AL AIN JUNIORS SCHOOL- BRITISH SYSTEM
LEARNING TRAILS
AY 2023-24: Term 1_Week 12 (13th to 17th November 2023)
GRADE 12

MATHEMATICS	IT
Topics: Linear Combination of Random variables. **Learning Objectives:** To be able to find the mean and variance of Random variables. To be able to find the probabilities using Normal distribution. **Resources needed:** Sample questions, Past paper questions. **Homework/Assignments:** Past paper questions.	**Topics:** Communication technology: Networks: Types. Characteristics and uses of each type. Advantages and disadvantages of each type. **Learning Objectives:** • Define client-server and peer-to-peer networks and explain their basic structures. • Identify the roles and responsibilities of clients and servers in a client-server network. • Describe the decentralized nature of peer-to-peer networks and their reliance on resource sharing among peers. • Discuss the applications of peer-to-peer networks, including file sharing, collaborative computing, and decentralized communication. • Evaluate the scalability and performance advantages of client-server networks in handling large-scale operations. • Identify scenarios where peer-to-peer networks are more suitable, such as small-scale environments or ad hoc collaborations. **Resources needed:** Cambridge International AS and A level IT-course book. **Homework/Assignments:** Solve past paper questions.

ADVANCED ARABIC	GENERAL ARABIC
Topics: البركة	**Topics:** نص معلوماتي طائر النعام
Learning Objectives: أن يبين المتعلم المعنى الإجمالي للنصوص الشعرية موضحا علاقة الفكر بعضها ببعض مفسرا مفرداتها من خلال السياق والقرائن باستخدام مصادر ورقية ورقمية متعددة مستنتجا الدلالات التعبيرية	**Learning Objectives:** أن يتعرف الطالب على المفردات الجديدة الواردة في النص أن يقرأ الطالب النص قراءة جهرية صحيحة أن يعدد الطالب مواصفات طائر النعام أن يحلل الطالب النص تحليلًا لغويًا صحيحًا
Resources needed: الكتاب المدرسي ـ العرض التقديمي ـ مقطع فيديو	**Resources needed:** كتاب الطالب ـ العرض التقديمي ـ فيديو عن النعام
Homework/Assignments: حل تمرينات الدرس ـ منصة ألف	**Homework/Assignments:** يجيب عن أسئلة النص في الكتاب- يكتب فقرة عن الطيور في دولة الإمارات العربية المتحدة
PHYSICS	BIOLOGY
Topics: Capacitors, Magnetic field	**Topics:** Inheritance
Learning Objectives: - Describe how PD across a capacitor varies with time while discharging and explain time constant along with exponential equation. - Explain force on a current carrying conductor in a magnetic field	**Learning Objectives:** - Describe the stages of Meiosis 1& 2 Draw and label different stages from the photomicrographs - Explain the importance of reduction revision - Explain the factors that leads to genetic variation - Explain structural genes, regulatory genes
Resources needed: Copy book, calculator, stationeries	**Resources needed:** Copy book, calculator, text book, tab, Activity sheet
Homework/Assignments: Topical past paper - Electric field	**Homework/Assignments:** Solve topical questions & activity sheet
ISLAMIC ARABIC	ISLAMIC EDUCATION
Topics: السنن الربانية	**Topics:** Divine Laws
Learning Objectives: أن يتعرف السنن الربانية وأقسامها	**Learning Objectives:** a. Understand the concept of Divine Laws in

أن يدلل على أهمية فهم السنن الربانية للفرد والمجتمع أن يبين خصائص السنن الربانية أن يحدد السنن الشرطية في القرآن الكريم والسنة أن يحرص على الاستفادة من السنن الربانية في حياتي اليومية Resources needed: الكتاب المدرسي بوربوينت أنشطة تعليمية منصة ألف **Homework/Assignments:** • حل أنشطة الطالب • حل أسئلة منصة ألف	Islam. b. Identify and analyze the different types of Divine Laws. c. Apply the Divine Laws to real-life situations and make informed ethical decisions. **Resources needed:** a. Apps: Islamic Legal Studies apps, Quran apps, Hadith apps. b. Links: Online resources such as reputable Islamic websites, academic journals, and video lectures **Homework/Assignments:** Solve students' activities in the textbook. Revise PPT

CHEMISTRY	ACCOUNTING
Topics: T 26 REACTION KINETICS **Learning Objectives:** Deducing rate equation and rate constant Order of reaction determination from graphs **Resources needed:** Smart board White board Textbook Past papers **Homework/Assignments:** Past paper questions	**Topics:** Limited Companies **Learning Objectives:** To formulate Statement of changes in equity To formulate schedule of non-current assets **Resources needed:** AS and A level Accounting by David Hopkins and Harold Randall Topical questions Formats based on IAS **Homework/Assignments:** Topical questions

BUSINESS	ECONOMICS
Topics: Human resource management 7.1.1 The relationship between business objectives and organizational structure 7.1.2 Types of structure: functional, hierarchical (flat and narrow), matrix	**Topics:** Government policies to correct the market failures **Learning Objectives:** To analyze the role subsidy in correcting the

7.1.2 Types of structure: functional, hierarchical (flat and narrow), matrix
7.1.5 Centralization and decentralization

Learning Objectives:
To analyze the relationship between delegation and accountability
To analyze the processes of accountability in a business
To analyze the impact of delegation on a business
The relationship between span of control and levels of hierarchy
To analyze the difference between authority and responsibility
To analyse the conflicts between control and trust that might arise when delegating
To analyse the impact of centralization and decentralization on a business

Resources needed:
ISBN:9781108921220
www.tutor2u.net/business/people/org_centralisation_decentralisation.asp
www.youtube.com/watch?v=M1sV6YhxQD8
– video about centralization and decentralization

Homework/Assignments:
Practice End of Unit 1 questions

market failure
To understand the tools of direct control in correcting the market failures
To understand the relationship between privatization and market failure

Resources needed:
Economics by Petr Smith
CIA past papers

Homework/Assignments:
Find solutions to the End of the Chapter questions-Page Number: 335