الكتاب - العرض التقديمي</u></p> <p><b>Homework/Assignments:</b> <u>كتابة الموضوع الثالث من موضوعات الكتابة</u></p>
PHYSICS	BIOLOGY
<p><b>Topics:</b> waves Diffraction Grating, Factors affecting Young's double slit experiment Assessment for waves</p> <p><b>Learning Objectives:</b> recall and use <math>d \sin \theta = n\lambda</math> 2 describe the use of a diffraction grating to determine the wavelength of light Discuss and explain various factors related with Youngs double slit experiment</p> <p><b>Resources needed:</b> Animations, topical Question, copy book, Internet, pictures</p> <p><b>Homework/Assignments:</b> June 2016-Nov 2022 for the content related with diffraction grating</p>	<p><b>Topics:</b> Transport in plants and Transport in Mammals</p> <p><b>Learning Objectives:</b> explain how companion cells transfer assimilates to phloem sieve tubes, with reference to proton pumps and cotransporter proteins explain mass flow in phloem sieve tubes down a hydrostatic pressure gradient from source to sink describe the functions of the main blood vessels of the pulmonary and systemic circulations, limited to pulmonary artery, pulmonary vein, aorta and vena cava</p> <p><b>Resources needed:</b> Solve Past paper questions, videos</p> <p><b>Homework/Assignments:</b> Solve end of the topic questions from text book.</p>



CHEMISTRY	ACCOUNTING
<p><b>Topics:</b> Hydrocarbons</p> <p><b>Learning Objectives:</b> Recall the reactions (including reagents and conditions) by which alkenes can be produced: (a) elimination of HX from a halogenoalkane by ethanolic NaOH and heat (b) dehydration of an alcohol, by using a heated catalyst (e.g. Al<sub>2</sub>O<sub>3</sub>) or a concentrated acid (c) cracking of a longer chain alkane 2 describe the following reactions of alkenes: (a) the electrophilic addition of (i) hydrogen in a hydrogenation reaction, H<sub>2</sub> (g) and Pt/Ni catalyst and heat (ii) steam, H<sub>2</sub>O (g) and H<sub>3</sub>PO<sub>4</sub> catalyst (iii) a hydrogen halide, HX(g) at room temperature</p> <p><b>Resources needed:</b> <b>Topical Questions from Save My exams</b> <b>Homework/Assignments:</b> Textual Questions Past Papers</p>	<p><b>Topics:</b> Marginal Costing</p> <p><b>Learning Objectives:</b> To understand and to analyse -how to calculate the contribution of a product • how to interpret a break-even chart Note: Candidates will not be asked to prepare a break-even chart. • how to calculate the break-even point, contribution to sales ratio, level of output or sales to achieve a target profit, and margin of safety • the use and limitations of break-even analysis</p> <p><b>Resources needed:</b> Task Sheet Formats and Formulas Text book</p> <p><b>Homework/Assignments:</b> Topical questions</p>
ISLAMIC ARABIC	ISLAMIC EDUCATION
<p><b>Topics:</b> منهج الإسلام في بناء الأسرة</p> <p><b>Learning Objectives:</b></p> <ul style="list-style-type: none"><li>التعرف على مفهوم الأسرة في الإسلام وأهميتها.</li><li>استنتاج وظائف الأسرة في الإسلام ودورها في بناء المجتمع.</li><li>تحليل مظاهر اهتمام الإسلام بالأسرة وأثرها على استقرار المجتمع</li></ul> <p><b>Resources needed:</b></p> <ul style="list-style-type: none"><li>الكتاب المدرسي</li><li>الشبكة العنكبوتية</li><li>العرض التقديمي</li><li>أوراق عمل</li><li>السيرة الذكية</li></ul>	<p><b>Topics:</b> Family Planing in Islam</p> <p><b>Learning Objectives:</b></p> <ul style="list-style-type: none"><li>Understand the concept of family in Islam and its importance.</li><li>Identify the functions of the family in Islam and its role in building society.</li><li>Analyze the aspects of Islam's care for the family and its impact on societal stability.</li></ul>



<ul style="list-style-type: none"><li>• <b>Homework/Assignments:</b></li><li>• حل أنشطة الكتاب المدرسي</li><li>• مراجعة العرض التقديمي للدرس</li></ul>	<p><b>Resources Needed:</b></p> <ul style="list-style-type: none"><li>• Textbook</li><li>• The Internet</li><li>• Presentation slides</li><li>• Worksheets</li><li>• Smartboard</li></ul> <p><b>Homework/Assignments:</b></p> <ul style="list-style-type: none"><li>• Complete the textbook activities.</li></ul>
<b>ECONOMICS</b>	<b>BUSINESS</b>
<p><b>Topics:</b> Balance of payments and exchange rates</p> <p><b>Learning Objectives:</b> To calculate the current account balance To describe the causes and consequences of imbalances in the current account. To describe the fixed and floating exchange rate To analyze the causes and consequences of the fixed and floating exchange rate</p> <p><b>Resources needed:</b> Textbook Calculators Topical questions</p> <p><b>Homework/Assignments:</b> Topical past papers</p>	<p><b>Topics:</b> Budget</p> <p><b>Learning Objectives:</b> • Analyse the benefits of setting budgets • Examine the importance of types of budgeting: incremental, zero and flexible • Analyse the potential limitations of budgeting • Apply variance analysis to assess adverse and favorable variances from budgets</p> <p><b>Resources needed:</b> E book, Topical questions uploaded in teams</p> <p><b>Homework/Assignments:</b> Practice past papers</p>