

**Year 13 Mock Examinations
January 2026**

Subject	Summary of exam (length / units)	Topic content
Art		Students will produce a final piece in response to their coursework, giving them the opportunity to bring together the ideas, techniques, and intentions they have been developing throughout their project
Biology	Paper 1 1 hour 30 Minutes Paper 2 1 hour 30 Minutes	Paper 1 Module 2, Module 3, Chapter 13, Chapter 14, Chapter 17, Chapter 18 Paper 2 Module 2 and Module 4. Chapter 23 and Chapter 24
Business	Paper 1 1 hour 30 minutes MCQ Calculations 9 mark responses 25 mark essay Paper 2 1 hour 30 minutes 3 x case studies Calculations 9 mark responses 16 mark responses	Paper 1 3.1 Forms of business ownership and organisational structures 3.2 Decision trees 3.3 PED and YED 3.4 Capacity utilisation 3.5 Budgeting, break even analysis, sources of finance 3.6 Hard and soft HRM 3.7 SWOT, Financial Ratios, overall performance (non-financial measures) PESTLE – economic factors, investment appraisal. Paper 2 3.1 Organisational structures, 3.3 Promotion 3.5 Cashflow 3.6 Labour productivity 3.7 Financial ratios, PESTLE (economic, legal and environmental)
Business (OCR)	No mock due to real examination taking place in this window	
Chemistry	Paper 1 1 hour 30 minutes Paper 2 1 hour 30 minutes	Paper 1 Topics 1, 3, 4, 5, 7, 8, 10, 11, 12, 13 and 14 Paper 2 Topics 2, 3, 4, 5, 6, 9, 14, 17
Computer Science	2 Papers 1 hour 30 minutes each	Paper 1 — Computer Systems Topics 1.1 Characteristics of contemporary processors, input, output and storage devices <ul style="list-style-type: none"> Structure & function of the CPU: ALU, Control Unit, registers (PC, ACC, MAR, MDR, CIR). The fetch-decode-execute cycle. CPU performance factors: clock speed, multi-core, cache, pipelining. Types of processor: CISC vs RISC; multi-core / parallel processing (GPU, pipelining, array processors). Input, output, and storage devices: various types (magnetic, optical, solid-state, etc.), considerations for selecting devices; role of RAM, ROM, volatile/non-volatile memory, virtual storage. 1.2 Software and software development <ul style="list-style-type: none"> Systems software (e.g. operating systems) and their purpose. Application software and software licences. How source code is translated into executable code: compilers, assemblers interpreters. Software development methodologies; basics of design and development processes.

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		<ul style="list-style-type: none"> Types of programming languages and paradigms (e.g. procedural, object-oriented, low level like assembly) <p>1.3 Exchanging data</p> <ul style="list-style-type: none"> Compression, encryption, hashing. Databases: storage, querying, SQL . Networks & web technologies: network architecture (e.g. LAN, WAN), protocols (TCP/IP), routing, packet switching vs circuit switching; internet structure; basic web technologies (HTML, CSS, client/server concepts) <p>1.4 Data types, data structures and algorithms (theory version)</p> <ul style="list-style-type: none"> Data representation: number systems (binary, hexadecimal), ASCII/Unicode for text, binary arithmetic, floating-point representation. Data structures: arrays, records/tuples, lists, stacks, queues, linked lists, trees, graphs, hash tables, etc. Boolean logic / Boolean algebra: logic gates, truth tables, logic simplification and Karnaugh maps <p>1.5 Legal, moral, cultural and ethical issues</p> <ul style="list-style-type: none"> Computing-related legislation (data protection, copyright / intellectual property etc.). Ethical, social, and cultural implications of digital technology: data storage and privacy; societal impact of computing, responsibilities, risks; freedom of expression vs harm; environmental considerations; digital divide. <p>Paper 2 — Algorithms & Programming: Topics</p> <p>2.1 Elements of computational thinking</p> <ul style="list-style-type: none"> Thinking abstractly (creating models, abstraction vs reality). Thinking ahead (identifying inputs/outputs, preconditions, planning reusable components, caching considerations). Thinking procedurally (breaking down problem into steps; order of operations). <p>2.2 Problem solving and programming</p> <ul style="list-style-type: none"> Programming techniques and computational methods: writing code to solve given problems, designing logic, using procedures/functions, recursion, careful variable use, program structure. Use of appropriate programming language(s) <p>2.3 Algorithms to solve problems and standard algorithms</p> <ul style="list-style-type: none"> Designing and understanding algorithms for data manipulation (e.g. searching, sorting) based on data structures. Considering algorithm complexity (efficiency, Big O / time & space complexity) Graph/path-finding algorithms, standard algorithms relevant to data structures and problem solving
Criminology	No exam	No exam
Economics	Paper 1 Microeconomics Themes 1 and 3	Both papers have the same structure as follows: 3 short answer questions – 5 marks each

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	<p>1 hour 30 minutes</p> <p>Paper 2 Macroeconomics Themes 2 and 4 1 hour 30 minutes</p>	<p>A structured data response question in 3 parts – 35 marks</p> <p>ONE essay from a choice of two – 25 marks</p> <p>Paper 1 Topics</p> <ul style="list-style-type: none"> • Supply and Demand diagrams • Consumer and Producer Surplus • Consumer Expenditure/Producer Revenue • Elasticity – PED, YED, CPED • Market Failure • Externalities • Government intervention to correct market failure <u>in context!</u> <p>Monopoly Cost and Revenue diagrams highlighting:</p> <ul style="list-style-type: none"> • Profit maximisation • Revenue maximisation • Sales maximisation <p>Behaviour of firms with a monopoly – impact on consumers and the firm in monopoly</p> <p>Monopolistic Competition model Equilibrium</p> <p>Paper 2 Topics</p> <ul style="list-style-type: none"> • Monetary Policy • Components of AD e.g. Consumption and factors that impact them. • Aggregate Supply • AS/AD diagram • Economic Growth • Protectionism • Balance of payments • Fiscal Policy • Globalisation
<p>English Literature</p>	<p>Paper 1 Post-2000/Unseen poetry</p> <p>1 hour 15 minutes</p> <p>Paper 2 Poetry of Christina Rossetti</p> <p>1 hour</p>	<p>Paper 1 Choice of two questions, comparing an unseen poem to a poem you have studied from the Post-2000 anthology.</p> <p>Paper 2 Choice of two questions, each of which names a different Rossetti poem you will have studied and a theme, and you choose a second Rossetti poem to write about which also links to the theme.</p> <p>NB: In the real exam at the end of Year 13, these two sections will be on the same exam paper, but for the purposes of the mock, they are being split into two different exams.</p>
<p>French</p>	<p>Paper 1 Listening & Reading</p> <p>1 hour 40 minutes Thursday 15th January</p> <p>Paper 2 Essay on La Haine and translation English to French</p>	<p>The Listening and Reading papers, and the translations will contain questions from all 4 themes of the A-Level.</p> <p>The speaking examinations will only contain cards from Units 1 – 6 (year 12) and Unit 7 and 8 (year 13)</p>

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	1 hour 30 minutes Thursday 22 nd January in the auditorium Paper 3 Speaking Thursday 29 th January	
Further Maths	Paper 1 1 hour 15 minutes Further Pure Paper 2 1 hour 15 minutes Further Mechanics/ Modelling with Algorithms	Further Pure content Matrices, Complex Numbers, Vectors, Further Vectors, MacLaurin's expansion, Hyperbolics. Mechanics content Friction, Moments, Work, Energy & Power, Centre of mass, dimensional analysis Modelling with Algorithms Algorithms, graphs, networks
Geography	Paper 1 Physical Geography 1 hour 30 minutes Paper 2 Human Geography 1 hour 30 minutes	Paper 1 – Physical Geography Hazards <ul style="list-style-type: none"> • The concept of hazards in a geographical context • Plate tectonics • Volcanic hazards • Seismic hazards • Storm hazards • Fires in nature • Multi hazardous case study • Local scale hazardous setting case study Coastal Systems and Landscapes <ul style="list-style-type: none"> • Coasts as natural systems • Systems and processes • Coastal landscape development • Coastal management • Local scale case study – The Dorset Coastline • Beyond the UK Case Study – The Odisha Coastline Paper 2 – Human Geography Contemporary Urban Environments <ul style="list-style-type: none"> • Urbanisation • Urban forms • Social and economic issues associated with urbanisation • Urban climate • Urban drainage • Urban waste and its disposal • Other contemporary urban environmental issues • Sustainable urban development Changing Places <ul style="list-style-type: none"> • The nature and importance of place • Relationships, connections, meaning and representation • The impact of relationships and connections on people and place • Quantitative and qualitative skills • Place studies

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History	2 x 1 hour exams	Paper 1K – USA 3x Extracts by historians Paper 2S – Modern Britain 3x Sources
Law		Paper 1 English Legal System and Criminal Law 20 marks for ELS and 40 for criminal law Paper 2 Law Making and Tort Law 20 marks for law making and 40 for tort law
Mathematics	Paper 1 1 hour 30 minutes Pure and Mechanics Paper 2 1 hour 30 minutes Pure and Statistics	Pure content Differentiation, Further Differentiation, Trigonometry, Functions, Trigonometric Functions, Trigonometric Identities, Further Algebra, Vectors Mechanics content Kinematics, Forces in Motion, Friction Statistics content Probability, binomial distribution and hypothesis testing
Media Studies	Component 1 1 hour 30 minutes Component 2 1 hour 15 minutes	Component 1 will include a 30-mark representation comparison question and stepped questions on Media Industries and Media Audiences. <i>All content covered so far needs to be prepared for: Music Video, Advertising, Newspapers, Radio, Video Games, Film Marketing, Film Industry</i> Component 2 will include a 30-mark question on magazines (<i>Big Issue</i> and <i>Vogue</i>) and a 15-mark question on <i>Zoella</i>
OCR Sport	No exam	No exam
PE	Paper 1 1 hour 30 minutes Paper 2 45 minutes Paper 3 45 minutes	Paper 1 – Physiological effects on performance <ul style="list-style-type: none"> • Joints, movements and muscles • Functional roles of muscles and types of contraction • Analysis of movement • Skeletal muscle contraction • Muscle contraction during exercise of differing intensities and during recovery • Cardiovascular system at rest • Cardiovascular system during exercise of differing intensities and during recovery • Respiratory system at rest • Respiratory system during exercise of differing intensities and during recovery • Energy systems and ATP resynthesis • ATP resynthesis during exercise of differing intensities and durations • The recovery process • Exercise at altitude • Exercise in the heat • Diet and nutrition • Ergogenic aids • Acute and chronic injuries, Injury prevention, Responding to injuries and medical conditions in a sporting context, Rehabilitation of injury • Biomechanical principles, Projectile motion, Angular motion Paper 2 – Psychological effects on performance <ul style="list-style-type: none"> • Classification of skills • Types and methods of practice

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		<ul style="list-style-type: none"> • Transfer of skills • Learning theories • Stages of Learning • Guidance and feedback • Individual differences <ul style="list-style-type: none"> ○ Personality ○ Attitudes ○ Motivation ○ Arousal ○ Anxiety ○ Aggression ○ Motivation • Group and team dynamics <p>Paper 3 – Socio Economic Factors effecting performance</p> <ul style="list-style-type: none"> • Lower classes – Preindustrial Britain • Aims of modern Olympic games • Influence of the media on sport • UK Sport • Examples of deviance • Working class participation in post-industrial Britain- 1850 • Olympic Games – Political incidents • Factors affecting hosting global sporting events • Women in sport – changes from 1980s to present day • 20th Century sport and link to spectatorism • Rise in sponsorship and the impact on sport • Commercialisation of sport • Modern technology • Legal Supplements in sport • 19th Century Public School Values
Physics	<p>Paper 1 Written exam 1 hour 30 minutes</p> <p>Paper 2 Written exam 1 hour 30 minutes</p>	<p>Paper 1 50 marks of short and long answer questions and 20, multiple choice questions: -</p> <ul style="list-style-type: none"> • Particles Physics • Waves • Mechanics • Electricity • SHM <p>Paper 2 50 marks of short and long answer questions and 20 multiple choice questions: -</p> <ul style="list-style-type: none"> • Gravitational Fields • Capacitors • Thermal Physics • Electric Fields • Practical Skills
Psychology	<p>Paper 1 1 hour 40 minutes</p> <p>Paper 2 1 hour 25 minutes</p> <p>Calculators required for both papers</p>	<p>Paper 1</p> <ul style="list-style-type: none"> • Social • Cognitive • Biopsychology • Learning Theories <p>Paper 2</p> <ul style="list-style-type: none"> • Clinical Psychology

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Religious Studies Philosophy & Ethics	<p>Paper 1 Philosophy and Christianity 1 hour 30 minutes</p> <p>Paper 2 Ethics and Christianity 1 hour 30 minutes</p>	<p>Philosophy Complete one 50 mark question from Theme 1 Arguments for the Existence of God or Theme 3 Religious Experience</p> <p>Christianity = complete one 20 mark question from Theme 2</p> <ul style="list-style-type: none"> • A The Nature of God • B The Trinity • C The Atonement <p>Ethics = Complete one 50 mark question from</p> <ul style="list-style-type: none"> • Theme 2 • Theme 3 <p>Christianity = complete one 20 mark question from Theme 1</p> <ul style="list-style-type: none"> • D • E • F
Sociology	<p>2 papers</p> <p>Paper 2 and 3 content</p>	<p>Media 40 marks 1 hour</p> <p>Crime and Deviance 50 marks 1 hour 15 minutes</p>