



## LEARNING TRAILS AY 2024-25

GRADE: 12

TERM 1\_WEEK 12 (11<sup>th</sup> November to 15<sup>th</sup> November 2024)

Cycle Test Schedule –

Monday (11 /11/24)

Mathematics

IT	MATHEMATICS
<p><b>Topics:</b> Network servers: file server, web server, mail server, applications server, print server, FTP server, proxy server, virtual server. Cloud computing. Graphics.</p> <p><b>Learning Objectives:</b> Explain the role of a server in a network.</p> <p>Describe the functions of different types of servers including: file server, web server, mail server, applications server, print server, FTP server, proxy server, virtual server.</p> <p>Describe the advantages and disadvantages of each type of server for a given scenario.</p> <p>Describe the advantages and disadvantages of cloud computing for individuals and organisations.</p> <p>Design vector graphics in adobe illustartor.</p> <p><b>Resources needed:</b> Computer system, task sheets, smart board.</p> <p><b>Homework/Assignments:</b> Solve past paper questions.</p>	<p><b>Topics:</b> Approximations involving the poisson distribution , Integration of exponential and logarithmic functions</p> <p><b>Learning Objectives:</b> *Use Poisson distribution as an approximation to the binomial distribution *Use normal distribution with continuity correction as an approximation to Poisson distribution *Use the idea of reverse differentiation to include the integration of exponential and logarithmic functions.</p> <p><b>Resources needed:</b> Text book , task sheets , past papers</p> <p><b>Homework/Assignments:</b> Topic related past paper questions</p>



ADVANCED ARABIC	GENERAL ARABIC
<p><b>Topics:</b> (إن وأخواتها) تطبيقات نحوية</p> <p><b>Learning Objectives:</b> أن يعدد المتعلم الحروف الناسخة ويوضح مبدأ عملها أن يحدد المتعلم عناصر جملة إن أن يعرب المتعلم الجمل إعرابا صحيحا</p> <p><b>Resources needed:</b> الكتاب المدرسي - الدفتر المدرسي - السبورة الذكية</p> <p><b>Homework/Assignments:</b> حل تمارين الدرس ص75-77</p>	<p><b>Topics:</b> <u>مراحل حياة الإنسان</u></p> <p><b>Learning Objectives:</b> <u>أن يفسر المتعلم المفردات الجديدة الواردة في الدرس</u> <u>أن يستنتج المتعلم مراحل حياة الإنسان</u> <u>أن يحلل المتعلم الدرس</u> <u>أن يستخرج المتعلم المهارات اللغوية والنحوية من الدرس</u></p> <p><b>Resources needed:</b> <u>كتاب الطالب - السبورة الذكية - العرض التفاعلي</u></p> <p><b>Homework/Assignments:</b> <u>كتابة فقرة عن مراحل تطور حياة الإنسان</u></p>
PHYSICS	BIOLOGY
<p><b>Topics:</b> Capacitors</p> <p><b>Learning Objectives:</b> Should be able to Determine energy stored in a capacitor Derive and apply combined capacitance equations for series and parallel combination. Describe charging and discharging of a capacitor and use exponential equation to solve problems.</p> <p><b>Resources needed:</b> Copy book, calculator, sample questions</p> <p><b>Homework/Assignments:</b> Topical Past paper questions – Electric field</p>	<p><b>Topics:</b> 16.Inheritance</p> <p><b>Learning Objectives:</b> Interpret photomicrographs and diagrams of cells in different stages of meiosis Explain that crossing over , random fusion of gametes and random orientation during meiosis produces genetically different individuals Interpret and construct genetic diagrams, including Punnett squares, to explain and predict the results of monohybrid crosses and dihybrid crosses Use the chi-squared test to test the significance of differences between observed and expected results</p> <p><b>Resources needed:</b> PPT, Video, Calculator , stationaries ,Activity sheet</p> <p><b>Homework/Assignments:</b> Solve the given monohybrid and dihybrid crosses</p>



CHEMISTRY	ACCOUNTING
<p><b>Topics: 26</b> <b>Reaction Kinetics</b></p> <p><b>Learning Objectives:</b> For a multi-step reaction: *suggest a reaction mechanism that is consistent with the rate equation and the equation for the overall reaction *predict the order that would result from a given reaction mechanism and rate-determining step *deduce a rate equation using a given reaction mechanism and rate-determining step for a given reaction *identify an intermediate or catalyst from a given reaction mechanism *identify the rate determining step from a rate equation and a given reaction mechanism</p> <p><b>Resources needed:</b> Copy book, calculator, sample questions Smart board.</p> <p><b>Homework/Assignments:</b> Topical past papers questions.</p>	<p><b>Topics:</b> Partnership Accounting</p> <p><b>Learning Objectives:</b> To account for partnership changes –admission and retirement</p> <p><b>Resources needed:</b> _Text book Formats Task sheets</p> <p><b>Homework/Assignments:</b> Topical questions</p>
ISLAMIC ARABIC	ISLAMIC EDUCATION
<p><b>Topics:</b> المسؤولية في الإسلام</p> <p><b>Learning Objectives:</b> أن يوضح الطلاب مفهوم المسؤولية أن يميز بين المسؤولية الجماعية والمسؤولية الفردية أن يوضح مجالات المسؤولية</p> <p><b>Resources needed:</b> الكتاب المدرسي البوربوينت أنشطة صفية</p> <p><b>Homework/Assignments:</b> حل أنشطة الطالب بالكتاب المدرسي مراجعة البوربوينت للدرس</p>	<p><b>Topics:</b> The Five Purposes of Islamic Legislation</p> <p><b>Learning Objectives:</b> <b>Understand the Concept of Islamic Legislation:</b> Students will learn about the overall purpose and essence of Islamic law (Sharia) and its role in creating a balanced society.</p> <p><b>Identify the Five Purposes (Maqasid al-Sharia):</b> Define and explore each purpose of Islamic legislation — preservation of religion, life, intellect, progeny, and property.</p> <p><b>Resources needed:</b></p>



Grade 12 Islamic Education textbook, supplementary materials on *Maqasid al-Sharia*

**Homework/Assignments:**

Research a real-world case where one of the purposes is demonstrated (e.g., protection of life in healthcare laws) and prepare a brief report.

**BUSINESS**

**Topics:**

Leadership

**Learning Objectives:**

- analyze the purpose of leadership
- analyze the qualities of a good leader
- evaluate key leadership theories
- analyze the four competencies of emotional intelligence.

**Resources needed:**

Text book

Topical Case studies

**Homework/Assignments:**

Practice topical past papers