LEARNING TRAILS AY 2024-25

GRADE: 12
TERM 1_WEEK 11 (4th November to 8th November 2024)
Cycle Test Schedule on Monday November 4th Chemistry

IT	MATHEMATICS
Topics: Communications technology: Types of networks. Characteristics of each type of network. Uses of each type of network. Components in a network. Network servers. Graphics. **Learning Objectives:** Describe different types of networks including: Client-server, peer-to-peer, VPN and mobile network. Differentiate between client-server network and peer-to-peer network. Analyze the advantages and disadvantages of client-server and peer-to-peer network. Describe the functions of different components of a network. Describe different network servers. **Resources needed:** Textbook, ppt, smart board, task sheets. **Homework/Assignments:** Solve the past paper questions from the topic.	**Topics:** Differentiation **Learning Objectives:** • Use the derivatives of e^x, $\ln x$, $\sin x$, $\cos x$, $\tan x$ and $\tan^{-1} x$ together with constant multiples, sums, differences and composites • differentiate products and quotients • find and use the first derivative of a function which is defined parametrically or implicitly Including use in problems involving tangents and Normals. **Resources needed:** Smartboards, MS PPTs, Whiteboards and markers, ATS questions, Topics-wise questions **Homework/Assignments:** Papers
ADVANCED ARABIC	**GENERAL ARABIC**

AL AIN JUNIORS SCHOOL
BRITISH SYSTEM

YEARS OF
IMPACTING
YOUNG MINDS
SCHOOLS · NURSERIES · TRAINING

AJ GROUP

Topics: أفعال المقاربة والرجاء والشروع **Learning Objectives:** أن يتعرف المتعلم أفعال المقاربة والرجاء والشروع ومبدأ عملها أن يعرب المتعلم الجمل التي تتضمن أفعال المقاربة والرجاء والشروع إعرابا صحيحا أن يوظف المتعلم أفعال المقاربة والرجاء والشروع في مواقف حياتية **Resources needed:** الكتاب المدرسي ـ الدفتر المدرسي ـ العرض التقديمي ـ السبورة الذكية **Homework/Assignments:** حل تمرينات الدرس	**Topics:** **قواعد نحوية الحال** **Learning Objectives:** أن يتعرف الطالب على معنى الحال أن يحدد الطالب أنواع الحال أن يعرب الطالب الحال أن يستنتج الطالب القاعدة النحوية للحال **Resources needed:** كتاب الطالب ـ السبورة الذكية ـ العرض التقديمي **Homework/Assignments:** كتابة فقرة عن أهمية العلم موظفًا الحال

PHYSICS	BIOLOGY
Topics: Electric field, Capacitors **Learning Objectives:** Define electric potential and relate with electric field. Solve problems linked with concepts of field and potential. Explain how a capacitor stores energy Define capacitance and use defining equations to solve problems. **Resources needed:** Copy book, Calculator, sample questions **Homework/Assignments:** Topical questions from SHM and Electric field.	**Topics:** Coordination In plants & Inheritance **Learning Objectives:** - describe the rapid response of the Venus fly trap and explain how the closure of the trap is achieved - explain the role of auxin - describe the role of gibberellin in the germination of barley - explain the need for a reduction division during meiosis - Explain different stages of meiosis - Interpret and construct genetic diagrams

	Resources needed:note book ,stationary ,smart board **Homework/Assignments:** Solve the given questions

CHEMISTRY	ACCOUNTING
Topics: 26 Reaction kinetics **Learning Objectives:** 1. calculate the numerical value of a rate constant, for example by: using the initial rates and the rate equation using the half-life, $t_{½}$, and the equation $k = 0.693 / t_{½}$ 2. for a multi-step reaction: suggest a reaction mechanism that is consistent with the rate equation and the equation for the overall reaction **Resources needed:** **Smart boards, textbook, past papers** **Homework/Assignments:** **Question from past papers**	**Topics:** Investment ratios **Learning Objectives:** How to calculate the following ratios: – working capital cycle (in days) – net working assets to revenue (sales) – interest cover – gearing ratio – earnings per share – price/earnings ratio – dividend per share – dividend yield – dividend cover • How to analyse and evaluate the results of the ratios and draw conclusions • How to make appropriate recommendations to stakeholders on the basis of the analysis undertaken **Resources needed:** Text book, Formula Sheet, Task Sheet, Case Studies **Homework/Assignments:** Topical questions
ISLAMIC ARABIC	ISLAMIC EDUCATION
Topics: السنن الربانية **Learning Objectives:** أن يوضح الطلاب مفهوم السنن الربانية وأقسامها أن يدلل على أهمية فهم السنن الربانية للفرد والمجتمع **Resources needed:** الكتاب المدرسي البوربوينت أنشطة صفية **Homework/Assignments:** حل أنشطة الطالب بالكتاب المدرسي مراجعة البوربوينت للدرس	**Topics:** **Divine Laws** **Learning Objectives:** • Define and explain the concept of Divine Laws in Islam. • Understand the importance and purpose of Divine Laws in guiding human actions and moral conduct. **Resources needed:** • **(Interpretation):** Passages related to Divine Laws.

	• **Hadith Collection:** Pertinent hadith related to Divine guidance and laws **Homework/Assignments:** Select one verse and one hadith related to Divine Laws. Write a short reflection on how these teachings influence ethical behavior.

BUSINESS

Topics:

Business communication

Learning Objectives:

To:

• analyze the importance of effective communication to business

• evaluate the advantages and disadvantages of different communication methods

• analyze the causes of barriers to communication and how to overcome them

• evaluate the differences between one- and two-way, vertical and horizontal, formal and informal communication

• evaluate the role of management in facilitating communication.

Resources needed:

Text Book,

 Topical case studies,

Topical Data response questions,

Mark schemes uploaded in teams

Homework/Assignments:

End of chapter questions