



## LEARNING TRAILS AY 2024-25

GRADE: 12

TERM 2\_WEEK 4 (27<sup>th</sup> January to 31<sup>st</sup> January 2025)

IT	MATHEMATICS
<p><b><u>Topics:</u></b> Communications technology: Network protocols. Programming for web.</p> <p><b><u>Learning Objectives:</u></b> Describe the purposes and uses of protocols in the preparation, addressing, sending and receiving of data across networks, including: Transmission Control Protocol (TCP), Internet Protocol (IP), Internet Control Message Protocol (ICMP), Address Resolution Protocol (ARP) and inverse address, Resolution Protocol (InARP), Dynamic Host Configuration Protocol (DHCP), User Datagram Protocol (UDP), Hypertext Transfer Protocols (HTTP and HTTPS), File Transfer Protocol (FTP)– tunneling protocol, for example, Simple Mail Transfer Protocol (SMTP), Post Office Protocols, for example, POP3, Internet Message Access Protocol (IMAP), Telnet, SSH, Internet Protocol Security (IPsec), TLS/SSL.</p> <p>Create simple program using java script.</p> <p><b><u>Resources needed:</u></b> Computer system, activity sheets, past paper</p> <p><b><u>Homework/Assignments:</u></b> Solve past paper questions.</p>	<p><b><u>Topics:</u></b> Continuous Random variable (Statistics)</p> <p><b><u>Learning Objectives:</u></b> Understand the concept of continuous random variable and recall and use properties of a probability density function Use probability density function to solve problems involving probabilities and to calculate the mean , and variance of a distribution</p> <p><b><u>Resources needed:</u></b> Text book , past papers</p> <p><b><u>Homework/Assignments:</u></b> Related past paper questions</p>



ADVANCED ARABIC	GENERAL ARABIC
<p><b>Topics:</b> (رواية قلم زينب الفصول ( 3 - 10</p> <p><b>Learning Objectives:</b> أن يحلل المتعلم عناصر الرواية وخيارات المؤلف في اختيار الكلمات والأساليب الأدبية المناسبة للنص أن يلخص المتعلم الفصول التي قرأها بطريقة إبداعية</p> <p><b>Resources needed:</b> الكتاب المدرسي - الدفتر المدرسي - العرض التقديمي</p> <p><b>Homework/Assignments:</b> تلخيص الفصول المقروءة</p>	<p><b>Topics:</b> <u>درس الشبكة العنكبوتية</u></p> <p><b>Learning Objectives:</b> <u>أن يتعرف المتعلم على المفردات الجديدة</u> <u>أن يوظف المتعلم المفردات الجديدة في جمل توضح معناها</u> <u>أن يحدد المتعلم الفكرة الرئيسية والفكر الفرعية للدرس</u></p> <p><b>Resources needed:</b> <u>كتاب الطالب - الدفتر - العرض التقديمي - السبورة الذكية</u></p> <p><b>Homework/Assignments:</b> <u>كتابة فقرة عن أهمية الشبكة العنكبوتية</u></p>
PHYSICS	BIOLOGY
<p><b>Topics:</b> Nuclear Physics</p> <p><b>Learning Objectives:</b> Should be able to Define decay constant, half-life and activity of a radioactive sample. Understand and apply exponential equations to solve problems. Explain decay curve.</p> <p><b>Resources needed:</b> Copy book, calculator, sample questions.</p> <p><b>Homework/Assignments:</b> Topical past paper questions – Quantum Physics Prepare for flipped class as assigned</p>	<p><b>Topics:</b> <u>18-Classification</u></p> <p><b>Learning Objectives:</b> -Discuss the meaning of the term species, limited to the biological species concept, morphological species concept and ecological species concept - Describe the classification of organisms into three domains: Archaea, Bacteria and Eukarya -Describe the classification of organisms in the Eukarya domain into the taxonomic hierarchy of kingdom, phylum, class, order, family, genus and species - Outline the characteristic features of the kingdoms Protocista, Fungi, Plantae and Animalia</p> <p><b>Resources needed:</b> Calculator, stationaries, PPT, smart board ,activity sheets</p> <p><b>Homework/Assignments:</b> <u>Solve the given questions /activity sheet</u></p>



CHEMISTRY	ACCOUNTING
<p><b>Topics: 35 Polymers</b></p> <p><b>Learning Objectives:</b></p> <ol style="list-style-type: none"><li>1. describe the formation of polyesters:<ol style="list-style-type: none"><li>(c) the reaction between a diol and a dicarboxylic acid or diol chloride</li><li>(c) the reaction of a hydroxycarboxylic acid</li></ol></li><li>2. describe the formation of polyamides:<ol style="list-style-type: none"><li>(c) the reaction between a diamine and a dicarboxylic acid or diol chloride</li><li>(c) the reaction of an aminocarboxylic acid</li><li>(c) the reaction between amino acids</li></ol></li></ol> <p><b>Resources needed:</b> <b>Textbook, syllabus, smartboards, whiteboards</b></p> <p><b>Homework/Assignments:</b> Past paper question</p>	<p><b>Topics:</b> Standard Costing</p> <p><b>Learning Objectives:</b> To prepare a statement reconciling the flexible budgeted cost of production with the actual cost of production</p> <ul style="list-style-type: none"><li>• To prepare a statement reconciling the flexible budgeted profit with the actual profit</li></ul> <p><b>Resources needed:</b> Task Sheets Topical questions Text book</p> <p><b>Homework/Assignments:</b> Topical questions</p>
ISLAMIC ARABIC	ISLAMIC EDUCATION
<p><b>Topics:</b> البيوع المحرمة</p> <p><b>Learning Objectives:</b> أن يبين البيوع المحرمة أن يذكر صوراً تطبيقية للبيوع المحرمة أن يوضح الأدلة على تحريم هذه البيوع أن يستنتج الحكمة من تحريم البيوع أن يحرص على تجنب هذه البيوع</p> <p><b>Resources needed:</b></p> <ul style="list-style-type: none"><li>• الكتاب المدرسي</li><li>• العرض التقديمي</li><li>• السبورة الذكية</li><li>• الانترنت</li><li>• الجهاز اللوحي</li></ul> <p><b>Homework/Assignments:</b></p> <ul style="list-style-type: none"><li>• مراجعة العرض التقديمي للدرس</li><li>• حل أنشطة الطالب بالكتاب المدرسي</li></ul>	<p><b>Topics:</b> Prohibited Transactions (Al-Buyou' Al-Muharramah)</p> <p><b>Learning Objectives:</b></p> <ul style="list-style-type: none"><li>• Explain the types of prohibited transactions.</li><li>• Identify practical examples of prohibited transactions.</li><li>• Clarify the evidence for the prohibition of these transactions.</li><li>• Deduce the wisdom behind prohibiting such transactions.</li></ul> <p><b>Resources needed:</b></p> <ul style="list-style-type: none"><li>• Textbook</li><li>• Presentation</li><li>• Smartboard</li><li>• Internet</li><li>• Tablet device</li></ul> <p><b>Homework/Assignments:</b></p> <ul style="list-style-type: none"><li>• Review the lesson presentation.</li></ul>



- Complete the student activities in the textbook.

## BUSINESS

**Topics:**

Financial statements

**Learning Objectives:**

- analyse the main components of a statement of financial position
- evaluate the importance of inventory valuation
- evaluate the importance of depreciation.

**Resources needed:**

E book, topical case studies

**Homework/Assignments:**

Practice past papers.