

Year 13 – Trial Exams – Revision Topics

Biology

Biology Paper 1 topics:

- DNA structure and replication
- Carbohydrates and triglyceride structure, food tests
- Eukaryotic and prokaryotic cell structure (including magnification calculations)
- Protein synthesis
- ATP
- Blood circulation and gas exchange in the lungs
- Immune response
- Enzymes
- Classification of organisms and relatedness
- Water potential

Biology paper 2 topics:

- Enzymes
- Genetic crosses
- Aerobic and anaerobic respiration
- Neurotransmitters
- Succession
- Using microscopes to study cells
- Photosynthesis
- Natural selection and speciation

Business Studies

Essential formulae

Labour productivity
Market size & share
Labour turnover
Ratio analysis
Break-even analysis

Essential models

Stakeholder mapping
Ansoff's matrix
Blake Mouton grid
SWOT analysis
Bowman's strategic clock
Hofstede's cultural dimensions
Kotter & Schlesinger
Porter's five forces
Stock control charts

Topics

Quality assurance
Intrapreneurship
Organisational structure
Free trade and protectionism
Analysing economic change

Business ownership
Budgets & variance analysis
Methods of growth
Entering international markets
Strategic drift

Chemistry

Paper 1 - Physical/Inorganic/Practical

Paper 2 - Organic/Practical

Computer Science

Paper 1 - On Screen Exam

- Reverse Polish
- Graphs
- Tracing Algorithms
- Turing Machine
- Skills Assessed - Knowledge of theory covered, Ability to read/write algorithms, Ability to Code

Paper 2 - Written Exam

- Number Systems
- Data Representation
- Computational Logic
- Networks
- Hardware Devices
- Storage
- Databases
- Instruction set
- Graphs
- Functional Programming
- Skills Assessed - Knowledge of theory covered.

Design Technology

Paper 1 – Technical Principles – mixture of short answers and extended response

Paper 2 – Designing and making principles

Section A – Product Analysis, Section B – Commercial Manufacture

Economics

Group 13D - revise all 4 themes. Themes 1 and 2 need to be revised in their entirety. Themes 3 & 4 need to be revised up until the point reached by the end of this term (end of December 2018). The paper will be a mixture of papers 1 and 2.

Group 13B – revise all of themes 2 and 4. The paper will be a paper 2 style with only macroeconomic content.

French

Paper 1 Listening, reading, translation - 2 hours 30 minutes

The following topics occur in the listening/ reading / translation questions – you should revise the vocabulary from these units and go through some texts and listening practice from each unit.

Year 12 Unit 1 – “ La famille en voie de changement”;

Unit 2 “ La “cybersociété”;

Unit 4 –“Une culture fière de son patrimoine”;

Year 13 Unit 1 – “Les aspects positifs d’une société diverse”;

Unit 2 - “Quelle vie pour les marginalisés?;

Unit 3 – “Comment on traite les criminels”

The translation into French will be on a topic not yet covered, although the source text does include any specific vocabulary that you will need. Most important for this question is to re-do translations that you have already done and have been marked, highlighting common errors such as:

The use of the infinitive as a noun at the start of a sentence:

Working hard is essential (Travailler dur, c’est essentiel);

Present participle:

By working hard, you will succeed (En travaillant dur, vous réussirez)

Pour + infinitive:

They met to find a solution (Ils se sont réunis pour trouver une solution)

Definite articles in front of nouns when we don’t have them in English:

Solutions proposed include (Les solutions proposées comprennent..)

Conditional – should, could etc

Everybody should decide (Tout le monde devrait décider)

The passive – correct tense

They had been threatened (Ils avaient été menacés)

TENSES: IDENTIFY THE CORRECT TENSE!

Paper 2 2 essays, one on film, one on book 2 hours.

There will be a choice of two titles for each topic. Make sure you know how to explain accurately what happens in the film and book so that you can provide evidence for your points. Practise writing five minute plans for the title you have. **ANSWER THE SPECIFIC QUESTION SET!**

Geography

Paper 1: Physical 2 hours 85 marks

Section A: Tectonics

1 x 4 mark question (Calculation or resource based)

1 x 12 mark ‘Assess’ question

Section A Total: 16 marks

Section B: Coasts

2 x 6 mark ‘Explain’ questions (Resource based)

1 x 8 mark ‘Explain’ question

1 x 20 mark ‘Evaluate’ question

Section B Total: 40 marks

Section C: Water Cycle

1 x 3 mark ‘Explain’ question (resource based)

1 x 6 mark ‘Explain’ question

1 x 8 mark ‘Explain’ question

1 x 12 mark ‘Assess’ question

Section C Total: 29 marks

Paper 2: Human 2 hours 85 marks

Section A: Globalisation and Superpowers

Globalisation

1 x 4 mark question (Calculation or resource based)

1 x 12 mark 'Assess' question

Total: 16 marks

Superpowers

1 x 4 mark question (Calculation or resource based)

1 x 12 mark 'Assess' question

Total: 16 marks

Section A Total: 32 marks

Section B: Regeneration

1 x 3 mark 'Explain' questions (Resource based)

2 x 6 mark 'Explain' question

1 x 20 mark 'Evaluate' question

Section B Total: 35 marks

Section C: Health, Human Rights and Intervention

1 x 4 mark 'Explain' question (calculation or resource based)

1 x 6 mark 'Explain' question

1 x 8 mark 'Explain' question

Section C Total: 18 marks

Health & Social Care

Unit 4: Research methods in Health and Social Care

Ethics

Research methods

Quantitative and Qualitative data

Reliability and Validity

History

German History:

- Economy (whole period)
- Opposition (whole period)
- Left and right wing (whole period)
- Elite rule/ militarism (whole period)

British History:

- The Hungry thirties
- Impact of WW2
- Labour 1945-51
- Never had it so good 51-57

English Language

English Language Paper 2

Language Diversity and Change

Students should study a range of examples of language in use and research data to inform their study of diversity and change:

- texts using different sociolects (to include social and occupational groups, gender and ethnicity)
- texts using different dialects (to include regional, national and international varieties of English)
- texts that use language to represent the different groups above
- texts from different periods, from 1600 to the present day
- written, spoken and electronic texts about a range of subjects, for various audiences and purposes in a variety of genres
- items from collections of language data (eg dictionaries, online resources, language corpora)
- research findings (eg tables, graphs, statistics).

When analysing texts and data, students should explore:

- how language varies because of personal, social, geographical and temporal contexts
- why language varies and changes, developing critical knowledge and understanding of different views and explanations
- attitudes to language variation and change
- the use of language according to audience, purpose, genre and mode
- how language is used to enact relationships.

This exploration will include:

- methods of language analysis
- how identity is constructed
- how audiences are addressed and positioned
- the functions of the texts
- the structure and organisation of the texts
- how representations are produced.

Students will be required to use methods of language analysis to:

- identify and describe features of language diversity and change
- research diversity and change
- analyse how texts present ideas about language.

The following list is a guide to the areas of language students are expected to examine:

- phonetics, phonology and prosodics: how speech sounds and effects are articulated and analysed
- graphology: the visual aspects of textual design and appearance
- lexis and semantics: the vocabulary of English, including social and historical variation
- grammar, including morphology: the structural patterns and shapes of English at sentence, clause, phrase and word level
- pragmatics: the contextual aspects of language use
- discourse: extended stretches of communication occurring in different genres, modes and contexts.

English Literature

English Literature paper 2:

Set texts: 'A Streetcar Named Desire', 'The Handmaid's Tale', 'Feminine Gospels'

Although not an exhaustive list of aspects of Modern times, areas that could be explored include: wars and the legacy of wars; personal and social identity; changing morality and social structures; gender, class, race and ethnicity; political upheaval and change; resistance and rebellion; imperialism, post-imperialism and nationalism; engagement with the social, political, personal and literary issues which have helped to shape the latter half of the 20th century and the early decades of the 21st century.

Students should look at their unseen prose practice papers and responses as well as notes on literary movements and genres. They should also remind themselves of key AO2 methods of literary analysis.

Maths

Year 1

ALGEBRA AND FUNCTIONS
SURDS AND INDICES
QUADRATICS
MORE ALGEBRA AND FUNCTIONS
CURVES
CO-ORDINATE GEOMETRY
CIRCLES
TRIGONOMETRY
LOGS
EXPONENTIALS
DIFFERENTIATION
INTEGRATION
VECTORS
PROOF

Year 2

FUNCTIONS
PARTIAL FRACTIONS
PARAMETRICS
SEQUENCES
TRIGONOMETRY
DIFFERENTIATION
FURTHER DIFFERENTIATION
INTEGRATION
NUMERICAL METHODS
3D VECTORS

Media Studies

Paper One

Advertising and Marketing

Film Industries

Music Video

Newspapers

Paper 2

Magazines

TV Crime Drama

Online, Social and Participatory

Theories

Barthes – Semiotics and Myth

Strauss – Binary Oppositions and Ideology

Todorov – Narratology

Gerbner - Cultivation Theory

Neale – Genre Theory

Hall – Reception AND Representation Theories respectively

Butler – Gender Performativity

Gilroy – Post Colonialism

Van Zoonen – Feminist theory

Hesmondhalgh – Cultural Industries

Curran and Seaton – Power and Media Industries

Music

Music Listening Exam Topic List

Area of study 1:

Western classical tradition from 1650–1910

- Baroque: the solo concerto
- Classical: the operas of Mozart
- Romantic: the piano music of Chopin, Brahms and Grieg

Area of study 4: Music for theatre

Music for theatre is defined as music composed to govern, enhance or support a theatrical conception from 1925 to the present.

- Kurt Weill
- Richard Rodgers
- Stephen Sondheim
- Claude-Michel Schönberg
- Jason Robert Brown

Area of study 5: Jazz

Jazz is defined as a style of music characterised by a strong but flexible rhythmic under structure with solo and ensemble improvisations on basic tunes and chord patterns and a highly sophisticated harmonic idiom from 1920 to the present.

- Louis Armstrong
- Duke Ellington
- Charlie Parker
- Miles Davis

- Pat Metheny
- Gwilym Simcock

Reading staff notation

Students must be able to identify musical elements relevant to their selected Area of study (as above) when reading staff notation.

For unfamiliar music, students must be able to read short passages of up to eight bars.

For familiar music, students must be able to read extended passages of score of approximately two pages.

Chords and their associated chord symbols

Students must learn standard and extended chords, including chord inversions and secondary dominant 7ths and their associated symbols, and be able to identify them in aural and written form.

Musical vocabulary and terminology

Students must be able to identify and apply appropriate musical vocabulary and terminology to both music heard and notated.

Music Technology

MUSIC TECHNOLOGY LISTENING AND ANALYSING EXAM

Students will be required to demonstrate the ability to:

- comment on the music production tools and techniques used to capture sounds, including musical instruments
- use aural discrimination to identify and evaluate music technology elements in unfamiliar works
- analyse critically and comment perceptively on music production techniques from a range of source material and their impact on music styles apply musical elements and language, for example structure, timbre, texture, tempo and rhythm, melody, harmony, tonality and dynamics within the context of music technology
- produce informed written responses about equipment used in unfamiliar commercial recordings by identifying effects used and associated parameter settings
- understand the wider context of music technology and how it has influenced trends in music

Students should have knowledge and understanding of the instruments, the sounds associated with them and the combination of instruments and voices used in the following styles:

- jazz
- blues
- rock 'n' roll
- rock
- metal
- punk
- soul
- disco and funk
- reggae
- acoustic and folk
- commercial pop
- urban
- electronic and dance
- music for the media
- computer game and film.

Students need to understand a range of recording and production techniques, identifying and discussing their use in the context of a series of unfamiliar commercial recordings.

- 1.1 Capture of sound
- 1.2 Synthesis
- 1.3 Sampling
- 1.4 Sequencing
- 1.5 Audio Editing
- 1.6 Pitch and rhythmic editing
- 1.7 Automation
- 1.8 Dynamic Processing
- 1.9 Stereo
- 1.10 E.Q
- 1.11 Effects
- 1.12 Balance and Blend
- 1.13 Mastering
- 2.1 Acoustics
- 2.2 Leads and Signals
- 2.3 Numeracy
- 2.4 Levels

MUSIC TECHNOLOGY PRODUCING AND ANALYSING EXAM

Students will be required to demonstrate the ability to:

- comment on the music production tools and techniques used to capture sounds including musical instruments
- use music production tools and techniques to create new sounds
- Use processing techniques to edit, correct and process audio and MIDI tracks
- use aural discrimination to identify and evaluate music technology elements in unfamiliar works and to refine recordings
- use processing techniques effectively to produce a final, balanced mix
- apply musical elements and language, for example structure, timbre, texture, tempo and rhythm, melody, harmony, tonality and dynamics within the context of a music technology production
- make informed decisions about equipment by analysing and interpreting a range of data, graphical representations and diagrams, for example relating to frequency response, microphone polar patterns and dynamic response
- apply technical numeracy to make calculations within the context of music technology

Music styles

Students should have knowledge and understanding of the instruments, the sounds associated with them and the combination of instruments and voices used in the following styles:

- jazz
- blues
- rock 'n' roll
- rock
- metal
- punk
- soul
- disco and funk
- reggae
- acoustic and folk

- commercial pop
- urban
- electronic and dance

The examination focuses on the techniques required to edit, process and mix audio and MIDI materials, as well as the creation of sounds using microphones and DI, synthesis and MIDI techniques. Students will apply appropriate techniques and effects processing, providing a technical justification for the parameters chosen.

- 1.1 Software and Hardware
- 1.2 Capture of Sound
- 1.3 Synthesis
- 1.4 Sampling
- 1.5 Sequencing
- 1.6 Audio Editing
- 1.7 Pitch and rhythm correction and manipulation
- 1.8 Automation
- 1.9 Dynamic Processing
- 1.10 Stereo
- 1.11 EQ
- 1.12 Effects
- 1.13 Balance and Blend
- 1.14 Mastering
- 2.1 Acoustics
- 2.2 Monitor Speakers
- 2.3 Leads and Signals
- 2.4 Digital and analogue
- 2.5 Numeracy
- 2.6 Levels

PE

Component 1 - Physiology

RV –

- 1.1.a. Skeletal and Muscular Systems
- 1.1.d. Environmental Effects on Body Systems
- 1.2.a. Diet and Nutrition (+ ergogenic aids)
- 1.3.a. Biomechanical Principles, Levers and the use of Technology

NM –

- 1.1.b. Cardiovascular and Respiratory Systems
- 1.1.c. Energy for Exercise
- 1.2.b. Preparation and Training Methods*
(Aerobic Training and Strength Training only)

Component 2 - Psychology

- 2.1. Skill Acquisition*
(Classification of Skills, Types and Methods of Practice, Transfer of Skills, Principles and Theories of Learning, Stages of Learning only)
- 2.2. Sports Psychology

Component 3 – Socio-cultural Issues

- 3.1. Sport and Society
- 3.2. Contemporary Issues in Physical Activity and Sport*
(Ethics and Deviance in Sport and Commercialisation and Media only)

Physics

All Astronomy topics
Circular and Simple Harmonic Motion
Thermal Physics
Gravitational Fields
Practical Skills
Plus any paper 1 topics that may support the above

Politics

*US Politics- Paper 2 (USA and Comparative)
-US constitution
-US Congress
-US Presidency
-US Supreme Court
-US Elections
*Comparative politics
-Parliament's relationship with the executive
-UK Constitution

Psychology

2c. Content of Research methods (Component 01)

- 1.1 Research methods and techniques
- 1.2 Planning and conducting research
- 1.3 Data recording, analysis and presentation
- 1.4 Report writing
- 1.5 Practical activities
- 1.6 How science works

2c. Content of Psychological themes through core studies (Component 02)

Section A: Core studies : Social, Cognitive, Developmental, Biological, Individual differences, Individual studies, Core studies in their pairs, Methodological issues, Key themes and areas of psychology

Section B: Areas, perspectives and debates

Section C: Practical applications

Philosophy & Ethics

Philosophy

Plato
Aristotle
Soul, Body and Mind
Design Argument
Cosmological Argument
Ontological Argument
Religious Experience
The Problem of Evil
Nature and Attributes of God
Religious Language: negative, analogical or symbolic

Ethics

Natural Law
Situation Ethics
Kantian Ethics
Utilitarianism
Euthanasia
Business Ethics
Meta Ethical Theories
Conscience
Sexual Ethics

Christianity

Augustine's teaching on human Nature
Death and Afterlife
The Person of Jesus Christ

Sociology

2c. Content of Debates in contemporary society: (03)

Section A: Globalisation and the digital social world

- 1 what is the relationship between globalisation and digital forms of communication
- 2 what is the impact of digital forms of communication in a global context?

Section B: Education

- 1 what is the role of education in society?
- 2 What are the patterns and trends of educational inequalities?
- 3 How can differential educational achievement be explained?
- 4 How has the UK education system changed?

Spanish

Paper 1

Los cambios en familia
Actitudes hacia el matrimonio y el divorcio
La influencia de la Iglesia Católica

La influencia de Internet
Los móviles inteligentes en nuestra sociedad
Las redes sociales: beneficios y peligros

La mujer en el mercado laboral
El machismo y el feminismo
Los derechos de los gays y las personas transgénero

Cantantes y músicos
Estrellas de tele y cine
Modelos

Tradiciones y costumbres
La gastronomía
Las lenguas

Sitios históricos y civilizaciones prehispánicas
Arte y arquitectura
El patrimonio musical y diversidad

Los beneficios y los aspectos negativos de la inmigración
La inmigración en el mundo hispanico
Los indocumentados – problemas

Los jóvenes y su actitud hacia la política: activismo o apatía
El paro entre los jóvenes
Su sociedad ideal

Paper 2

La Casa de Bernarda Alba
Volver