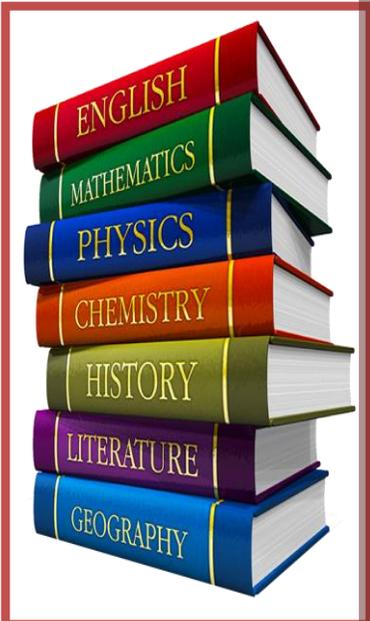
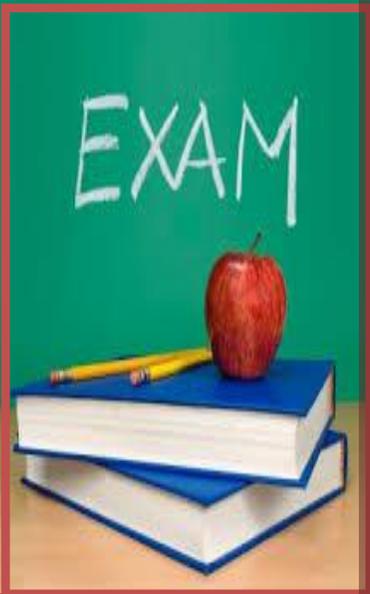


# YEAR 12



**Term 2 Exam**  
**2018-2019**

O  
B  
J  
E  
C  
T  
I  
V  
E  
S



# O B J E C T I V E S

## CONTENTS

**1. Arabic**

**2. Sharia**

**3. Hum Arabic**

**4. English**

**5. Physics**

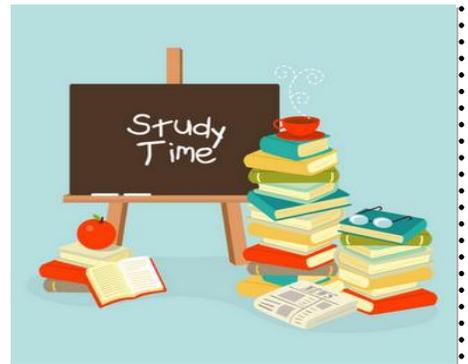
**6. Chemistry**

**7. Biology**

**8. Mathematics**

**9. ICT**

**10. Business**



Teacher's name : Jinan mousa  
: 12

Subject: arabic

Year

No.	Term 2 objectives:
1	كتابة المقال – الرسالة – القضايا الاجتماعية ( النص المفتوح )- المشروع
2	طرح قضية ما للنقاش ومناقشة أسبابها وأثارها السلبية والإيجابية واقتراح حلول بناءة لها
3	ضبط الكلمة ضبطا سليما وفق موقعها الإعرابي من الجملة
4	ترجمة النص من العربية إلى الانجليزية ترجمة سليمة

Max. number of objectives is 5 objectives.

No of assessments during the term(without including the end of term exam) عدد الاختبارات خلال الفصل ما عدا نهاية الفصل	2
Total mark for each assessment (every assessment is out of what) درجات الاختبارات	درجة الاختبار الأول 46 علامة – الثاني 20 علامة
Duration of end of term exam/exams الدرجة الخاصة باختبار نهاية الفصل	ورقة واحدة مدتها ساعتان – الدرجة 90

Please use your class practical experience and knowledge for the topics covere - 1

كتابة المقال الاجتماعي والسياسي كتابة سليمة وفق شروطه وعدد كلماته المطلوب في الموضوعات التالية

أ- التاريخ العربي عبر العصور

ب- الثقافة والفنون العربية

ت- الثقافة الاجتماعية العربية

ث- الأحداث العربية الجارية

كتابة النص النقاشي ( وعرض أسباب المشكلة – أثارها السلبية – اقتراح حلول لها)- المقال – الرسالة - المشروع

ضبط الكلمة ضبطا سليما وفق موقعها من الإعراب ( ما سبقت دراسته من قواعد نحوية )

ترجمة النص من العربية إلى الانجليزية

نصوص الفهم والاستيعاب

No.	Term 2 objectives:
1	أن تطبق أحكام التجويد تطبيقاً صحيحاً فيما تتلو أو تسمع
2	أن تتعرف بعض المصطلحات الخاصة بعلم مصطلح الحديث أن تتعرف على بعض أبواب علوم القرآن المعينة على فهمه
3	أن تتعرف حقيقة الدعوة إلى تحرير المرأة
4	أن تبين المقاصد الشرعية لأحكام الجهاد
5	أن تتعرف على شخصية الصحابي عبد الله بن عمر بن الخطاب رضي الله عنه وأن تتعرف معنى التغريب وجذوره الفكرية والعقائدية

Max. number of objectives is 5 objectives.

No of assessments during the term (without including the end of term exam) عدد الاختبارات خلال الفصل ما عدا نهاية الفصل	2
Total mark for each assessment (every assessment is out of what) درجات الاختبارات	15+15
Duration of end of term exam/exams الدرجة الخاصة باختبار نهاية الفصل	10 تلاوة / 40 امتحان تحريري

#### Topics and units covered/ Studying material/Any other information

المواضيع الداخلة باختبار نهاية الفصل

Please use your class practical experience and knowledge for the topics covered.

- 1- أحكام النون الساكنة والتنوين وأحكام الميم الساكنة
- 2- سورة البقرة من آية 168-179 (تلاوة)
- 3- سورة ق ( حفظ )
- 4- علوم القرآن 2
- 5- عبد الله بن عمر
- 6- علم مصطلح الحديث
- 7- أشهر كتب السنة
- 8- أحكام الجهاد
- 9- تحرير المرأة
- 10- التغريب

الأدلة الشرعية في الدروس التالية: احكام الجهاد/ علوم القرآن



أكاديمية الأرقام للبنات  
AL- Arqam Academy For Girls

الثاني

الثاني عشر

Teacher's name: ميمونة محمد Subject: العلوم الاجتماعية Year group:

No.	Term 2 objectives:
1	أن تذكر أسباب الحرب العالمية الثانية المباشرة وغير المباشرة.
2	أن توضح الظروف التي أدت إلى قيام الحرب العالمية الثانية.
3	أن تبيّن اطراف النزاع خلال الحرب العالمية الثانية (دول الحلفاء ودول المحور).
4	أن تتعرف أنواع طبقات المياه الجوفية وأساليب تغذيتها.
5	أن تفهم معنى البيئة التوازن البيئي .
6	أن توضح مفهوم أسس الجغرافيا الاقتصادية.

Max. Number of objectives : .....

No of assessments during the term (excluding the end of term exam)	Assessment 1 Assessment 2
Total mark for each assessment (every assessment is out of what)	Total (30) Assessment 1 ( 15 ) Assessment 2 ( 15 )
No of assessments needs to be included in end of term 1 exam timetable	50
Duration of end of term exam/exams	..... minutes

Topics and units covered/ Studying material/Any other information

1-الحرب العالمية الثانية.ص 93
2-المياه الجوفية ص 119(المفهوم ، أهميته، المكونات، طبقاته ، مشكلاته)
3-البيئة والتوازن البيئي ص123
4- الجغرافيا الاقتصادية ص 129

**Teacher: Ms ANA**  
**group: 12**

**Subject: ENGLISH**

**Year**

No.	Term 2 objectives:
1	<p>READING</p> <ul style="list-style-type: none"> <li>• Demonstrate understanding of explicit meanings</li> <li>• Demonstrate understanding of implicit meanings and attitudes</li> <li>• Select information for specific purposes.</li> </ul>
2	<p>WRITING</p> <ul style="list-style-type: none"> <li>• Articulate experience and express what is thought, felt and imagined</li> <li>• Use a range of appropriate vocabulary</li> <li>• Make accurate use of spelling, punctuation and grammar</li> </ul>
3	<p>SPEAKING</p> <ul style="list-style-type: none"> <li>• Demonstrate the ability to speak fluently and confidently without notes</li> </ul>

No of assessments during the term (without including the end of term exam)	<b>2</b>
Total mark for each assessment (every assessment is out of what?)	<b>20 – Writing</b> <b>25 – Speaking</b>
No of assessments needs to be included in end of term 2 exam timetable	<b>1</b>
Duration of end of term exam/exams	<b>1 hour</b>

**Topics and units covered/ Studying material/Any other information**

**Topics covered:**

\* Grammar

**Exam Preparation:**

\* Practise readings from IELTS, SAT or TOFL.

\* Read through vocabulary lists and familiarize yourself with as many words as possible.

Teacher's name : Ruchi Shangari Subject: Physics Year group: Grade 12

No.	Term 2 objectives:
1	<b><u>Mechanics-- Motion</u></b> Describing motion, Kinematics Equations-Equations of motion Vectors/scalars, Motion Graphs, Newton's laws of motion, Moments, Resolving Vectors- Moving in more than one directions, Measuring g, Projectiles
2	<b><u>Energy</u></b> —Gravitational and Kinetic Energies, Work and Power, Efficiency
3	<b><u>Momentum</u></b> —Momentum, Conservation of Linear Momentum.
4-	<b><u>Materials—Fluids</u></b> - Fluids flow, Density, Upthrust, Stokes law, Viscosity, Terminal Velocity
5-	<b><u>Solid Material Properties</u></b> —Hooke's Law, Stress, strain young modulus, Stress-Strain Graphs, Materials in the real world
6-	<b><u>Waves and Particle Nature of Light--</u></b> Wave Basics, Wave Types, The behaviour of wave, wave phase and superposition, stationary waves, Diffraction, Wave Interference, More wave Properties of light, Refraction, Total Internal Reflection, Polarisation.
7-	<b><u>Quantum Physics--</u></b> Wave Particle Duality, The photoelectric Effect, Electron Diffraction and Interference, Atomic Electron Energies
8-	<b><u>Electric Circuits</u></b> —Electrical Quantities- Electric Current, Electrical Energy Transfer, Current and voltage relationships, Resistivity, Conduction and Resistance, Semiconductors, Complete Electric Circuits, Series and Parallel circuits, Electrical Circuit rules, Potential Dividers, EMF and Internal Resistance, Power in Electric Circuits

No of assessments during the term(without including the end of term exam)	2
Total mark for each assessment (every assessment is out of what)	<b>Assessment 1: Out of 45</b> <b>Assessment2: Out of 45</b>
No of assessments needs to be included in end of term 2 exam timetable	3
Duration of end of term exam/exams	<b>Unit 1 (1 hr 30 mins) + Unit 2 (1 hr 30 mins)</b> <b>and Unit 3 (1 hour and 20 mins)</b> <b>Total 4 hours and 20 minutes</b> <b>Total 200 marks (80+80+50)</b>
<b>Topics and units covered/ Studying material/Any other information</b> <b>Please make sure that you follow the curriculum outline.</b>	



### **Unit 3: Practical Skills in Physics I**

#### **CORE PRACTICALS:**

- 1: Determine the acceleration of a freely-falling object.**
- 2: Use a falling-ball method to determine the viscosity of a liquid.**
- 3: Determine the Young modulus of a material.**
- 4: Determine the speed of sound in air using a 2-beam oscilloscope, signal generator, speaker and microphone.**
- 5: Investigate the effects of length, tension and mass per unit length on the frequency of a vibrating string or wire.**
- 6: Determine the wavelength of light from a laser or other light source using a diffraction grating.**
- 7: Determine the electrical resistivity of a material**
- 8: Determine the e.m.f. and internal resistance of an electrical cell**

**Resources- Textbook and reference notes given in the class.**



أكاديمية الأرقام للبنات  
AL- Arqam Academy For Girls

Teacher's name : -----Uzma Jalil----- Subject: -----Chemistry----Year group: --12A/B--

No.	Term 2 objectives:
1	ENERGETICS
2	INTERMOLECULAR FORCES
3	REDOX CHEMISTRY AND GROUP 1,2 AND 7
4	KINETICS AND EQUILIBRIA
5	ORGANIC CHEMISTRY :ALCOHOLS, HALOALKANES AND SPECTRA

No of assessments during the term(without including the end of term exam)	2
Total mark for each assessment (every assessment is out of what)	45,45
No of assessments needs to be included in end of term 2 exam timetable	3
Duration of end of term exam/exams	UNIT 1 (1hr 30 min):80 Marks UNIT 2 (1hr 30 min):80 Marks UNIT 3(1hr 20 min):50 Marks

#### Topics and units covered/ Studying material/Any other information

##### UNIT 1: (from term 1)

##### Content Over view:

##### 1. FORMULAE, EQUATIONS AND AMOUNT OF SUBSTANCE:

(Application of ideas from this topic will be applied to unit 2 and 3)

Moles, percentage yield, atom economy, empirical and molecular formula, molar volume calculations, concentration of solutions, concentrations in PPM

##### 2. ATOMIC STRUCTURE AND THE PERIODIC TABLE

Structure of atoms and isotopes, mass spectrometry and relative masses of atoms, isotopes and molecules , atomic orbitals and electronic configurations , ionization energies, General trends in periodic table and properties.

##### 3. BONDING AND STRUCTURE

Ionic bonding, ionic radii, evidence of existence ions (CuCrO<sub>4</sub>), lattice structure

Electro negativity, Polarization, % ionic character, Dipole moment (effect of electrostatic on jets of liquid), polar bonds and polar molecules

Covalent bonding, dative covalent bonding, electron density map, giant covalent structure- graphite, diamond, grapheme Shapes of molecules VSEPR, bond length and bond angle

Metallic bonding (melting point trends, electrical conductivity)

##### 4. INTRODUCTORY ORGANIC CHEMISTRY AND ALKANES AND ALKENES:

Hazards and risks , IUPAC nomenclature: structural, displayed & skeletal formula

Types of reactions, Alkanes: isomers, reactions of alkanes

Alkenes: isomerism, reactions of alkenes, Polymers

##### UNIT 2:

##### 5. ENERGETICS

Energy level diagram,  $\Delta H_c$ ,  $\Delta H_n$ ,  $\Delta H_f$ , Hess's law, bond enthalpy and mean bond enthalpy

## 6. INTERMOLECULAR FORCES:

Intermolecular interactions and physical properties.

## 7. REDOX CHEMISTRY AND GROUPS 1,2 AND 7

REDOX: intro to redox, constructing full ionic equation

Groups 1,2: Trends in groups 1,2; reactions of groups 1 and 2, including sulphates, nitrates, oxides and hydroxides, thermal stability of their compounds, flame test and the test for ammonium ions

GROUP 7: general trends, redox reactions in group 7, reactions of halides.

QUANTITATIVE CHEMISTRY: making standard solution, doing titrations, calculations from titrations, mistakes, errors, accuracy and precision

## 8. KINETICS AND EQUILIBRIA:

KINETICS: reaction rate, collision theory and activation energy; effect of concentration, pressure, surface area, temperature and catalyst on rate of reaction

EQUILIBRIA: reversible reactions and dynamic equilibria, effect of changes in conditions on equilibrium composition, reversible reactions in industry.

## 9. ORGANIC CHEMISTRY :

HALOALKANES: hydrolysis reactions, comparing the rates of hydrolysis reactions, haloalkane reactions and mechanism

ALCOHOL: reactions of alcohols, oxidation of alcohols, purifying an organic liquid

MASS SPECTRA AND IR: Mass spectrometry of organic compounds, deducing structure from mass spectra, infrared spectroscopy, using infrared spectra.

Please visit the website for more details:

<https://qualifications.pearson.com/content/dam/pdf/International%20Advanced%20Level/Chemistry/2018/Specification-and-Sample-Assessment/International-A-Level-Chemistry-Spec.pdf>

### UNIT 3:

This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed in Unit 1 and 2.

There are 8 Core Practicals for AS:

CP 1 Measurement of the molar volume of a gas

CP 2 Determination of the enthalpy change of a reaction using Hess's Law

CP 3 Finding the concentration of a solution of hydrochloric acid

CP 4 Preparation of a standard solution from a solid acid and use it to find the concentration of a solution of sodium hydroxide

CP 5 Investigation of the rates of hydrolysis of some halogenoalkanes

CP 6 Chlorination of 2-methylpropan-2-ol with concentrated hydrochloric acid

CP 7 The oxidation of propan-1-ol to produce propanal and propanoic acid

CP 8 Analysis of some inorganic and organic unknowns

Sample assessment materials are given:

<https://qualifications.pearson.com/content/dam/pdf/International%20Advanced%20Level/Chemistry/2018/Specification-and-Sample-Assessment/International-A-Level-Chemistry-SAMs.pdf>

For thorough preparation of the course material please read and understand each lesson from your text book, solve end of chapter exercises, solve past papers and use lab activities, work sheets and class notes as extra resources.

Teacher's name: Fauzia Usman

Subject: Biology Year group: 12

No.	Term 2 objectives:
1	Chemistry of water and importance of water in transport around the body; blood; blood vessels; circulatory system; heart and cardiac cycle; blood clotting; transport of oxygen in blood and the oxygen dissociation curve; transport of carbon dioxide in blood and the Bohr shift; Practical on using colour standards to estimate concentration of reducing sugars and starch
2	Cardiovascular diseases, risks and control; antioxidants and CVDs; Evaluating studies and interpreting data; Practical on vitamin C content of food and drink; LDL and HDL
2	Biological molecules –carbohydrates (including starch and glycogen), lipids and proteins – their structure and function; condensation and hydrolysis reactions; saturated and unsaturated lipids.
3	Cell membranes, and transport across membranes;
4	Gas exchange surfaces and adaptations of mammalian lungs; features of gas exchange surfaces and Fick's Law
5	Enzymes and their mode of action
6	DNA Structure and replication; semi-conservative replication; role of enzymes in DNA replication
7	Transcription, translation and protein synthesis
8	Genetic mutations and genetic diagrams; pedigree diagrams; sex linkage
9	Cystic fibrosis; its causes and effects; Genetic screening for cystic fibrosis and counselling
11	Ultrastructure of Prokaryote and Eukaryote cells; using light and electron microscopes; recognizing organelles and listing their functions ; plan diagrams and high power cell diagrams; using eye piece graticule and stage micrometer to measure cells and area of view in microscopes
12	Role of RER and Golgi apparatus in protein synthesis and transport
13	Mitosis and cell cycle
14	Meiosis and variation; importance of crossing over and independent assortment
15	Gamete structure and specialisation
16	Fertilisation in mammals and double fertilization in flowering plants
	Cell differentiation and gene expression; epigenetics; multiple alleles; polygenic inheritance; continuous and discontinuous variation and SD.
17	Stem cells –Pluripotency, totipotency, morula and blastocyst. Stem cell research and therapy
20	Ultrastructure of plant cells; structure and function of organelles; Structure and function of cellulose and starch.
21	Tissues in stem; xylem, phloem and sclerenchyma; Uses of plants; Plant fibres



	<b>and use of plant based fibres, Xylem and Sclerenchyma fibres</b>
<b>22</b>	<b>Importance of water and mineral ions in plants; antimicrobial properties of plants</b>
<b>23</b>	<b>Protocols of drug testing</b>
<b>24</b>	<b>Classification and the three domains; Biodiversity, endemism, adaptation and natural selection; measuring biodiversity</b>
<b>25</b>	<b>Evaluation of Conservation methods used by zoos and seed banks</b>

No of assessments during the term (without including the end of term exam)	<b>2</b>
Total mark for each assessment (every assessment is out of what)	<b>45; 45</b>
No of assessments needs to be included in end of term 2 exam timetable	<b>3</b>
Duration of end of term exam/exams	<b>Paper 1 (1 hr 30 mins) + Paper 2 (1 hr 30 mins) and Paper 3 (1 hour and 20 mins) Total 4 hours and 20 minutes Total 200 marks (80+80+50)</b>

#### **Topics and units covered/ Studying material/Any other information**

##### **Core practicals;**

- 1. Using a semi-quantitative method with Benedict's reagent to estimate concentrations of reducing sugars and with iodine solution to estimate the concentrations of starch, using colour standards**
- 2. Investigate the vitamin C content of food and drink**
- 3. Effect of alcohol concentration or temperature on membrane permeability**
- 4. Effect of temperature, pH, enzyme and substrate concentrations on initial rates of reactions.**
- 5. Using a light microscope to make observations and labelled drawings of suitable animal cells – use a graticule with a microscope to make measurements and understand scale.**
- 6. Prepare and stain a root tip squash to observe the stages of mitosis**
- 7. Use a light microscope to; make observations of transverse sections of roots, stems and leaves-identify sclerenchyma fibres, phloem sieve tubes and xylem vessels in their locations.**
- 8. Determine the tensile strength of plant fibres**
- 9. Antimicrobial properties of plants and aseptic techniques for safe handling of bacteria**

No.	Term 2 objectives:
1	Algebraic expressions, Quadratics, equations and inequalities
2	Graphs and transformations
3	Straight line graphs
4	Trigonometric ratios Radians
5	Calculus – Differentiation, Integration

Max. Number of objectives: 5

No of assessments during the term (excluding the end of term exam)	2
Total mark for each assessment (every assessment is out of what)	40
Duration of end of term exam/exams	1 hour 30 min

### Topics and units covered/ Studying material/Any other information

#### Algebraic expressions

- Index laws
- Expanding brackets
- Factorising
- Negative and fractional indices
- Surds
- Rationalising denominators

#### Quadratics

- Solving quadratic equations
- Completing the square
- Functions
- Quadratic graphs
- The discriminant

#### Equations and inequalities

- Linear simultaneous equations
- Quadratic simultaneous equations
- Simultaneous equations on graphs
- Linear inequalities
- Quadratic inequalities
- Inequalities on graphs
- Regions



## Graphs and transformations

- Cubic graphs
- Reciprocal graphs
- Points of intersection
- Translating graphs
- Stretching graphs
- Transforming functions

## Straight line graphs

- $Y = mx+c$
- Equations of straight lines
- Parallel and perpendicular lines
- Length and area

## Trigonometric ratios

- The cosine rule
- The Sine rule
- Areas of triangles
- Solving triangle problems
- Graphs of sine, cosine and tangent
- Transforming trigonometric graphs

## Radians

- Radian measure
- Arc length
- Areas of sectors and segments

## Differentiation

- Gradients of curves
- Finding the derivative
- Differentiating
- Differentiating quadratics
- Differentiating functions  
With two or more terms
- Gradients, Tangents and normals
- Second order derivatives

## Integration

- Integrating
- Indefinite integrals
- Finding functions

**Studying material: Text book, Review exercises in the textbook, C1, C2 and C12 past papers**

No.	Term 2 objectives:
1	Algebraic methods
2	Coordinate geometry in the (x,y) plane
3	Exponentials and logarithms
4	The Binomial expansion Sequences and series
5	Trigonometric identities and equations
6	Calculus – Differentiation, Integration

**Max. Number of objectives: 6**

No of assessments during the term (excluding the end of term exam)	2
Total mark for each assessment (every assessment is out of what)	40
Duration of end of term exam/exams	1 hour 30 min

**Topics and units covered/ Studying material/Any other information**

**Algebraic expressions**

- Algebraic fractions
- Dividing polynomials
- The factor theorem
- The remainder theorem
- Mathematical proof
- Method of proof

**Coordinate geometry in the (x,y) plane**

- Midpoints and perpendicular bisectors
- Equation of a circle
- Intersections of straight lines and circles
- Use tangent and chord properties
- Circles and triangles

**Exponentials and logarithms**

- Exponential functions
- Logarithms
- Laws of logarithms
- Solving equations using logarithm
- Changing the base of a logarithm

**The Binomial expansion**

- Pascal's triangle
- Factorial notation



- The binomial expansion
- Solving binomial problems
- Binomial estimation

### Sequences and series

- Arithmetic sequences
- Arithmetic series
- Geometric sequences
- Geometric series
- Sum to infinity
- Sigma notation
- Recurrence relations
- Modelling with series

### Trigonometric identities and equations

- Angles in all four quadrants
- Exact values of trigonometric ratios
- Trigonometric identities
- Solve simple trigonometric equations
- Equations and identities

### Differentiation

- Increasing and decreasing functions
- Stationary points
- Sketching gradient functions
- Modelling with differentiation

### Integration

- Definite integrals
- Areas under curves
- Areas under the  $x$  – axis
- Areas between curves and lines
- Areas between two curves
- Trapezium rule

**Studying material: Text book, Review exercises in the textbook, C1, C2 and C12 past papers**

**Teacher's name: Ms Mallika      Subject :Statistics -S1      Year: 12**

No.	Term 2 objectives:
<b>1</b>	<p><b>Representation and summary of data</b>            Statistical Measures, Find mean, mode, median, range, quartiles and standard deviation of data from a list and from a frequency table.            Consider outliers and include using both a calculator and spreadsheet.            Use of a cumulative frequency graph to find the median, quartiles and percentiles.            Compare and contrast data sets using statistical charts and measures.            Measures of dispersion – variance, standard deviation, range and inter-percentile ranges.            Skewness. Concepts of outliers</p>
<b>2</b>	<p><b>Correlation</b>            Scatter diagrams. Linear regression. Explanatory (independent) and response (dependent) variables. Applications and interpretations.            The product moment correlation coefficient, its use, interpretation and limitations.</p>
<b>3</b>	<p><b>Discrete random variables, Normal distribution</b>            To find the cumulative distribution function of a discrete random variables, the expected value and the variance            Use the normal distribution and its table to find probability and use its tables to find means and the standard deviations</p>

**Max. Number of objectives: 3**

No of assessments during the term (excluding the end of term exam)	<b>1</b>
Total mark for each assessment (every assessment is out of what)	<b>40</b>
Duration of end of term exam/exams	<b>1 hour 30 min</b>

**Topics and units covered/ Studying material/Any other information**

**Representation and summary of data – location**

1. Recognise different types of data
2. Find the mean, mode and median for discrete data presented as list  
Discrete data presented in a table.
3. use coding to make calculations of measures of location simple

**3.Representation and summary of data – measures of dispersion**

1. Find the quartiles, range, inter-quartile range, variance and standard deviation for discrete data presented in a grouped frequency table
2. use coding to make calculation of measures of dispersion simpler



أكاديمية الأرقام للبنات  
AL- Arqam Academy For Girls

#### **4.Representation of data**

- 1.Draw stem and leaf diagrams
- 2.Calculate outliers
- 3.Draw box plots
- 4.Draw histograms
- 5.Work out whether data are skewed
- 6.compare sets of data

#### **6. Correlation**

1. Show diagrammatically, pairs of observations of variables.
- 2.Be able to decide if there is a relationship between two variables
3. put a numerical measure on the strength of this relation ship
4. Simplify calculations by using coding.

#### **7. Regression**

- 1.Understanding the idea of independent and dependent variables
2. Work out the regression of a line which best fits the trend of the points on a scatter diagram
3. Apply and interpret the regression equation

#### **8. Discrete random variables**

1. Understand what a discrete random variables is
2. Understand discrete random variables arise
3. be able to find the cumulative distribution function of a discrete random variables.
- 4.Be able to use the discrete uniform distribution

#### **9. Normal distribution**

1. Use the normal distribution and its table to find probability
2. Use the normal distribution and its tables to find means
3. Use the normal distribution and its table to find deviations.

#### **10. Probability**

1. Understand common terms used in probability and solve simple probability problems.
2. Use set notation and venn diagrams to solve problems with two or three events.
3. use given formulae to find probability

Teacher's name: Ms Ameera

Subject: ICT

Year group: 12

No.	Term 2 Topics
1	Data, information, knowledge and processing
2	Hardware and software
3	Monitoring and control
4	E-safety and health and safety
5	The digital divide
6	Using networks
7	Expert systems
8	Spreadsheets
9	Database and file concepts
10	Sound and video editing

No of assessments during the term (without including the end of term exam)	2
Total mark for each assessment (every assessment is out of what?)	Assessment 1: Assessment 2:
No of assessments needs to be included in end of term 1 exam timetable	2
Duration of end of term exam/exams	1 hour theory, 2 hours practical

**Topics and units covered/ Studying material/Any other note the teacher would like to remind students of(eg. Needed tools on the test...etc)**

Students need to revise above mentioned topics from given notes, books and AS past papers. Students can also take help from all the resources uploaded at [www.edmodo.com](http://www.edmodo.com).

Teacher's name: Miss Anisah Subject: AS Business Year group: 12

No.	Term 2 objectives:
1	Students to develop an understanding of raising and managing finance, and measuring business performance.
2	Students will be able to understand the importance of using resources efficiently within a business to ensure that goods or services can be delivered effectively and efficiently to a high quality.
3	Students will understand the external influences that have an impact on businesses including economic and legal factors.
4	Students must investigate different types and sizes of organisations in various business sectors and environments and in local, national and global context. Competitive environments.

No of assessments during the term (without including the end of term exam)	2
Total mark for each assessment (every assessment is out of what?)	A1: A2:
No of assessments needs to be included in end of term 2 exam timetable	2
Duration of end of term exam/exams	1 hour 30 mins

### Topics and units covered/ Studying material/Any other information

#### All of unit 2 (for paper 2):

**Internal and external finance** - Know of the various methods of finance available to a company and the sources in which these can be obtained such as owners capital, retained profits, sales of assets, crowd funding etc, loans, mortgages etc.

**Liability** - The implications of limited and unlimited liability and the finance that is available for these companies - how the companies liability can affect the finance that is available to them.

**Planning** - Understand why a business plan is necessary to obtain finance, able to interpret a cash flow forecast and also know of the uses and limitations of a cash flow forecast.

**Sales forecasting** - Understand the purpose of sales forecasting and the factors that can affect sales forecast such as consumer trends, economic variables, actions of competitors and also to be able explain the difficulties of sales forecasting.

**Sales, revenue and costs** - able to make the following calculations: sales volume, sales revenue, fixed costs and variable costs. Formulas are to be remembered.

**Break-even** - Know the formulas for contribution (Contribution: selling price – variable cost per unit), BEP (total fixed costs + total variable costs = total revenue). Understand the margin of safety, and know of the limitations of break even analysis.

**Budgets** - Understand why businesses budget and why they set budgets. Be able to explain the types of



AL- Arqam Academy For Girls

budgets (historical and zero based), understand the variance analysis (adverse and favorable) and explain the potential difficulties of budgeting.

**Profit** - Be able to make calculations of: gross profit, operating profit and new profit. Understand how to make calculations for profit and loss account - measuring profitability, gross profit margin, operating profit and profit for the year as well as providing information regarding ways in which profitability can be improved. understand the distinction between profit and cash.

**Liquidity** - understand how to measure liquidity, making calculations in regards to current ratio and acid test ratios. Explaining ways on how to improve liquidity. and also understanding working capital and its management - the importance of cash.

**Business failure** - Understanding the Internal and external causes of business failure: both financial and non financial factors.

**Production, productivity and efficiency** - Know of the production methods (job, batch etc), the link between productivity and competitiveness and the factors that can influence productivity. Efficiency - production at minimum average costs, factors that may influence efficiency and the distinction between labour and capital intensive production.

**Capacity utilisation** - Understand the formula of capacity utilisation (current output (divided by) maximum possible output (x 100)). The implications of under- and over-utilisation of capacity and Ways of improving capacity utilisation.

**Stock control** - Understand the terms: buffer stocks, JIT and lean production and how these are used. Understand how companies can manage stock, minimise waste and what the implications of poor stock control can lead to. Additionally, how competitive advantage can be gained from lean production.

**Quality management** - Understand the various quality methods such as: control, assurance, circles and TQM. To also understand the process of kaizen Competitive advantage from quality management.

**Economic influences** - The effect on businesses of changes in: inflation, exchange rates, interest rates, taxation and government spending and the business cycle. Also, understand the effect of economic uncertainty on the business environment.

**Legislation** - The effects on businesses of legislations such as: consumer protection, employee protection, environmental protection, competition policy and health and safety.

**The competitive environment** - Understand how the market size can affect competition.

**STUDENTS SHOULD ALSO COVER All of unit 1 (FOR PAPER 1): Meeting customer needs:**

- The Market
- Marketing mix and strategy
- Managing people
- Entrepreneurs and leaders

**PLEASE USE CLASS NOTES, TEXTBOOK AND EXAM TECHNIQUE RESOURCES ON EDMODO**