



LEARNING TRAILS AY 2026-27

YEAR: 13

TERM 1_WEEK 6 (Oct 5th -9th Oct , 2026)

IT	MATHEMATICS
Topics: System life cycle: Implementation. Documentation. Vector graphics. Learning Objectives: Describe different implementation methods. Differentiate between different implementation methods. Evaluate the implementation method to be used for a given scenario. Differentiate between user documentation and technical documentation. Describe the components of user documentation. Describe the components of technical documentation. Resources needed: Textbook, Computer system, task sheet. Homework/Assignments: Practice with past paper questions.	Topics: Poisson Distribution Learning Objectives: The students shall be able to: - use the Poisson distribution as an approximation to the binomial distribution where appropriate - use the normal distribution, with continuity correction, as an approximation to the Poisson distribution where appropriate. Resources needed: Textbook, smartboard, Whiteboard, Topical past paper questions Homework/Assignments: Topical questions from savemyexams
ADVANCED ARABIC	GENERAL ARABIC
Topics: إن وأخواتها Learning Objectives: <u>أن يعرف المتعلم إن وأخواتها</u> <u>أن يستنتج المتعلم أثر دخول إن وأخواتها على المبتدأ</u> <u>أن يميز المتعلم بين اسم إن وأخواتها</u> <u>أن يحول الجملة الاسمية إلى جملة مستخدما إن وأخواتها</u> <u>أن يوظف إن وأخواتها في جمل مفيدة</u> Resources needed: <u>الكتاب المدرسي - البوربوينت - السبورة الذكية - بطاقات - دفتر الطالب</u> Homework/Assignments:	Topics: قصيدة الشمس Learning Objectives: إن يفسر المتعلم معاني المفردات الواردة في النص أن يحدد المتعلم الفكرة الرئيسة والأفكار الفرعية للنص أن يستنتج المتعلم أهمية الشمس للإنسان أن يتحدث المتعلم عن دور الشمس في حياة الناس أن يحلل المتعلم النص الشعري تحليلاً صحيحاً Resources needed: كتاب الطالب - العرض التقديمي - السبورة الذكية - أوراق عمل Homework/Assignments: كتابة فقرة عن أهمية الشمس



كتابة فقرة قصيرة عن أهمية العلم مستخدماً إن وأخواتها	
PHYSICS	BIOLOGY
Topics: IDEAL GASES Learning Objectives: Should be able to Define one mole and explain what an ideal gas is. State basic assumptions of kinetic theory of gases Apply ideal gas equations to solve problems. Derive relation between KE and absolute temperature hence use the equations to solve problems Resources needed: Copy book, calculator, sample questions Homework/Assignments: Topical Past paper questions - Temperature	Topics: Homeostasis of glucose, Homeostasis in plants Learning Objectives: 1. Describe the principles of cell signalling using the example of the control of blood glucose concentration by glucagon 2. Explain how negative feedback control mechanisms regulate blood glucose concentration, with reference to the effects of insulin on muscle cells and liver cells and the effect of glucagon on liver cells 3. Explain the principles of operation of test strips and biosensors for measuring the concentration of glucose in blood and urine, with reference to glucose oxidase and peroxidase enzymes. 4. Explain how stomata respond to changes in environmental conditions and analyze daily stomatal rhythms of opening and closing. 5. Describe the structure and function of guard cells and explain the mechanism by which they open and close stomata. 6. describe the role of abscisic acid in the closure of stomata during times of water stress, including the role of calcium ions as a second messenger 7. Describe the features of the endocrine system with reference to the hormones ADH, glucagon and insulin. Resources needed: Smartboard, textbook, past papers Homework/Assignments: Topical questions from past papers 9700/42



CHEMISTRY	ACCOUNTING
Topics: 24 <u>Electrochemistry</u> <u>Learning Objectives:</u> 1. predict qualitatively how the value of an electrode potential, E, varies with the concentrations of the aqueous ions 2 use the Nernst equation, e.g. $E = E^\ominus + (0.059/z) \log$ <u>[oxidised species]</u> <u>[reduced species]</u> , to predict quantitatively how the value of an electrode potential varies with the concentrations of the aqueous ions; examples include $\text{Cu}^{2+}(\text{aq}) + 2\text{e}^- \rightleftharpoons \text{Cu}(\text{s})$, $\text{Fe}^{3+}(\text{aq}) + \text{e}^- \rightleftharpoons \text{Fe}^{2+}(\text{aq})$ 10 understand and use the equation $\Delta G^\ominus = -nE^\ominus_{\text{cell}}$ <u>Resources needed:</u> <u>Past paper, text books, smart boards</u> <u>Homework/Assignments:</u> Past paper questions	Topics: Investment Appraisal <u>Learning Objectives:</u> how to apply the following capital investment appraisal techniques: – payback – accounting rate of return (ARR = (average profit / average investment) × 100) – net present value (NPV) – internal rate of return (IRR) • the advantages and disadvantages of these capital investment appraisal techniques <u>Resources needed:</u> PPT Formats Formulas Task Sheets <u>Homework/Assignments:</u> Topical questions
ISLAMIC ARABIC	ISLAMIC EDUCATION
Topics: <u>الفراق بين الزوجين</u> <u>Learning Objectives:</u> • أن يعرف مفهوم الفراق بين الزوجين • أن يذكر صور الفراق بين الزوجين • أن يفسر الحكمة من تشريع الطلاق والخلع • أن يميز بين الطلاق والخلع <u>Resources needed:</u> • كتاب التربية الإسلامية • عرض تقديمي أو سبورة • بطاقات تتضمن مواقف حياتية حول الخلافات الزوجية والفراق	Topics: Extremism <u>Learning Objectives:</u> • Define extremism and distinguish it from sincere commitment to Islam. • Explain how Islamic teachings encourage moderation, mercy, and respect for others. • Identify the harm extremism causes to individuals and communities. • Suggest peaceful ways to respond to intolerant ideas.



<u>Homework/Assignments:</u> أن ينشئ جدولاً يقارن فيه بين الطلاق والخلع من حيث المفهوم والحكم والآثار، ثم أن يكتب فقرة قصيرة توضح أهمية الحفاظ على حقوق الزوجين والأبناء عند حدوث الفراق.	<u>Resources needed:</u> • Islamic Education textbook • Relevant Qur'an verses and Hadith from the lesson • Presentation or whiteboard • Age-appropriate case studies for group discussion <u>Homework/Assignments:</u> Write a short paragraph explaining how moderation helps build a peaceful community. Include one example from school, daily life, or social media.
BUSINESS	ECONOMICS
<u>Topics:</u> 6.2 Business strategy 6.2.1 Developing business strategy <u>Learning Objectives:</u> To analyze the meaning and purpose of strategic management: analysis, choice and implementation <u>Resources needed:</u> E book, Case studies with mark scheme <u>Homework/Assignments:</u> Practice end of unit questions	<u>Topics:</u> Different market structures <u>Learning Objectives:</u> To describe the market structure of perfect competition To explain barriers to entry and exit To analyse the performance of firms in different market structures To define the meaning of concentration ratio <u>Resources needed:</u> Text -book Past paper Marking scheme Task sheet <u>Homework/Assignments:</u> Topical questions