



# **YEAR 12**



# Term 2 Exam 2019-2020



# CONTENTS

1. Arabic

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- 2. Sharia
- 3. Hum Arabic
- 4. English
- 5. Physics

- 6. Chemistry
- 7. Biology
- 8. Mathematics
- 9. IT (Finished Mock)
- 10. Business
- **11. Global Perspective**





Teache	er's name : هبة الله	Subject: A	rabic	Year group: 12	
No.	Term 2 objectives:				
1				أن تذكر مرادف عدد من الكلمات	•
2	لمؤنث أو العكس، من	(من المذكر إلى ا	ير المطلوب:	أن تعيد صياغة الجمل بعد إجراء التغ	•
	ديل بين الإفراد والتثنية	نس او العكس. التب ا	فني إلى الحاط	الإثبات إلى النفي أو العكس، من الماه	
3		اسطه او العدس) مطلوب	والحروف الد ة من النص ال	والجمع، التبديل بين الاقعال الماسكة .	•
4		، ـــرب. (AS	من بسس ، س لطالبات 5	ان تكتب تلخيصا لأفكار النصين. (خام	•
5		(	<u>د 300 كلمة.</u>	أن تكتب نصاً إقناعيا أو إرشاديا بحدو	•
Max. n	umber of objectives	is 5 objective	S.		
No of as term(wi exam) اية الفصل	ssessments during the thout including the en رات خلال الفصل ما عدا نه	d of term عدد الاختبا	2		
Total m	ark for each assessme	nt			
every a)) لاختبار ات	ussessment is out of w در جات ا	hat)	25		
Duratio	Duration of end of term exam/exams 100				
اية الفصل	الدرجة الخاصة باختبار نه		• 1/4	A1 • 6 A•	
Topics اية الفصل	and units covered/ S مواضيع الداخلة باختبار نه	tudying mate	rial/Any (	other information	
			86	نموذج مشابه للاختبارات السابقة 80	



Subject: sharia

Year:12

نسرين محمد القضاة: Teacher's Name

الأهداف العامة للاختبار	الرقم
أن تحفظ الطالبة سورة المجادلة حفظا سليما وخاليا من الأخطاء.	1.
أن تتلو الأيات الكريمة من سورة فصلت (1-29) بصورة سليمة وخالية من الأخطاء	2.
مع تطبيق أحكام النون الساكنة والتنوين وأحكام المد.	
أن تفسر الآيات الكريمة المقررة تفسيرا صحيحا من سورة آل عمران (190-195) .	3.
أن تعرف الطالبة أقسام الحديث الشريف، وأسس تقسيمه.وتدرك أهمية الكتب الستة	4.
أن تدرك الطالبة أهمية العقيدة في بناء شخصيةالمسلم، مبينة حكم السحر في الاسلام.	5.
أن تتعرف الأحكام الشرعية المتعلقة بمصادر التشريع الإسلامي من خلال مشروعيته	6.
وحكمه وأهدافه	
أن تتعرف على حياة النبي صلى الله عليه وسلم وتقتدي به من خلال سيرته صلى الله	7.
عليه وسلم في تعامله مع الشباب.	
أن تتعرف سيرة السلف الصالح ومنهم عمر بن عبد العزيز.	8.

Topics and units covered/ Studying material/Any other information الموضوعات التي تدخل في الاختبار النهائي التحريري للفصل الثاني:

كتاب الفصل الدراسي الأول-الباب الأول

- التفسير: التفكر والذكر؛ الدرس كامل وما يتعلق به من أسئلة التقويم.
  - 2. علوم القرآن: جمع القرآن الكريم.
- 3. الحديث الشريف: أقسام الحديث الشريف، الدرس كامل وما يتعلق به من أسئلة التقويم.
- 4. العقيدة الإسلامية: موقف الإسلام من السحر، الدرس كامل وما يتعلق به من أسئلة التقويم..
- 5. الفقه الإسلامي: مصادر التشريع الإسلامي، الدرس كامل وما يتعلق به من أسئلة التقويم.
- السيرة والبحوث: مكانة الشباب في السيرة النبوية، الدرس كامل وما يتعلق به من أسئلة التقويم.
  - الحديث الشريف: الكتب الستة، الدرس كامل وما يتعلق به من أسئلة التقويم.
  - 8. السيرة والبحوث: الخليفة عمر بن عبد العزيز... الدرس كامل وما يتعلق به من أسئلة التقويم

ستخضع الطالبة لاختبار شفوي للتلاوة من عشر علامات محتسبة من علامة الاختبار النهائي للفصل. علما أن علامة الاختبار النهائي من خمسين درجة. وقد خضعت الطالبة لاختبارين كل منهما من عشرين درجة خلال الفصل.



الثاني group:	Teacher's name: العلوم الاجتماعية Subject: نبيلة لطفي + ميمونة محمد Vear الثاني عشر
No.	Term 2 objectives:
1	أن تذكر أسباب الحرب العالمية الثانية المباشرة وغير المباشرة والظروف المحيطة بهذه الحرب.
2	أن تبين أطراف النزاع خلال الحرب العالمية الثانية والنتائج المترتبة على الدول المشاركة ودول العالم.
3	أن تتعرف أنواع طبقات المياه الجوفية وأساليب تغذيتها.
4	أن توضح معنى البيئة والتوازن البيئي .
5	أن تبين مفهوم أسس الجغرافيا الاقتصادية.
Max N	umber of abjectives.

Assessment 1
Assessment 2
Total (30)
Assessment 1 (10)
Assessment 2 (20)
50
minutes

1-الحرب العالمية الثانية. ص93

2-المياه الجوفية ص 119(المفهوم ، أهميته، المكونات، طبقاته ، مشكلاته)

3-البيئة والتوازن البيئي ص123

4- الجغرافيا الاقتصادية ص 129



Teache	r: Ms V	Vaheeda	Subject: ENGLISH	Year group: 12
No.	Term	a 2 objective	25:	
1	READII	NG		
	•	Demonstrat	te understanding of explicit meaning	S
	•	Demonstrat	te understanding of implicit meaning	s and attitudes
	•	Select infor	mation for specific purposes.	
2	WRITI	NG		
	•	Articulate e	xperience and express what is thoug	ht, felt and imagined
	•	Use a range	e of appropriate vocabulary	
	•	Make accur	ate use of spelling, punctuation and	grammar
3	SPEAK	ING		
	•	Demonstrat	te the ability to deliver a presentation	n effectively and confidently .

No. of assessments during the term	2
(without including the end of term exam)	
Total mark for each assessment	25 – Writing
(every assessment is out of what?)	25 – Speaking
No of assessments needs to be included	1 - 50 Marks
in end of term 2 exam timetable/Total	
Mark	
Duration of end of term exam/exams	1Hr30 min

# Topics covered:

- \* Magazine and Report Writing
- \* Grammar and vocabulary

# **Exam Preparation:**

- \* Practise reading tasks from IELTS.
- \* Revise vocabulary ex. from IELTS
- \* Revise criteria for writing a formal email.



Year	group:	Grade	12
	<b>o</b> 1		

No.	Term 2 objectives:
1	<u>Mechanics Motion</u> Describing motion, Kinematics Equations-Equations of motion
	Moving in more than one directions, Measuring g, Projectiles
2	Energy—Gravitational and Kinetic Energies, Work and Power, Efficiency
3	Momentum—Momentum, Conservation of Linear Momentum.
4-	<u>Materials—Fluids</u> - Fluids flow, Density, Upthrust, Stokes law, Viscosity, Terminal Velocity
5-	Solid Material Properties—Hooke's Law, Stress, strain young modulus, Stress-Strain Graphs, Materials in the real world
6-	<u>Waves and Particle Nature of Light</u> 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-	<u>Electric Circuits</u> —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)	Assessment 1: Out of 45 Assessment 2: Out of 45
No of assessments needs to be included in end of term 1 exam timetable	3
Duration of end of term exam/exams	Unit 1 (1 hr 30 mins) Unit 2 (1 hr 30 mins) Unit 3 (I hour and 20 mins) Total 210 marks (80+80+50)
Topics and units covered/ Studying material/Any other information Please make sure that you follow the curriculum outline.	



# 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.



Teacher'	Teacher's name:Ms. Uzma Jalil Subject:ChemistryYear group:12A/B/C		
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 1 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

# 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 (CuCrO4), 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 VSEPRT, 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,  $\Delta$  Hc,  $\Delta$  Hn,  $\Delta$  Hf, 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/Spe cification-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: Ms. Fauzia Usman Subject: Biology Year group: 12

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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:
2	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 (including heamoglobin and collagen) – 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 and gene 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; Diagrams of organelles and micrographs; 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 specialistion
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
	Standard Deviation – use of SD and SD error bars to assess variability of
	data
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 and use of plant based fibres, Xylem and Sclerenchyma fibres
22	Importance of water and mineral ions in plants; antimicrobial properties of plants
23	Protocols of drug testing
24	Classification and the three domains; Biodiversity, endemism, adaptation and natural selection; measuring biodiversity
25	Evaluation of Conservation methods used by zoos and seed banks

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	Paper 1 (1 hr 30 mins) + Paper 2 (1 hr 30 mins) and Paper 3 (I hour and 20 mins) Total 4 hours and 20 minutes Total 210 marks (80+80+50)

Core practicals - you must know the methods and Biology of each;

- 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
- **Recommended practicals** –



RECOMMENDED ADDITIONAL PRACTICAL You must understand the technique and theory of these as well;

- 1. Investigate tissue water potentials using plant tissue and graded concentrations of a solute.
- 2. Use a semi-quantitative method to estimate protein concentration using biuret reagent and colour standards.
- 3. Investigate factors affecting the growth of pollen tubes.
- 4. Investigate plant mineral deficiencies.



er's name: Ms Mallika	sam Academy For Girls Sub: Mathematics -P1	Year: 12
Term 2 objectives:		
Algebraic expressions, Quadratics, equations and		
inequalities		
Graphs and transformations		
Straight line graphs		
Trigonometric ratios		
Radians		
Calculus – Differentiation, Integration		
Max. Number of objectives: 5		
No of assessments during the term 2		
(excluding the end of term exam)		
Total mark for each assessment40		
(every assessment is out of what)		
Duration of end of term exam/exams 1 hour 30 min		
	er's name: Ms Mallika Term 2 objectives: Algebraic expressions, C inequalities Graphs and transformatio Straight line graphs Trigonometric ratios Radians Calculus – Differentiation, umber of objectives: 5 ssessments during the term ing the end of term exam) ark for each assessment assessment is out of what) n of end of term exam/exams	Allow Sub: Mathematics -P1Term 2 objectives:Algebraic expressions, Quadratics, equations and inequalitiesGraphs and transformationsGraphs and transformationsStraight line graphsTrigonometric ratios RadiansCalculus – Differentiation, IntegrationCalculus – Differentiation, IntegrationImber of objectives: 5ssessments during the term ing the end of term exam)2ark for each assessment assessment is out of what)40n of end of term exam/exams1 hour 30 min

# **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

- المادينية الأرقيم للمنا
- 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

Teach	ner's name: Ms Mallika	Sub: Mathematics -P2	<b>Year: 12</b>
No.	Term 2 objectives:		
1	Algebraic methods		
2	<b>Coordinate geometry in the (x,y) plane</b>		
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		40	
Duratio	Duration of end of term exam/exams <b>1 hour 30 min</b>		

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 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

Teach	er's name: Ms Mallika	Subject :Statistics -S1	<b>Year: 12</b>
No.	Term 2 objectives:		
1	Mathematical Modelling		
	Designing a model		
2	Measures of location and spread		
_	Use of a cumulative frequency graph to find the median, guartiles and percentiles.		
	Compare and contrast data sets using statistical charts and measures.		
	Measures of dispersion – variance	e, standard deviation, range and	d inter-
	percentile ranges.		
	Skewness. Concepts of outliers		
3	PROBABILITY		
	Venn diagrams		
	Set notation		
	Conditional porobability		
	Tree diagrams		
4	Correlation		
	Scatter diagrams. Linear regression. Explanatory (independent) and response		
	(dependent) variables. Applications	and interpretations.	
	The product moment correlation coefficient, its use, interpretation and limitations.		
5	Discrete random variables		
	To find the cumulative distribution function of a discrete random variables, the		variables, the
	expected value and the variance		
	Normal distribution		
	Use the normal distribution and its table to find probability and use its tables to		se its tables to
find means and the slandered deviations			
Max. N	Max. Number of objectives: 3		
No of a	No of assessments during the term 1		
(exclud	(excluding the end of term exam)		
Total n	nark for each assessment	40	
(every	assessment is out of what)		
Duratio	on of end of term exam/exams	1 hour 30 min	



# 2.Measures of location and spread

1.Recognise different types of data

2.Measures of central tendency

3. Other measures of location

4.Measures of spread

5. Variance and standard deviation

6.Coding

# 3. Representations of data

1. Histograms

2.Outliers

3.Box plots

4.Stem and leaf diagrams

5.Skewness

6.Comparing data

# 4. Probability

1. Understanding the vocabulary used in probability

2. Venn diagrams

3. Mutually exclusive and independent events

4.Set notation

5. Conditional probability

6.Conditional probabilities in venn diagrams

7. Probability formula

8. Tree diagrams

# 5.Correlation and regression

1.Scatter diagrams

2.Linear regression

3.Calculating least squares linear regression

4. The product moment correlation coefficient

# 6. Discrete random variables

1. Discrete random variables

2. Finding the cumulative distribution for a discrete random variable

3.Expected value of a discrete random variable

4.Variance of a discrete random variable

5. Expected value and variance of a function of X

6. Solving problems involving random variables

7.Using discrete random distribution as a model for the probability distribution of the

outcomes of certain experiments



# 7. Normal Distribution

1.Normal distribution

- 2.Using tables to find probabilities of the standard normal distribution Z
- 3.Using tables to find the value of z given a probability
- 4. The standard normal distribution

5. Finding  $\mu$  and  $\sigma$ 

- 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



Teache	r's name: Mrs Mareem Subject: AS Business Year group: 12		
No.	Term 2 objectives:		
1	Students to develop an understanding of meeting customer needs		
2	Students will be able to understand the importance of the market		
3	Students will understand the marketing mix and strategy		
4	Students to develop an understanding of managing people		
5	Students to develop an understanding of entrepreneurs and leaders		
6	Students to develop an understanding of raising finance		
7	Students to develop an understanding of financial planning		
8	Students to develop an understanding of managing finance		
9	Students to develop an understanding of resource management		
10	Students to develop an understanding of external influences.		

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: 72 A2: 48
No of assessments needs to be included in end of term 2 exam timetable	2
Duration of end of term exam/exams	Paper 1 – 1 hour 30 minutes Paper 2 - 1 hour 30 minutes



# Term 1

### Theme 1 - Includes the following:

# Meeting customer needs

# The market

a) Mass markets and niche markets b) Dynamic markets c) How competition affects the market d) The difference between risk and uncertainty

#### Market research

a) Product and market orientation b) Primary and secondary market research data (quantitative and qualitative) c) Limitations of market research, sample size and bias d) Use of ICT to support market research e) Market segmentation

#### Market positioning

a) Market mapping b) Competitive advantage of a product or service c) The purpose of product differentiation d) Adding value to products/services

#### The market

#### Demand

a) Factors leading to a change in demand

#### Supply

a) Factors leading to a change in supply

### Markets

a) The interaction of supply and demand b) The drawing and interpretation of supply and demand diagrams to show the causes and consequences of price changes

### Price elasticity of demand

a) Calculation of price elasticity of demand b) Interpretation of numerical values of price elasticity of demand c) The factors influencing price elasticity of demand d) The significance of price elasticity of demand to businesses in terms of implications for pricing e) Calculation and interpretation of the relationship between price elasticity of demand and total revenue

#### Income elasticity of demand

a) Calculation of income elasticity of demand b) Interpretation of numerical values of income elasticity of demand c) The factors influencing income elasticity of demand d) The significance of income elasticity of demand to businesses

#### Marketing mix and strategy

#### **Product/service design**

a) Design mix b) Changes in the elements of the design mix to reflect social trends

#### **Branding and promotion**

a) Types of promotion b) Types of branding c) The benefits of strong branding d) Ways to build a brand e) Changes in branding and promotion to reflect social trends

#### **Pricing strategies**

a) Types of pricing strategy b) Factors that determine the most appropriate pricing strategy for a particular situation c) Changes in pricing to reflect social trends

#### Distribution

a) Distribution channels b) Changes in distribution to reflect social trends: o online distribution o changing from product to service

# Marketing strategy



a) The product life cycle b) Extension strategies beton Matrix and the product portfolio d) Marketing strategies appropriate for different types of market e) Consumer behaviour – how businesses develop customer loyalty

#### Managing people

#### Approaches to staffing

a) Staff as an asset; staff as a cost b) Flexible workforce c) Distinction between dismissal and redundancyd) Employer/employee relationships

#### Recruitment, selection and training

a) Recruitment and selection process b) Costs of recruitment, selection and training c) Types of training **Organisational design** 

a) Structure b) Types of structure c) Impact of different organisational structures on business efficiency and motivation

#### Motivation in theory and practice

a) The importance of employee motivation to a business b) Motivation theories c) Financial incentives to improve employee performance d) Non-financial techniques to improve employee performance

# Leadership

a) Leadership b) Types of leadership style

**Entrepreneurs and leaders** 

Role of an entrepreneur

a) Creating and setting up a business b) Running and expanding/developing a business c) Innovation within a business (intrapreneurship) d) Barriers to entrepreneurship e) Anticipating risk and uncertainty in the business environment

#### **Entrepreneurial motives and characteristics**

a) Characteristics and skills required b) Reasons why people set up businesses

#### **Business objectives**

a) Survival b) Profit maximisation c) Other objectives

#### Forms of business

a) Sole trader, partnership and private limited company b) Franchising, social enterprise, lifestyle businesses, online businesses c) Growth to PLC and stock market flotation

#### **Business choices**

a) Opportunity cost b) Choices and potential trade-offs

#### Moving from entrepreneur to leader

a) The difficulties in developing from an entrepreneur to a leader

# Term 2

### Theme 2 - Includes the following:

**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 interpreted 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 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 competiveness 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.



Year group: 12

No.	Term 2 objectives:
1	Analyse arguments to understand how they are structured and on what they are based.
2	Analyse perspectives and understand the different claims, reasons, arguments, views and evidence they contain.
3	Critically evaluate the strengths, weaknesses and implications of reasoning in arguments and overall perspectives.
4	Deconstruct texts and documents to evaluate and analyze information.

No of assessments during the term (without including the end of term exam)	3
Total mark for each assessment	1= 30 marks 2 = 35 marks
No of assessments in end of term 1 exam timetable	1
Duration of end of term exam/exams	1.5 hours

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

- Writing skills, critical analysis, and deconstruction of information.
- Topics that you may be questioned on include global issues
  - -Global Warming
  - -Gender Inequality
  - -Climate Change
  - -Impact of the Internet
  - -International Law Ethics
  - -Digital Futures
  - -Raise of Global Superpowers
  - -Technology and Lifestyles
  - -Sustainable Futures
  - -Freedom and Control
  - -Resources and Sustainability
- Notes, articles and written work completed for the above topics to be revised, as well as critical thinking, analysis and deconstruction skills to be practiced.

Please use your class notes, worksheets, past assessments and textbook for revision.