



LEARNING TRAILS AY 2026-27

YEAR: 12

TERM 1_WEEK 5(Sep 28th -2nd Oct , 2026)

IT	MATHEMATICS
Topics: Database: Normalisation to third normal form (Practical). Hardware and software: Mainframe computers and supercomputers Learning Objectives: Describe normalization. Describe the advantages and disadvantages. Create a relational database in third normal form. Describe the characteristics of mainframe computers and supercomputers. Describe the Advantages and disadvantages of mainframe computers and supercomputers. Resources needed: Textbook, white board, Computer system, Task sheets. Homework/Assignments: Solve past paper questions.	Topics: Coordinate Geometry Learning Objectives: The students shall be able to: - Find the equation of straight line given sufficient information. - Interpret and use any of forms $y = mx + c$, $y - y_1 = m(x - x_1)$ and $ax + by + c = 0$. - Understand that the equation $(x - a)^2 + (y - b)^2 = r^2$ represents the circle with centre (a, b) and radius r. - Use algebraic methods to solve problems involving lines and circles. - Understand the relationship between a graph and its associated algebraic equation and use the relationship between points of intersection of graphs and solutions of equations. Resources needed: Text book, Calculator https://cambridgepapers.net/a-level-mathematics-9709-pure-mathematics-1-coordinate-geometry-questions-without-diagram Homework/Assignments: Daily Practice Questions, Weekly Assignment



ADVANCED ARABIC	GENERAL ARABIC
Topics: <u>اسما الزمان والمكان</u> Learning Objectives: <u>أن يعرف المتعلم اسما الزمان والمكان</u> <u>أن يستخرج المتعلم أسما الزمان والمكان من الجمل</u> <u>أن يميز المتعلم اسما الزمان والمكان في الجمل والنصوص</u> <u>أن يحدد المتعلم أركان أسلوب التفضيل في الأمثلة</u> <u>أن يوظف المتعلم اسما الزمان والمكان في جمل من إنشائه</u> Resources needed: <u>كتاب الطالب – البوربوينت – السبورة الذكية – دفتر الطالب</u> Homework/Assignments: كتابة فقرة قصيرة من 5 – 6 أسطر عن مظاهر التميز والتقدم في دولة الإمارات موظفا أسماء الزمان والمكان على الأقل	Topics: <u>الأفعال الناسخة</u> Learning Objectives: • أن يتعرف الطالب الأفعال الناسخة • أن يحدد الطالب اسمها وخبرها • أن يكتب اسم كان وخبرها في حالاته المختلفة • أن يجيب الطالب عن أسئلة الكتاب المدرسي Resources needed: <u>الكتاب المدرسي – بوربوينت – دفتر الطالب</u> Homework/Assignments: <u>اكتب فقرة عن أهمية القراءة</u>
PHYSICS	BIOLOGY
Topics: <u>Kinematics</u> Projectiles, velocity time and acceleration time graph Learning Objectives: Practice SQ and MCQ question of papers 2021-2025 [june/october] Use equations of motion to solve projectile question Solve question related to velocity time graph , displacement time graph, acceleration time graph Resources needed: <u>Topical papers from 2021-2025</u> Homework/Assignments: <u>Topical papers [2016-2020] [october-november]</u>	Topics: BIOLOGICAL MOLECULE Learning Objectives: describe the molecular structure of phospholipids with reference to their hydrophilic (polar) phosphate heads and hydrophobic (non-polar) fatty acid tails. describe and draw the general structure of an amino acid and the formation and breakage of a peptide bond Explain the meaning of the terms primary, secondary , tertiary structure and quaternary structure of proteins Describe the types of interaction that hold protein molecules in shape: State features and role of globular proteins Describe the structure of a molecule of haemoglobin as an example of a globular protein. relate the structure of haemoglobin to its function, including the importance of iron in the haem group Describe the structure of a molecule of collagen as an example of a fibrous protein, and the arrangement of collagen molecules to form collagen fibres



	Relate the structures of collagen molecules and collagen fibres to their function <u>Resources needed:</u> Textbook, presentation, Videos and <u>Homework/Assignments:</u> Solve topical questions from Save my exams
CHEMISTRY	ACCOUNTING
<u>Topics:</u> Chemical Bonding <u>Learning Objectives:</u> (a) Describe van der Waals' forces as the intermolecular forces between molecular entities other than those due to bond formation, and use the term van der Waals' forces as a generic term to describe all intermolecular forces (b) Describe the types of van der Waals' force: • instantaneous dipole – induced dipole (id-id) force, also called London dispersion forces • permanent dipole – permanent dipole (pd-pd) force, including hydrogen bonding (c) Describe hydrogen bonding and understand that hydrogen bonding is a special case of permanent dipole – permanent dipole force between molecules where hydrogen is bonded to a highly electronegative atom <u>Resources needed:</u> Data booklet Inorganic Student Kit <u>Homework/Assignments:</u> <u>Textual Questions</u>	<u>Topics</u> Control Account <u>Learning Objectives:</u> To amend SLCA and PLCA and to reconcile the control account balances with ledger account balances . <u>Resources needed:</u> Formats Task sheets Topical questions <u>Homework/Assignment:</u> Topical questions
ISLAMIC ARABIC	ISLAMIC EDUCATION
<u>Topics:</u> <u>الاستعفاف</u> <u>Learning Objectives:</u> . أن يبين المقصود بالاستعفاف . أن يبين أثر الاستعفاف على الفرد والمجتمع . أن يوضح مجالات الاستعفاف	<u>Topics:</u> Chastity (Al-Isti'faf / الاستعفاف) <u>Learning Objectives:</u> • To explain the meaning of chastity (Al-Isti'faf). • To explain the impact of chastity on the individual and society.



أحرص على تمثل القيم والأخلاق الإسلامية

Resources needed:

- كتاب التربية الإسلامية.
- القرآن الكريم.
- (PowerPoint) السبورة والعرض التقديمي.
- جدول للمقارنة / بطاقات تعليمية.
- أوراق عمل وأنشطة صفية.
- فيديو تعليمي قصير.

Homework/Assignments:

إكمال أنشطة الكتاب المدرسي المتعلقة بالدرس

- To identify the different **areas/aspects of chastity**.
- To demonstrate and practise **Islamic values and morals**.

Resources needed:

- Islamic Education textbook.
- The Holy Qur'an.
- Whiteboard and PowerPoint presentation.
- Comparison chart / educational cards.
- Worksheets and classroom activities.
- Short educational video.

Homework/Assignments:

Complete the **textbook activities** related to the lesson.

ECONOMICS

Topics:

Classification of goods and services

Learning Objectives:

To explain the meaning and importance of the free goods and private goods

To explain the meaning and importance of public goods

To explain the meaning of merit and demerit goods

To analyse how overconsumption of demerit goods results from imperfect information in the market

Resources needed:

Past paper

Ppt

Task sheet

Topical questions

Homework/Assignments:

Topical questions

BUSINESS

Topics:

1.5 Stakeholders in a business

1.5.2 The relative importance and influence of stakeholders on business activities

Learning Objectives:

To analyze how and why a business needs to be accountable to its stakeholders

To analyze how conflict might arise from stakeholders having different aims and objectives

To analyze how changing business objectives might affect its stakeholders

To evaluate the impact of business decisions on stakeholders and their reactions

Resources needed:

E book, topical case studies with mark scheme

Homework/Assignments:

Practice topical past papers which are uploaded in Edunation.