



Rewarding Learning

**ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2015**

History of Art

Assessment Unit AS 2

assessing

Module 2: Architecture, Craft and Design

[AD121]

TUESDAY 16 JUNE, AFTERNOON

**MARK
SCHEME**

AS Generic Mark Scheme

Assessment Criteria	Level 1 0–12 marks	Level 2 13–24 marks	Level 3 25–36 marks	Level 4 37–48 marks	Level 5 49–60 marks
Knowledge Source, select, recall material to demonstrate knowledge effectively (AO1).	Insufficient knowledge. Recall lacking scope, depth, relevance and/or accuracy.	Limited knowledge. Recall problematic in scope, depth, relevance and/or accuracy.	Satisfactory knowledge. Recall mostly satisfactory in scope, depth, relevance and accuracy.	Good knowledge. Recall extensive, relevant and accurate, with minor lapses.	Excellent knowledge. Recall extensive, relevant and accurate.
Understanding Demonstrate understanding through analysis and make substantiated judgements and sustained discussion and/or arguments (AO2).	Insufficient understanding. Any relevant analysis, judgements, discussion and arguments unsubstantiated and/or unsustained.	Limited understanding. Any relevant analysis, judgements, discussion and arguments problematic.	Satisfactory understanding. Analysis, judgements, discussion and/or arguments mostly relevant and satisfactorily substantiated.	Good understanding. Analysis, judgements, discussion and/or arguments relevant, substantiated and sustained, with minor lapses.	Excellent understanding. Relevant and fully substantiated and sustained analysis, judgements, discussion and/or arguments.
Communication Present a clear and coherent response (AO3), addressing Quality of Written Communication requirements.	Insufficient communication. Unclear, incoherent and/or non-extensive, with inaccurate spelling, punctuation and/or grammar, and/or inappropriate vocabulary and/or form/style of writing.	Limited communication. Clarity, coherence, extensiveness, spelling, punctuation, grammar, vocabulary and/or form/style of writing problematic.	Satisfactory communication. Clarity, coherence, extensiveness, spelling, punctuation, grammar, vocabulary and form/style of writing mostly satisfactory.	Good communication. Clear coherent, and extensive, with accurate spelling, punctuation and grammar, and appropriate vocabulary and form/style of writing, with minor lapses.	Excellent communication. Clear, coherent and extensive, with accurate spelling, punctuation and grammar, and appropriate vocabulary and form/style of writing.
Marks available for each AC	1 2 3 4	5 6 7 8	9 10 11 12	13 14 15 16	17 18 19 20

Throughout this mark scheme:

- *insufficient* – clear that minimum required standard for an AS pass has not been achieved
- *limited* and *problematic* – unclear that minimum required standard for an AS pass has been achieved.

AS 2 Mark Scheme

Candidates' demonstrated knowledge and understanding of the indicative content will be assessed against the assessment criteria and performance descriptors within the AS Generic Mark Scheme above.

For each question, candidates must demonstrate some knowledge and understanding of the relevant 'immediate context' – within their historical contexts, closely associated artistic styles, themes, centres, movements and/or practitioners, as identified within the particular subject content section. 'Immediate contexts' shown below reproduce in full content descriptions directly relating to the questions, with the less relevant contextual content shown in summary form. The major part of each answer should not be contextual but, rather, drawn from the subject content to directly address the question.

Principal practitioners and works relevant to the examination question should be dated on first mention. Basic biographies should be provided for these principal practitioners. (To assist examiners, information within the Mark Scheme may occasionally be extensive – more than expected from any single candidate's answer.)

For archiving purposes each question is given a six-digit reference, the first three digits identifying the year (09, 10...) and examination series (1, January; 2, May–June), and the second three the unit (1–4) and section number (01–10).

AS 2 Section 1 – Greek architecture

152.201: What for you is the single most interesting aspect of Greek architecture? Establish contexts, refer to appropriate architects and works, and give reasons in support of your answer.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context:
 - **Classical orders** Three major Greek building styles governing detail of column, capital, entablature and their constituent parts; terms, descriptions (including visual where appropriate), development, significance. Doric: imposing 'masculine' strength, characteristic sculpted frieze of triglyphs and metopes. Ionic: 'feminine' delicacy, continuous sculpted frieze. Corinthian; possibly designed by Callimachus: decorative emphasis, limited use by Greeks; interiors, exteriors.
and/or
 - **Materials and methods** From timber to limestone and marble; adherence to trabeated (post-and-lintel) system; structural and optical refinements; use of mathematics and geometry; significance.
and/or
 - **Religious** Development of temple through Archaic (c. 750–480 BC), Classical (c.480–323 BC) and Hellenistic (c.323–27 BC) periods; its religious and social functions; major examples in European Greece, Sicily, Southern Italy, Greek Asia Minor. Ictinus (Iktinus), Mnesicles, Callicrates (Kallikrates).
and/or
 - **Civic** Town-planning; theatre design; major examples.
 - and in summary
 - Classical orders, Materials and methods, Religious and/or Civic, as not already covered.
- Identification of chosen aspect.
- Identification of architect(s) and work(s), and descriptions of work(s), e.g.:
 - Classical orders.
 - Ictinus (Iktinus) and Callicrates (Kallikrates), overseen by Phidias.
 - Parthenon, Acropolis, Athens, 448–432 BC. Commissioned by Pericles. Pentelic marble used throughout. Doric peristyle of 8 x 17 columns (overall measurements 33.5 x 72.2 m/ 110 x 237 ft) with Ionic sculpted frieze high on outside of the cella walls. Portico at each end, two columns deep. Cella divided into two rooms, the smaller, to the west, the parthenon or treasury; the main room or naos, opening to the east, housed Phidias's chryselephantine (gold and ivory over wooden core) statue of Athena, some 12 m/ 40 ft tall. Other sculpture in the two pediments and 92 metopes.
 - Mnesicles(?).
 - Erechtheum, Acropolis, Athens, 421–405 BC. Small, venerable, uniquely complex Ionic temple; dedicated to Erechtheus, Poseidon and Athena. Irregular layout and levels, with three differently sized Ionic colonnades (site slopes from north to south and from east to west). Caryatid porch (flat roof supported by six columns in the form of maidens) to the south, facing the Parthenon; finely decorated friezes and capitals.
 - Architect(s) unknown.
 - Choragic Monument of Lysicrates, Athens, 335–334 BC. Monument erected by the *choregos* (patron of theatrical performances) Lysicrates to display a bronze tripod won by him for sponsoring a chorus at the Theatre of Dionysus. One of the earliest surviving examples of the Corinthian order used on a building's exterior. The tall square base supports a hollow circular structure (without access), with six engaged Corinthian columns, and topped by an acanthus finial.
 - and/or
 - Materials and methods.
 - From timber and mud brick to limestone and marble:
 - Archaeological problem of very little physical remains of timber and mud brick buildings.

- Egyptian, Mycenaean and Minoan architectural influences, including Mycenaean ‘megaron’ or house.
- Earliest known Greek stone temples (such as Temple of Artemis, Corfu, c. 580 BC) emerge with principal (Doric) features largely established.
- Availability of suitable limestone and marble encourages use of these materials.
- Overlap of architectural materials and methods with the sculptural.
- Developed practice of building without mortar, relying on finely crafted masonry jointing (sometimes discreetly supplemented with bronze, lead or wooden pins/ clamps).
- Adherence to trabeated (post-and-lintel) system:
- Arch and its various permutations known to Greek (and Egyptian) architects but chose not to use them.
- Structural and optical refinements:
 - Orders: the three major Greek building styles governing detail of column, capital and entablature and their constituent parts.
 - Entasis: slight convex swelling given to columns, thought to offset the natural illusion of concavity and/or weakness produced if perfectly straight-sided.
 - Slight convex curve given to stylobate and entablature, thought to offset the natural illusion of sagging produced if perfectly horizontal (and also to allow for rainwater run-off).
 - Inclination of columns: subtle inclination of columns towards central axis of building, thought to enhance sense of structural coherence.
 - Spaces between columns at the corners slightly reduced, thought to enhance sense of structural solidity and coherence.
- Use of mathematics and geometry:
 - Parthenon (see above), with its 8 x 17 peripteral columns, exemplifies the 2n+1 ratio typical of Greek temple design.
 - Various proportioning systems have been proposed for Greek temple design, including, for the Parthenon, ones based on a 0.89 m/35.0 in module, the 4:9 ratio and/or the Golden Section.

and/or

○ Religious.

- Callicrates (Kallikrates) and Ictinus (Iktinus), Parthenon (see above).
- Mnesicles(?), Erechtheum (see above).

and/or

○ Civic.

- Town-planning.
 - Boundaries, streets, public spaces, and zones or districts (sacred, public and private); gridded street plans; agoras (open public meeting areas), stoas (long, rectangular, colonnaded municipal halls). Examples: Athens and, in Greek Asia Minor (Turkey), Miletus and Priene.
- Theatre design.
 - Set into a suitable hillside; tiered stone seating, regularly divided by access aisles, radiating up and out from a circular, or almost circular, orchestra (where the actors, chorus and dancers performed). Examples:
 - Priene, 5-4th C BC
 - Epidaurus, c. 350–300 BC
 - Theatre of Dionysus, Athens, c. 330 BC
 - Delphi, c. 160 BC.

- UNDERSTANDING
- Analysis/interpretation/significance/appraisal, e.g:
 - Classical orders.
 - Orders (and temple design) reveal sustained aesthetic development over many generations, the Greeks seemingly uninterested in developing more structurally/spatially/functionally efficient building systems.
 - Parthenon and Erechtheum the principal temples of Athens and the city's patron goddess Athena; Classical masterpieces; enormous expense and care lavished on their construction; in some respects more like great sculptures than buildings.
 - Aesthetic development of architectural orders and other embellishments hand-in-hand with aesthetic developments in sculpture – closely integrated.
 - Doric and Ionic orders seen as visual expressions of distinctive components of the Greeks themselves (the Dorian and Ionian peoples, and/or male and female, respectively) whilst also allowing expressions of national/civic harmony/unity.
 - Corinthian order little used by Greeks themselves, especially on exteriors, but highly influential on Roman architecture, and subsequently.
 - and/or
 - Materials and methods.
 - Pursuit of aesthetic and technical perfectionism, ultimate refinement, arguably a major national characteristic. Perhaps this is key factor in their choosing to persevere with a temple structure (trabeated/post-and-lintel) essentially primitive and spatially inefficient (compared with arcuated/arch-based structures). Innovative in terms of structural details but not the basic forms.
 - In Greek temple design, architectural development is closely integrated with the sculptural/aesthetic. Other aspects of Greek cultural life – such as the philosophical, literary and mathematical – may be similarly related (e.g., the application of mathematics in various proportioning systems proposed for the Parthenon, such as ones based on a 0.89 m/ 35.0 in module, the 4:9 ratio and/or the Golden Section).
 - and/or
 - Religious.
 - Athenian Acropolis and its buildings highly visible focal point for entire city, reinforcing sense of religious and social cohesion.
 - Western room within the Parthenon also the city-state treasury. Functional in sense of providing a relatively high level of protection, but aesthetic interests also served.
 - Greek religious worship patterns, and the climate, exerted little pressure to accommodate large numbers of worshippers within temples. The religious festival of the annual Panathenaic Procession – up to and through the Athenian Acropolis and its complex of buildings – an example of how the site was used and how Greeks observed their religion and simultaneously promoted social cohesion.
 - and/or
 - Civic.
 - Greek town-planning and theatre designs basis for most later developments. Greek theatre design arguably prioritises aesthetics (sense of place, sense of openness) over structure/function.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 2 – Early Renaissance Italian architecture

152.202: What for you is the single most interesting aspect of Early Renaissance Italian architecture? Establish contexts, refer to appropriate architects and works, and give reasons in support of your answer.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context:
 - **Classical influence and rise of Humanism** Emergence from Gothic and Byzantine traditions; studying, questioning, challenging; individualism; architect's status rises; enlightened patronage.
and/or
 - **Technical and aesthetic developments** Structural engineering innovations; interest in mathematics, geometry, proportion; discovery (or rediscovery?) of perspective and its impact.
and/or
 - **Florence as centre** Isolated examples elsewhere; Filippo Brunelleschi, Leon Battista (Battista) Alberti, Michelozzi Michelozzo (Michelozzo di Bartolommeo), Giovanni Pisano, Bernardo Rossellino.
 - and in summary
 - Classical influence and rise of Humanism, Technical and aesthetic developments, and/or Florence as centre, as not already covered.
- Identification of chosen aspect.
- Identification of practitioner(s) and work(s), and descriptions of work(s), e.g.:
 - Filippo Brunelleschi (1377–1446). Leading 15th century Florentine goldsmith, sculptor and architect. 1401, lost to Ghiberti competition for north Baptistery doors; thereafter, concentrates on architecture, spending time in Rome studying buildings of antiquity. About 1410–20, (re) discovers linear/scientific perspective. Innovative structural and mechanical engineer.
 - Florence Cathedral Dome, 1420–36.
 - 1418, Brunelleschi wins competition with design of octagonal pointed arch form with 8 principal stone ribs and 16 secondary ones; the secondary ribs encased in a double-shell of stone in the lower part of the dome and herring-bone brick in the upper. The brick-laying technique was derived from Ancient Roman buildings and permitted the dome to be erected without timber centring. Hoists and other special equipment needed also designed by Brunelleschi. 1436–51, lantern added, overseen and possibly partly designed by Michelozzo di Bartolommeo (1396–1472).
 - Leon Battista (Battista) Alberti (1404–72). Quintessential 'Renaissance man', highly accomplished in a range of the arts and humanities. Born into Florentine nobility but the family expelled from the city for political reasons in 1402; Alberti himself first recorded there in 1434.
 - Malatesta Temple (Tempio Malatestiano/S. Francesco), Rimini; exterior designed 1450.
 - Refurbished classical exterior, designed 1450, enclosing original Gothic church; ground storey only completed; a domed roof intended. Front façade of 3 semi-circular arches, the central one framing the pedimental main door; the 2 side arches left as shallow niches. A plinth, broken at the entrance, surrounds the building and supports, on the front façade, 4 fluted engaged columns and, on each of the side elevations, 7 deep semi-circular arches. Above the columns and arches, a heavy entablature. Small round windows throughout. The capitals of the engaged columns to Alberti's own design, incorporating volutes, egg-and-dart mouldings, acanthus leaves and winged cherub heads.
 - Bernardo Rossellino (b. Settignano, near Florence, c. 1409; d. Florence 1464); sculptor, architect and town planner. Studied under Alberti.
 - Tomb of Leonardo Bruni, 1444–47, marble; Santa Croce, Florence.
 - Bruni, a leading Florentine humanist and statesman, is depicted lying on a bier, which is supported by Roman eagles, holding a copy of his book, *History of the Florentine People* or *History of Florence*, and with a laurel crown on his head. Below him is a sarcophagus with an inscribed plaque held by two angels or genii in bas-relief. Translated from Latin, the inscription reads: "At Leonardo's passing, history grieves,

eloquence is mute, and it is said that the Muses, Greek and Latin alike, cannot hold back their tears". A fluted Corinthian pilaster either side and a semi-circular arch above frame the figure. Above the arch, a medallion of a rampant lion, the Bruni family coat-of-arms, supported either side by an angel or cupid. The niche immediately behind the figure is divided into three simple rectangular panels. Above these, a deep florally-ornamented architrave, and above this, within the arch, a tondo bas-relief of the Madonna and Child, this also supported by two angels. The arch itself is highly ornamented with laurel leaf and other decoration.

- UNDERSTANDING

- Analyses/interpretation/significance/appraisal, e.g.:

- Brunelleschi.

- Florence Cathedral Dome.

- Largest dome since the Pantheon in Rome, c. 118–125, and the highest to that time. Highly innovative and daring engineering solution. Resolution involving Ancient Roman, Gothic and Renaissance forms and techniques. Structural and aesthetic innovations come together in harmonious balance.

- Alberti.

- Malatesta Temple.

- Alberti's refurbishment borrows elements from the antique triumphal arch (including the Arch of Augustus in Rimini itself) but also brings an innovative and individual sense of design and massing of forms that significantly influences the development of Renaissance architecture. Limited structural innovation; exceeded by aesthetic.

- Rossellino.

- Tomb of Leonardo Bruni.

- Architectural and sculptural forms in close harmony. Highly influential example of wall tomb. The abundant references to Greek and Roman antiquity set against the relatively few Christian ones clearly illustrate a cultural shift towards Humanism.

- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 3 – European architecture Renaissance to Rococo

152.203: What for you is the single most interesting aspect of European architecture Renaissance to Rococo? Establish contexts, refer to appropriate centres, architects and works, and give reasons in support of your answer.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context:
 - **France** Armies of Charles VIII of France invade Italy 1494; Italian Renaissance gradually influences French Gothic; rich mix of classical and romantic tendencies; François Mansart (Mansard), Louis Le Vau, Jules Hardouin Mansart (Mansard).
and/or
 - **Britain** Reformation; Henry VIII breaks with Rome and establishes Church of England, 1529; period of iconoclasm; resistance to and isolation from Renaissance artistic influences; first colony established in Virginia, N. America, 1607, marking beginning of 300 years of overseas expansion; architectural expression mainly through great country houses; Robert Smythson, Inigo Jones, Christopher Wren, Nicholas Hawksmoor (Hawksmore), John Vanbrugh.
 - and in summary
 - France or Britain, as not already covered.
- Identification of chosen aspect.
- Identification of required practitioner(s) and work(s), and descriptions of work(s), e.g.:
 - Jules Hardouin Mansart (1646–1708). Grandnephew of François Mansart, under whom he trained. Appointed Architect to the King (Louis XIV) 1675. Began redesign and expansion of the Palace of Versailles 1678; thereafter given responsibility for major architectural projects throughout France.
 - Church of the Invalides (or the Dôme of the Invalides), Paris, c. 1676–1706.
 - Belonging to an institution caring for disabled soldiers. Hardouin Mansart appointed to the project in 1676, taking over from Libéral Bruant who had been appointed in 1670. Plan based on Greek cross with a circular chapel in each of the four corners. Square substructure topped by a tall tambour and slender dome (105 m/ 344 ft high), with an oculus.
 - and/or
 - Christopher Wren (1632–1723). Son of the Dean of Windsor. Educated in sciences at Oxford. Appointed professor of astronomy at Gresham College, London c. 1656. Savilian professor of astronomy at Oxford 1661–73. Earliest architectural work c. 1662–63; commissions largely for church or crown. 1664–65, consulted on refurbishment of the Old St Paul’s Cathedral, following which he spent several months in Paris studying major buildings by François Mansart (1598–1666), Louis Le Vau (1612–70) and others, and briefly meeting Gianlorenzo Bernini (1598–1680). Following Great Fire of London in 1666, appointed Surveyor General to the Crown 1669. Involved in designing 51–52 of the city’s churches, c. 1670–86. Saw himself as effectively having to invent a new tradition of church architecture, writing, “...in our reformed Religion, it should seem vain to make a Parish church larger than that all who are present can both hear and see. The Romanists, indeed, may build larger Churches, it is enough if they hear the murmur of the Mass, and see the Elevation of the Host, but ours are to be fitted for Auditories”.
 - Sheldonian Theatre, Oxford, c. 1663–69.
 - Building intended for university ceremonials. Exterior derived from Serlio’s reconstruction of D-shaped Theatre of Marcellus, Rome. Interior remarkable for using triangulated timber trusses to span 21.3 m/70 ft without ground supports.
 - St Paul’s Cathedral, London, 1673–1710.
 - Various designs proposed, including a domed Greek-cross with portico of giant Corinthian columns (Wren’s own preference; the wooden ‘Great Model’, 1673, still exists), before building began on a Latin-cross design, with a spire over the crossing, and a classical portico – the ‘Warrant Design’, 1675. Wren made many changes to this design over the course of its construction, including changing the spire to a dome, similar to the one in the Great Model.

- UNDERSTANDING
- Analysis/interpretation/significance/appraisal, e.g.:
 - Jules Hardouin Mansart.
 - Church of the Invalides.
 - Strongly influenced by Roman Baroque and particularly the plan and dome designed by Michelangelo for St. Peter's. In turn, Mansart influenced many others well into the 18thC; some of his Palace of Versailles work, such as the Hall of Mirrors, begun 1678, anticipating Rococo. Limited structural innovation; aesthetic arguably dominant.
 - and/or
 - Christopher Wren.
 - Sheldonian Theatre.
 - Exemplifies mathematical and scientific understanding allied to innovative, imaginative structural engineering.
 - St Paul's Cathedral.
 - Centralised Greek-cross design of 1673 rejected as impractical, too radical and/or insufficiently Protestant. Final building a masterly solution to a demanding brief and impressive synthesis of many stylistic influences. Definitive statement of English Protestant Baroque. Aesthetically and structurally innovative.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 4 – Architecture 1835–1918

152.204: What for you is the single most interesting aspect of architecture 1835–1918? Establish contexts, refer to appropriate movements, architects and works, and give reasons in support of your answer.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context:
 - **Arts and Crafts Movement** Structural and decorative integration; contribution to ideas of suburb and Garden City; Philip Webb, Charles F. Voysey, Edwin Lutyens.and/or
 - **Art Nouveau** Painting and plant form influences; influence of Viollet-le-Duc's 'structural rationalism'; Antonio (Antoni) Gaudí, Victor Horta, Charles Rennie Mackintosh.and/or
 - **Wiener Werkstätte and Deutscher Werkbund** Innovative practice in Austria and Germany; tension between 'arts and crafts' and industrial approaches; Adolf Loos, Josef Hoffmann, Peter Behrens.and/or
 - **Independents** Joseph Paxton, Gustave Eiffel, Dankmar Adler and Louis Sullivan, Frank Lloyd Wright.
 - and in summary
 - Arts and Crafts Movement, Art Nouveau, Wiener Werkstätte and Deutscher Werkbund and/or Independents, as not already covered.
- Identification of chosen aspect.
- Identification of required practitioner(s) and work(s), and description of work(s), e.g.:
 - Philip Webb (1831–1915); architect and designer; close associate of William Morris (1834–96) and one of the founding members of the Arts and Crafts Movement.
 - Red House, Bexley Heath, Kent, 1859–60. Marriage home for Morris and his bride Jane Burden.
 - L-shaped plan; red brick construction, left bare. Red tile pitched roof, roof-lines varying. Doors and windows mostly within pointed arches but varied in shape and size.and/or
 - Antonio Gaudí (1852–1926). Son of a coppersmith. Based in Barcelona, where almost all of his work is found. A unique style, within Art Nouveau, based on organic structures, exuberantly textured and coloured. Influenced by nature, religious belief, Catalan independence movement (political and artistic), Moorish design and the architectural theories of Eugène Emmanuel Viollet-le-Duc.
 - Sagrada Familia (variously referred to as a church, cathedral or temple), Barcelona, 1875–on-going.
 - In 1883–84 Gaudí replaced Francesco del Villar as architect, continuing to work on the church until his death. He replaced his predecessor's modest Neo-Gothic design, with flying buttresses, with a highly complex one, of cathedral proportions, in which the arches, piers and columns are 'equilibrated' (self-supporting – tilting, dispensing with the need for internal bracing or external buttressing). Catenary model based on Hooke's Law ("the arch stands as the loaded chain hangs", 1660–75; weighted loops of cord/wire suspended from ground-plan set out on a large board and then inverted, each loop corresponding with the size and loading of a particular arch).and/or
 - Peter Behrens (b. Hamburg 1868, d. Berlin 1940). Highly influential architect, and industrial, corporate identity and furniture designer. 1886–9, studied painting in Karlsruhe. 1890s, worked in Jugendstil (German Art Nouveau) style as painter and designer in Munich. 1893, cofounded Sezession movement of artists, architects and designers. 1899, influenced by J. M. Olbrich to take up architecture. 1903–7, Director of Düsseldorf School of Applied Arts, directing studies away from craft-based approach and towards industrial design and work-based practice. 1907, founding member of Deutscher Werkbund, its aim to modernize German design. 1907–14,

design consultant with AEG, the electrical manufacturing company, designing buildings, products, publicity material, workers' housing and furniture. 1908–11, gave architectural training to, among others, Gropius, Mies van der Rohe and Le Corbusier. 1922, taught at the Prussian Academy of Fine Arts and became head of Architecture Department there in 1936, remaining in the post, during Nazi rule, until his death in 1940.

- AEG Turbine Factory, Berlin, 1908–10.
 - Massive masonry corner pylons, narrowing towards top, with extensive use elsewhere of iron/steel and glass. Designed with use and manufacture of very large machinery in mind. Well lit and adaptable functional space.

and/or

- Joseph Paxton (1803–1865). Gardener and self-taught landscape architect and architect. 1826, appointed Head Gardener at Chatsworth, Derbyshire, by William Spencer, 6th Duke of Devonshire. In this post for 30 years, overseeing the estate, its gardens and exotic plants, and designing buildings and landscape features. During this time also carried out work for numerous private and public authority clients. Built the Great Stove conservatory at Chatsworth, 1836–40 (destroyed 1920), the largest glass-house in Europe at the time, using a ridge-and-furrow glazing system (invented by John Loudon in 1817) supported by arched laminated-timber frames. 1850, patented an improved ridge-and-furrow glazing system. 1849–50, designed and constructed a special conservatory for a specimen of the enormous Victoria Regia (now Victoria Amazonica) lily, achieving the plant's first flowering in Britain. An illustration of Paxton's daughter Annie standing on one of the lily's floating leaves appeared in *The Illustrated London News* in 1849.
 - Crystal Palace, Hyde Park, London, 1850–51.
 - Large temporary structure (1,848 x 408 x 108 ft/563 x 124 x 33 m) prefabricated from cast iron, wrought iron, glass and timber to accommodate Great Exhibition of 1851. Disassembled and re-erected in enlarged form at Sydenham, South London, 1852, where it was destroyed by fire in 1936. Development of his conservatory ridge-and-furrow glazing system but the rib structure of the Victoria Amazonica lily was also apparently an inspiration.

- UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:

- Webb.
 - Red House.
 - Unlike (Neo)classical buildings, designed essentially from the inside out (form following function), hence its modernist significance. Exterior left as unadorned red brick – hence the house name – a statement of aesthetic and (Morris's) socialist principles at a time when a gentleman's residence was expected to be finished in fine cut stone, or at least stucco, again referencing the classical. By Victorian standards, much of the interior – such as the staircase – similarly stark. Gothic and Georgian references combined with vernacular; poetic with functional; proto-modernist.

and/or

- Gaudí.
 - Sagrada Familia.
 - Prime example of Gaudí's total commitment to his art; fully consistent and coherent throughout. In plan and elevation, eschewing the 'Euclidean' geometrical forms (of circles, straight lines and flat surfaces) conventionally used by architects in favour of complex 'Non-Euclidean' ones (catenary, hyperboloid, conoid, paraboloid) closer to the organic forms of nature. Arguably structurally and functionally 'rational' in that large volumes are enclosed with minimal material, but particularly costly, and demanding on the craft skills of his masons, as constructed of cut stone rather than, say, poured concrete. Distinctiveness of the architecture accords with Catalanian drive for independence. The aesthetic, imaginative and 'irrational' aspects appealed to Surrealists. Following the decline of International Style Modernism in the 1950s and '60s, his work influenced the architecture of curved surfaces.

and/or

- Behrens.
 - AEG Turbine Factory.
 - Masonry corner pylons point to past, with innovative use elsewhere of iron/steel and glass pointing to Modernist functionalism. New materials and methods, structurally and aesthetically innovative.
- and/or
- Paxton.
 - Crystal Palace.
 - Widely regarded as the most innovative and influential building of the 19th century. Informed by detailed knowledge and understanding of natural forms. Adoption of materials and methods of industry and civil engineering – rather than those of craftsmen, builders and architects. Exploitation of industry and mass production; few elements reproduced in large numbers; prefabrication; unskilled or semi-skilled labour; just-in-time delivery; exploitation of new railway/transport system; rapid assembly and disassembly; minimal imprint on site. Structurally and aesthetically innovative.
- Any other valid content identified at the standardising meeting to be credited.

AS 2 Section 5 – Architecture 1900–1945

152.205: What for you is the single most interesting aspect of architecture 1900–1945? Establish contexts, refer to appropriate movements, architects and works, and give reasons in support of your answer.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context
 - **French Avant Garde** Development of reinforced concrete; classical rationalism; the Industrial City; Tony Garnier, Auguste Perret, Le Corbusier.
and/or
 - **De Stijl and Bauhaus** De Stijl: Neo-Plasticism; influences of Cubism and the machine-made; Gerrit Rietveld, Jacobus Johannes Pieter Oud. Bauhaus: functionalism; concrete, steel and glass classicism; Walter Gropius, Ludwig Mies van der Rohe.
and/or
 - **North American** Innovative practice; informed by and reacting to European modernism; Frank Lloyd Wright, Richard Buckminster Fuller.
and/or
 - **Independents** Wells Coates, Alvar Aalto, Berthold Lubetkin.
 - and in summary
 - French Avant Garde, De Stijl and Bauhaus, North American and/or Independents, as not already covered.
- Identification of chosen aspect.
- Identification of required practitioner(s) and work(s), and descriptions of work(s), e.g.:
 - Le Corbusier (b. Charles-Édouard Jeanneret, Switzerland, 1887; d. France, 1965). Architect, designer, town-planner, artist and writer. The most active Modernist (or International Style) architect in promoting functionalism as a design principle. Post-1945 work increasingly sculptural in expression. Trained under Josef Hoffmann in Vienna (1905), Auguste Perret in Paris (1908–09) and Peter Behrens in Berlin (1910–11).
 - Villa Savoye, Poissy, 1927–31.
 - Weekend retreat. Severely geometrical flat-roofed concrete dwelling raised off ground on thin columns; horizontal windows; painted white; no applied decoration.and/or
 - Walter Gropius (1883–1969). Founding director of the Bauhaus and widely recognised as one of the most influential architects of the 20th century. Inspired to enter the profession at least partly by the great medieval cathedrals. Studied architecture in Munich and Berlin, 1903–07; worked under Berlin architect and designer Peter Behrens (1868–1940), 1907–10. Joined the Deutscher Werkbund, 1910, initially allying himself to Henry van de Velde's individualistic 'arts and crafts' approach but, by 1914, switching to Hermann Muthesius's functionalist, industry-led one. 1914–18, squalor of WWI and its aftermath (he served as an officer in the trenches) motivation to improve general living conditions through enlightened architecture and design, and machine production. 1919–28, first director of the Bauhaus. 1934–37, Gropius left Germany for England, working with Maxwell Fry. 1937–52, left for USA to head Harvard Graduate School of Design's Department of Architecture.
 - Bauhaus Building, Dessau, 1925–26.
 - Building complex comprising workshop wing, accommodation and studio blocks, teaching wing for Dessau Technical College, a 'flyover' administrative section, and a block containing an auditorium, theatre and canteen. Constructed of reinforced concrete, steel and glass; no applied decoration.and/or
 - Frank Lloyd Wright (1867–1959). Leading American independent and proponent of what he himself termed 'organic' architecture – distinguishing his approach from that of 'hard-edge' modernists such as Gropius, Mies van der Rohe and Le Corbusier, and emphasizing the uniqueness of each client's and each site's requirements. Unusually long, varied and prolific career, extending from 'Arts and Crafts' homes, adapted for American mid-west suburbs, through to the highly innovative white spiral form of the Guggenheim Museum in New York,

completed six months after his death.

- Falling Water, Kaufmann House, Bear Run, Pennsylvania, 1935–39.
 - Weekend retreat for wealthy businessman and his family. Sited in a birch forest, directly over a small waterfall, and built of rough-cut local stone, reinforced concrete and with timber-framed banded windows. Smoothly finished reinforced concrete platforms are cantilevered out from the walls and chimney of rough-cut local stone, and tied in also to the natural rock.

and/or

- Alvar Aalto (b. Kuortane, Finland 1898; d. Helsinki 1976). Leading Scandinavian Organic Modernist architect, city planner, furniture and glassware designer. Renowned for designing in sympathy with both the human user and the natural environment. Strongly influenced by nature and by Finnish vernacular architecture, craft and design. Contended it was the task of the architect and designer to humanize mechanical forms. 1916–21, studied architecture at Helsinki Polytechnic Institute. Early work reveals uneasy mix of Gothic and Classical elements – the latter relating to the Nordic Classical architectural movement, active c. 1910–30:
 - Tuberculosis Sanatorium, Paimio, 1928–33.
 - Built for long-stay patients at a time when tuberculosis was rife, affecting all conditions and classes of people, and treatment largely comprised rest in hygienic surroundings with exposure to sunlight and fresh air. Commission won through competition. Minimal disruption to surrounding natural landscape of pine trees. Wards arranged in a tall narrow block with large windows and facing the morning sun. Reinforced concrete frame construction with glazed stairwells, and balconies where patients could socialize, at the end of each block. Staff and administration blocks branch off the ward block. Design extended to furniture and fittings; artificial light from behind the patient's head; rooms painted in soft tones with darker ceilings, encouraging rest; wall-hung cupboards eased floor cleaning; attention paid to sound insulation.

- UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:

- Le Corbusier.
 - Villa Savoye. Defining example of Le Corbusier's '5 points of a new architecture' (pilotis, free plan, free façade, strip windows and roof terrace/garden); functionalist; idealist and influential but some practical shortcomings; questionable as to 'homeliness' of design approach.

and/or

- Gropius.
 - Bauhaus Building.
 - Defining example of modernist non-domestic architecture. Reinforced concrete frame with supporting columns set back from the non-structural 'curtain walls' of metal-framed windows. Building system allowing rapid and economical construction of large, well lit, open-plan spaces. Non-symmetrical; functionalist. Structurally and aesthetically innovative.

and/or

- Wright.
 - Falling Water.
 - As typical of his house designs, open-plan for most part and centred on large fireplace. The main living area takes the living rock as its floor, and a small stairway connects directly to the waterfall below. The cantilevered platforms, horizontal banded windows, and flat roofs echo the modernism of Gropius, Mies van der Rohe and Le Corbusier but the use of local materials and the formal coherence achieved between man-made and natural forms (the cantilevered platforms, for instance, echoing the rock formations) are significantly different. The cantilevered platforms echo his 'Prairie House' use of large overhanging eaves and the flow of space between interior and exterior. Structurally and aesthetically innovative.

and/or

- Aalto.
 - Tuberculosis Sanatorium.
 - In many respects a model for the modern hospital. Careful attention to detail to help improve health and welfare of patients. Integrated architectural and design approach. More sensitive to human needs than most 'functionalist' designs.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 6 – Three-dimensional craft and design 1850–1918

152.206: Critically appraise three-dimensional craft and/or design 1850–1918 for either the Shakers or early industrial design. Establish contexts and refer to appropriate practitioners (where known) and works.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context:
 - **Shaker** Anonymous, elegantly functional, well crafted interiors, furniture, boxes and other household artefacts; reflecting religious commitment and values.
 - or
 - **Early industrial design** Great Exhibition of 1851 highlights poor state of British product design; widespread debate, design reforms; from craft- into batch- and mass-production; Michael Thonet, Christopher Dresser, Josef Hoffmann.
 - and in summary
 - Shaker, Early industrial design, Arts and Crafts Movement and/or Art Nouveau, as not already covered.
- Identification of required practitioners (where known) and works, and descriptions of works, e.g.:
 - Shakers (officially the United Society of Believers in Christ's Second Appearing). Protestant celibate sect originating in Manchester in 1747 (or in London in 1706, according to Shaker oral tradition), relocating to N. America under the leadership of Ann Lee ("Mother Ann") in 1774 where it expanded to a high of about 18 communities and 6,000 members between 1830 and 1850, but falling to only 8 members in 2000 – rule of celibacy meant there were no second-generation Shakers. Communal living and property, with the sexes segregated. The communities self-sufficient, hard working, orderly, believing in 'plain and simple' living; building, making and other forms of work viewed as forms of worship, to be done to the very highest standards and without ostentation of any kind. Dislike of ostentation and vanity also meant their craftworks were generally left anonymous.
 - Rocking chair, c. 1880; from Shaker factory, New Lebanon, New York.
 - Light-weight three-slatted ladder-back rocking chair in turned and stained maple. Back posts gently tapered and topped by simple rounded finials; front posts, with gentle ogee taper between seat and arms, extended through arms and ending in flat pommels; double turned stretchers to front and sides, single stretcher to back; plain wooden rockers; simple woven seat.
 - Ladder-back chair, c. 1880.
 - As above but without arms and rockers, and with ball-and-socket tilter buttons on back legs (tilter buttons a Shaker invention enabling feet to remain flat and firm to floor, minimising damage when chair is tilted backwards). This design awarded a medal at 1876 Philadelphia Centennial Exhibition for combining "strength, sprightliness and modest beauty"; both chair and tilter button granted patents.
 - or
 - Michael Thonet (b. Boppard, Germany, 1796; d. Vienna, Austria, 1871). With his sons Franz, Michael, August and Joseph, founded the furniture making firm of Gebrüder Thonet in Vienna, 1845. Awarded bronze medal for furniture design at 1851 Great Exhibition in London.
 - Bentwood chair (or Kaffeehausstuhl/ Coffee shop chair) No. 14, c. 1859.
 - Light-weight mass-produced laminated wood chair; rounded forms. Steam treatment also used to bend solid wood. Some 30 million produced to 1930. Awarded gold medal at 1867 World's Fair in Paris.
 - Christopher Dresser (b. Glasgow, 1834; d. 1904). Lecturer in botany. Prolific designer of wallpaper, textiles, ceramics, glass, furniture and metal ware. Influential writer and theorist on design. Described by some as the first modern, or professional, industrial designer. Contended that ornamentation should be based not on historical styles but on the abstraction of natural forms. Shared certain views on design with William Morris and the Arts and Crafts Movement but, unlike them, interested in designing for industry and a wide market. Influenced by Pugin,

Owen Jones and oriental art and design, especially Japanese, examples of which he had seen at the 1862 International Exhibition in London. 1876–7, made his first trip to Japan, after which he established the firm Dresser & Holme to import Japanese and oriental goods.

- Model No. 2045 Crow's Foot Claret Jug, 1878; electro-plate and glass; designed for and manufactured by Hulkin & Heath.
 - Amphora-shaped glass jug supported on three feet; angular handle connecting feet and lid assemblies.
- Josef Hoffmann (b. Pirnitz, Moravia, 1870; d. Vienna 1956). Architect and designer. Trained and worked under architect Otto Wagner in Vienna. Founder member of the Wiener Sezession (Vienna Secession). Visited Britain in 1900, meeting Charles Rennie Mackintosh and various representatives of the Arts and Crafts Movement, including Charles Robert Ashbee. Mackintosh's quite severe and functional form of Art Nouveau a major influence, and he invited Mackintosh to contribute to the VIII Secessionist Exhibition held in Vienna that year. 1903, helped establish the Wiener Werkstätte (Viennese Workshop) co-operative workshop, based on Ashbee's Guild of Handicraft, and was its director until 1932/3.
 - Sitzmaschine (Sitting Machine) Model No. 670, c. 1905–8.
 - Chair of bent beechwood and pierced sycamore panels, with adjustable back, manufactured by Jacob & Josef Kohn, Vienna (and/or Thonet?) in a number of versions (most with cushions to back and seat). Designed originally for the Purkersdorf Sanatorium in Vienna. The adjustable back influenced by Philip Webb's Morris Chair, c. 1866. Forms more rectangular and rectilinear than curved.
- UNDERSTANDING
- Analyses/interpretation/significance/appraisal, e.g.:
 - Shakers.
 - Rocking and Ladder-back chairs.
 - Rocking and plain ladder-back chairs: finely crafted, although also produced in large numbers; practical, elegant, unostentatious, durable; lightweight and designed to be hung on peg-boards when not in use, leaving floor space free for cleaning or other activities. Development and refinement of vernacular chair designs from New England and elsewhere on the Eastern Seaboard. Products of a religious belief system but anticipate many of the functionalist design principles of Modernism.
 - Shaker buildings, interiors and craft products valued for their grace, simplicity, practicality, durability and quality of design and craftsmanship. Peculiarly propitious circumstances for high quality design and craftsmanship created by the religious and communal ethos, and its subjugation of individuality. Influenced many Modernist designers and craftspeople.
 - or
 - Dresser.
 - Model No. 2045 Crow's Foot Claret Jug.
 - Inventively practical design and restrained use of ornament (abstracted natural forms). Electro-plating and industrial processes reduce costs and broaden potential market.
 - Hoffmann.
 - Sitzmaschine (Sitting Machine) Model No. 670.
 - Part of an early attempt to create unity between building and furnishings ('gesamtkunst-werk', a 'total work of art'). Shift from Art Nouveau curvaceous, indulgent decorativeness towards rationalism and functionalism. Exposed structure and simple forms consistent with machine production. An early instance of Hoffmann's lengthy and mutually profitable association with J&J Kohn as an industrial designer and, more broadly, an example of a work by him that had major influence on modernist design as a whole.
 - Thonet.
 - Bentwood Chair No. 14.
 - Functional, lightweight, comfortable, durable and economical. Affordable due to its minimalist decoration and a design having adapted handcraft methods to mass-production ones. Use of glued laminates and steam-bending enabled efficient and economical use of wood. Light weight minimised transport costs. Curved lines influenced by contemporary Rococo Revival, and also anticipate Art Nouveau.

- General, e.g.:
 - General craft–design relationship; conflict, often unresolved, between aesthetic, social and/or economic principles; tension between art and industry; catering for elite or mass markets.
- Any other valid content identified at the standardising meeting to be credited.

AS2 Section 7 – Three-dimensional craft and design 1918–1945

152.207: Critically appraise Modernist (*not* Art Deco) three-dimensional craft and design 1918–1945, establishing contexts and referring to appropriate practitioners and works.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context
 - **Modernist** De Stijl: Neo-Plasticism; Theosophical, Cubist, machine influences; Bakelite developed 1907–09; Gerrit Rietveld. Bauhaus: formal experiment, functionalism; craft with a view to mass-production; Ludwig Mies van der Rohe, Marcel Breuer, Marianne Brandt, Wilhelm Wagenfeld. Independents: Le Corbusier, Alvar Aalto.
 - and in summary
 - Art Deco.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - Gerrit Rietveld (b. Utrecht, Netherlands, 1888; d. Utrecht, 1964). De Stijl architect and designer. Trained as cabinetmaker in his father's business 1899–1906 before establishing his own cabinet-making business in 1911, when he also began studying architecture. Joined De Stijl 1918–19. Most radical of the De Stijl architects and designers.
 - *Red and Blue (or Red/Blue) Chair*, c. 1917–23. Wooden construction, originally unpainted; c. 1923, painted in primary colours (red, yellow, blue) and black under De Stijl influence (especially of Piet Mondrian, 1872–1944).
 - Rectilinear elements throughout. Supporting frame and chair arms of square-section elements – black, apart from the yellow ends – arranged vertically or horizontally. Seat, flat rectangular section painted blue and slightly inclined downwards towards back; back, flat rectangular section painted red and slightly inclined back from vertical. All elements seem to simply abut one another (no apparent jointing or visible means of attachment).
 - Marcel Breuer (b. Pécs, Hungary, 1902; d. New York, 1981). Modernist architect and designer. Bauhaus student 1920–23. Head of Bauhaus carpentry/furniture workshop c. 1925–28. One of the first to use tubular steel for furniture, influenced in this by his purchase of a racing bicycle c. 1925 and/or awareness of Dutch designer Mart Stam's (1899–1986) tubular steel cantilevered chair prototype of 1926.
 - *Model No. B3, Wassily Chair*, c. 1925–27, for Standard-Möbel, Berlin (a manufacturing firm established by Breuer and the Hungarian architect Kalman Lengyel), and Thonet.
 - Chrome-plated tubular steel armchair with stretched leather or canvas seat, back and arms. Chair frame appears almost a continuous length of tubular steel, for part of its length forming a 'runner' either side. Named after the abstract painter and Bauhaus master Wassily Kandinsky (1866–1944), who encouraged Breuer's experiments in new materials.
 - Alvar Aalto (b. Kuortane, Finland 1898; d. Helsinki 1976). Leading Scandinavian Organic Modernist architect, city planner, furniture and glassware designer. Renowned for designing in sympathy with both the human user and the natural environment. Strongly influenced by nature and by Finnish vernacular architecture, craft and design. Saw the task of architect and designer to humanize mechanical forms. 1916–21, studied architecture at Helsinki Polytechnic Institute. Early architectural work reveals uneasy mix of Gothic and Classical elements – the latter relating to the Nordic Classical movement, active c. 1910–30. 1924, married designer Aino Marsio (1894–1949), subsequently collaborating with her on numerous projects. Experimented extensively with laminated wood and plywood. 1935, with Aino and others, founded Artek, a company to mass-produce and market his laminated birch moulded-plywood furniture – designs still being produced:
 - *Paimio chair* (Model No. 41), 1930–33; later produced by Artek.
 - Moulded birch plywood armchair with sweeping curves. Designed to help recuperation of patients at the Tuberculosis Sanatorium, Paimio, 1928–33, also designed by Aalto.

- UNDERSTANDING
- Analysis/interpretation/significance/appraisal/discussion:
 - Rietveld.
 - *Red and Blue Chair.*
 - Apart from the inclined seat and back, complies with De Stijl's visual fundamentalism of only verticals and horizontals, and only primary colours plus white, black and grey. Aesthetic statement more than a practical chair design (although apparently more comfortable than it looks). Structure clearly revealed on the level of arrangement of basic forms but not revealed on the level of how the wooden pieces are securely attached to one another (a chair is particularly demanding in terms of stresses and strains). Antithesis of the craft skills Rietveld would have learnt in his father's cabinet-making workshop. Simple abutment of elements could be related to recent invention of (electric) welding, used in metalwork.
 - Breuer.
 - *Model No. B3.*
 - Chrome-plated tubular steel light, strong, adaptable, hygienic and reasonably workable and affordable. Minimal visual clutter and consistent with developments in Modernist architecture. Functional, modern, innovative, visually interesting/exciting; suitable for mass-production; can also be criticised as coldly clinical and lacking in comfort.
 - Aalto.
 - *Paimio chair.*
 - Functional; no applied decoration; self-coloured natural material, enhanced by varnish only. Adds sense of warmth and psychological connection that would probably not be available from man-made materials such as steel or plastics. Crisp and clean organic forms. Connects with Scandinavian craft heritage in use of curved wood. Making use of local skills and materials. Pioneering use of plywood and the structural use of wood veneers (following recent developments in glue and timber cutting technologies, and mass production techniques). Bentwood techniques allow efficient connection of vertical and horizontal elements. Modernism humanised. Such work strongly influential on Charles and Ray Eames and other leading Modernist furniture designers.
- Any other valid content to be identified at the standardising meeting and credited.

AS2 Section 8 – Textiles and fashion design 1850–1945

152.208: Critically appraise fashion design 1850–1945, establishing contexts and referring to appropriate designers and works.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context
 - **Fashion** Earliest practical sewing machines invented 1840s–50s; economic, practical, gender, personal, lifestyle, social, cultural factors; emergence of haute couture; Charles Worth, Madeleine Vionnet, Paul Poiret, Coco Chanel, Cristobal Balenciaga.
 - and in summary
 - Arts and Crafts Movement, Bauhaus, Art Deco.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - Charles Worth (b. Bourne, Lincolnshire, 1825; d. Paris, 1895). English-born fashion designer based in Paris; widely referred to as the first modern couturier.
 - Ball gown, silk, c. 1872; collection of The Metropolitan Museum of Art, New York, USA; accession number C.I.46.25.1a-d.
 - Curvaceous hourglass silhouette achieved by corsetry and bustle. Bustle: a framework of steel or cane hoops used to support a woman's dress extended at the back; introduced c. 1869 as a slightly more practical replacement for the crinoline, a dome-shaped framework. Ostentatiously expensive fabrics and trimmings.
 - Gabrielle 'Coco' Chanel (b. Saumur, France, 1883; d. 1971). Fashion designer renowned for the comfort, practicality and simple elegance of her designs, and credited more than any other with freeing women from the constraining and generally ostentatious clothing of the previous era. Precise details of early life unclear but seems to have been raised in a convent orphanage at Aubazine, where she learned to sew. 1902–04, café-concert singer under name 'Coco'. 1910, with the financial backing of Arthur 'Boy' Capel, she began making and selling hats from her own shop in Paris. 1913, opened a boutique in Deauville and, in 1915, another in Biarritz, selling her own designs of hats, blouses and chemises – designed to be worn without corsets. 1916, began using jersey (a cheap material previously found mostly in underwear) for her garments; borrowing elements from menswear (sweaters, blazers, trousers...). By 1920s, she had established a couture house, textile factory and range of perfumes, including Chanel No. 5. 1939–53, her business closed on outbreak of WWII and, following an affair with a Nazi officer, she went into exile in Switzerland. 1954, business reopened.
 - Day ensemble ('little black dress'), c. 1927; collection of The Metropolitan Museum of Art, New York, USA; accession number 1984.28a-c.
 - Pleated wool jersey dress; simple in form and material but finely tailored, including seam binding and hand-sewn belt.
 - Cristobal Balenciaga (b. Guetaria, near San Sebastian, in Basque region of Spain, 1895; d. Spain 1972). His mother a seamstress. A local patron sponsored his tailoring training in Madrid. His fashion designs met early success but the Spanish Civil War, 1936–39, forced him to move operations to Paris, his first fashion show there in 1937. Rapidly recognized as revolutionizing force in fashion.
 - Evening coat, silk, 1940–45; collection of Metropolitan Museum of Art, New York, Accession number C165.28.1F.
 - Black full length silk evening coat with integral cape, deep cuffs and eight silver filigree, black-centred, buttons.
- UNDERSTANDING
- Analysis/interpretation/ significance/ appraisal, e.g.:
 - Worth.
 - Ball gown.
 - Extravagant form, colour, materials and decorative treatment, finely and expensively crafted. Female form exaggerated (using corsetry, bustle and voluminous fabrics) to point where much physical activity and, by implication, female independence are curtailed. Worth's career coincident with reestablishment of French Empire, under Napoleon III, and the Empress Eugénie his major client.

- Chanel.
 - Day ensemble ('little black dress').
 - Modest form, colour, materials and decorative treatment, finely and expensively crafted. Innovative use of black as a fashion colour. Simple clean lines and inconspicuous detailing often described as 'classically elegant'. 'Boyish' lines reflecting new independence and freedom of lifestyle for western women post-WWI, for which Chanel herself was a leading role model. Certain democratisation of style, connecting with servants' uniforms, and capable of being cheaply emulated.
- Balenciaga.
 - Evening coat.
 - Almost straight drop from shoulders anticipates Balenciaga's later development of the 'sack' dress. 'Straight drop' also of the eight silver filigree buttons contrasting with the soft black of the fabric.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 9 – Graphic design 1850–1945

152.209: Critically appraise Modernist graphic design 1850–1945, establishing contexts and referring to appropriate designers and works.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context
 - **Modernism** Bauhaus: ethos of formal experiment, abstraction, functional design; Laszlo Moholy-Nagy, Herbert Bayer, Max Bill. Art Deco: formal simplicity infused with glamour and opulence; Edward McKnight Kauffer, Adolphe Mouron Cassandre. Independent: Jan Tschichold.
 - and in summary
 - Post-Impressionism and Art Nouveau, Wars and revolution.
- Identification of required practitioners and works, and descriptions of works, e.g.:
 - Max Bill (b. Winterthur, Switzerland 1908; d. Zürich 1994). Bauhaus trained graphic, exhibition and industrial designer, as well as architect, painter, sculptor, writer and educationalist, and a key pioneer of the International Typographic Style (or Swiss Style). 1924–27 studied silversmithing at Zurich Kunstgewerbeschule (Applied Arts School). 1927–29, studied at the Bauhaus, Dessau. 1929, returned to Zurich where, 1932–33, he designed his own house and studio and from which he worked for most of the rest of his life.
 - Catalogue cover for 1944 *Konkrete Kunst (Concrete Art)* exhibition at Basle Museum of Art.
 - Black print on plain white ground. Asymmetric layout using a single typeface, the sans serif Akidenz Grottesque, in just two sizes and completely in lower case. Generous margins and line spacing. Emphasis confined to use of bold, bottom left, in “kunsthalle basel”.
 - Adolphe Mouron Cassandre (b. Adolphe Jean-Marie Mouron, Ukraine 1901; d. Paris 1968). Art Deco poster designer. Left Russia and, following WWI, studied painting at the École des Beaux Arts and Académie Julian in Paris. 1923, adopted pseudonym “Cassandre” for his poster designs, probably intending to keep his birth name for his paintings.
 - *Dubo, Dubon, Dubonnet* Dubonnet poster, 1932. One of several Cassandre posters promoting the alcoholic drink Dubonnet.
 - Poster bordered top and left in dark blue, and bottom and right in wine-red. Within the border, a flat yellow background. Upper centre, seated in front of a café or bar table, a man in a dark suit and hat, in left profile, pours some red Dubonnet into a glass on the table. Apart from the bottle and glass, everything, including the man’s wide-eyed expression of delighted astonishment, is severely flattened and cartoon-like. Arrow-like shape, directing attention to the neck of the bottle, formed by the bottle, outstretched right arm, and an area of white blow the arm. Below image, in dark blue sans serif capitals, and stacked on one another, from the top down, are the words “DUBO”, “DUBON”, “DUBONNET”. Below “DUBONNET”, in very small red sans serif capitals, are the words “VIN TONIQUE/ AU QUINQUINA”. “DUBO” is not in itself a French word but it equates phonetically with “du beau” (beautiful, fine, handsome...), and “DUBON” or “du bon” translates as “good”. “DUBO” here has also been interpreted as “short for ‘dubious’” (Jeremy Aynsley, *A Century of Graphic Design*, 2001, ISBN 1 84000 348 0, p. 51), but, as relating to “douteux”, that interpretation is itself dubious.
 - Jan Tschichold (b. Leipzig, Germany, 1902; d. Locarno, Switzerland, 1974). Independent Modernist teacher, calligrapher, typographer, book designer and writer. Trained at the Academy of Graphic Arts and Book Design in Leipzig 1919–22. Influenced by Russian Constructivism, De Stijl and the 1923 Weimar Bauhaus exhibition to adopt Modernist design principles. In his book *Die Neue Typographie (The New Typography)* Berlin, 1928, advocating such as asymmetric layouts, grids, sans serif typefaces, left-justified/ragged-right text, use of photographs rather than drawn illustrations. Persecuted by Nazis and escaped to Switzerland in 1933. Published *Typographische Gestaltung*, Basle, 1935, but from this time began to question Modernism, eventually associating it with totalitarianism and fascism. Increasingly used symmetrical layouts

and/or serif typefaces, especially for books. Lived in London 1946–9, working on Sir Allen Lane’s commission to redesign all Penguin Books publications (comprising 19 series – Penguin Books, Pelican Books, Penguin Classics, Penguin Shakespeare, etc. – and over 500 individual titles). In 1947, as part of this redesign, he formulated the *Penguin Composition Rules*, which are still widely used as guidance on typographic practice. His typeface designs include *Transit* (or *Transits*), c. 1930–31; *Saskia*, c. 1931–32; and *Sabon*, c. 1964–67. Internationally influential through his works and writings.

- *Die Hose*, 1927. Film poster in red and black on white for Phoebus Palast (Palace), Munich.
 - asymmetric layout and sans serif text; text – all upper case and in five sizes – at about 300 to the horizontal throughout, in white on red, black on red, and black on white; black and white photographic still from the film within a circular frame.
- Prospectus for *Die Neue Typographie*, 1928.
 - Vertical A4 format with asymmetrical layout of black sans serif text on yellow ground; two unequal columns of text, with a third block of text, lower right, between the vertical midpoint and the right-hand margin; the latter block along with the left hand column fully justified; capitals, bold and solid blacks variously used.
- The Penguin Shakespeare generic cover, 1947, for Penguin Books, London.
 - The company’s general aim to produce a wide range of well designed books in large numbers and at affordable prices. This cover representative of one of 19 published or proposed series. Black and red on white ground; a white-edged black band bordering each of the four sides; white lettering, hand drawn by Tschichold, reading “THE PENGUIN SHAKESPEARE” within the top band and “PENGUIN BOOKS” within the bottom; discreet foliate designs within the side borders; inside the border, the play’s title in centred red italic roman; immediately below this, a centred oval black and white engraved portrait of Shakespeare, by Reynolds Stone; below this, editor and price details, separated by a tapering red horizontal line, in small centred red roman.

- UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:

- Bill.
 - Catalogue cover for *Konkrete Kunst*.
 - Austere asymmetric layout with white spaces very carefully considered. Architectonic; indicative of importance given to grids, modules and mathematical proportioning. Major influences include: De Stijl, and especially Theo Van Doesburg’s (1883–1931) concept of ‘concrete art’; Bauhaus and Constructivism; inter-disciplinary philosophy (art, architecture and design informing one another). Produced in politically neutral Switzerland during WWII. Period of creative consolidation and experimentation for trilingual Switzerland. Confluence of French, German and Italian cultures within the country propitious for the international standing Swiss typography attained post-WWII.
- Cassandre.
 - *Dubo, Dubon, Dubonnet* poster.
 - Severe spatial flattening and geometrizing of forms can be related to Cubism and other Paris-centred developments in avant garde painting over previous 20–30 years. Three-dimensionality of bottle, glass and poured drink commands attention, contrasting with flatness of man, chair, table and lettering (similar, eg, to trompe l’oeil nail in George Braque’s *Violin and Palette*, 1909–10, or Cubist painters’ use of lettering generally; see *Cubist Painting in France* study note). Humour; visual and literary economy of means.
- Tschichold.
 - *Die Hose* film poster.
 - Early example of his Modernist typography. Radically different from classical centred typography. Asymmetry and effective use of white space something shared with Japanese painting and graphic design. Purity of form, use of severe geometry, functionalism, rejection of the past and a declared dislike of “selfish individualism” all accord with principles widely held by Constructivist, De Stijl and Bauhaus artists and designers. Use of photographic image emphasizes openness to new technologies, as does the fact that it is a film poster. Connects also with popular culture.

- Prospectus for *Die Neue Typographie*.
 - A practical demonstration – for printers and graphic designers primarily but also for a much wider public – of the benefits of the “new typography”. Cleaner and more flexible, functional and “modern” than the centred and usually very cluttered typography of the day. Closely paralleling other developments in modernist art, architecture, craft and design.
- The Penguin Shakespeare cover.
 - Return to classical symmetrical/centred typography, serif typefaces and some hand-drawn lettering and illustration, but also – in its clean and relatively simple design – informed by Modernist principles. Appropriate to brief in evoking the times of both Shakespeare and Tschichold. Illustrates his later considered view that books were best served by symmetric typography, and asymmetric typography’s role was in advertising, letterheads and such-like.
- Any other valid content to be identified at the standardising meeting and credited.

AS 2 Section 10 – Automotive design to 1945

152.210: Critically appraise 'other' automotive design (*not* 'family car') to 1945, establishing contexts and referring to appropriate designers, manufacturers and examples.

Indicative content

Answers should include the following:

- KNOWLEDGE
- Immediate context:
 - **Other** Sports/racing cars: Enzo Ferrari, William Lyons/Jaguar, Ettore Bugatti/Bugatti, Aston Martin. Various: Harry Ferguson, Raymond Loewy, Henry Dreyfuss.
 - and in summary
 - Family car.
- Identification of required practitioners and works, and description of works, e.g.:
 - Enzo Ferrari (b. Modena, Italy 1898; d. Modena 1988). Italian motor racing driver and founder of Ferrari, leading sports car manufacturer and motor racing team. His father had a small metalworking business. Discharged from Italian army during WWI due to ill health. Worked for car company CMN converting war surplus trucks. 1919, began racing for CMN team. 1920, began working and racing for Alfa Romeo. 1923, acquired Prancing Horse badge that would become the Ferrari symbol, given to him by the mother of Italian WWI flying ace Francesco Baracca, the badge retrieved from her dead son's crashed plane. 1929, formed and managed Scuderia Ferrari, which Alfa Romeo adopted as its official racing team. 1932, Ferrari himself stopped racing. 1938–39, severed Alfa Romeo link and founded Auto Avio Costruzioni, in Modena, ostensibly at least to manufacture aircraft parts – being legally bound by Alfa Romeo not to use the Scuderia Ferrari name for 4 years. 1946–47 (following WWII), first Ferrari racing car, the *Tipo 125*. 1951–present, many race wins (Le Mans, Formula One Grand Prix, and numerous sports car events) and manufacturers' championships. Racing Ferraris often said to be bright red and synonymous with indifference to death. 1950s, sports car production began essentially to help fund the racing team.
 - *Auto Avio Costruzioni 815*, also known as the *AAC Tipo 815*, 2-seat sports car with 8-cylinder 1.5L single overhead camshaft engine, 1940. Two examples produced.
 - Arguably the first car fully designed and built by Ferrari, although, because of the contractual agreement with Alfa Romeo, his erstwhile associates, not bearing his name. Engine essentially two Fiat 4-cylinder engines joined end-to-end, with a specially designed aluminium engine block and other modifications. The curvaceous bodywork of a lightweight aluminium-magnesium alloy. The only two 815s built were entered for the 1940 Brescia Grand Prix, both retiring due to engine failure, although one had set the lap record for its class at the time and was also well ahead of the field before retiring.
 - Sir William Lyons (b. Blackpool 1901, d. Leamington Spa 1985; knighted 1956)/ Jaguar Cars Ltd. Lyons served an engineering apprenticeship before, with William Walmsley, co-founding the Swallow Sidecar Company, in Blackpool, in 1922. 1927, expanded from designing and making motorcycle sidecars to coach-built cars, the *Austin Swallow* an early example. 1928, business moved to Coventry. 1931, the company now called SS Cars Ltd and the first car sold under this name, the *SS1*, of 1931. 1934, Walmsley left company. 1935, the first so-called *Jaguar* model, a saloon, produced. 1945, following WWII and the unfortunate Nazi connotations of SS, the company itself became Jaguar Cars Ltd. Although managing director of the company and although having no design training, Lyons himself maintained close design control, and especially of styling, working with full scale 3D models (Malcolm Sayer, though, was responsible for *C-type*, *D-type*, *E-type* and *XJS* models).
 - *Jaguar SS100* 2-seat sports car (roadster and coupé versions), 1936–40.
 - 198 (costing £395) made with 2.5 litre engine, and 116 (costing £445) with 3.5 litre. Front-mounted engines developed from *Standard* unit and converted from side to overhead valve. 4-speed gearbox with synchromesh on top three gears. Half-elliptical spring suspension all round with rigid axles. Long low bonnet with headlights on chromed tubular steel mounts either side of upright radiator. Mudguards front and back in sweeping continuous curve with running board. Small flat windscreen which could be lowered if wished.

- Harry Ferguson (b. near Hillsborough, Co. Down, 1884; d. Stow-on-the-Wold, England, 1960). Engineer, aviator, inventor, manufacturer. 1909, made first powered flight in Ireland, in an aeroplane of his own design. 1926–28, invented new plough and three-point linkage, the Ferguson System, that revolutionised farming. 1938, he made a handshake agreement with Henry Ford whereby the Ferguson System would be used on Ford tractors (9N, 1939–42; 2N, 1942–47; and 8N, 1947–52). 1947, this agreement broken by Ford’s grandson, Henry Ford II, whereupon Ferguson sued for \$240–340m, reaching an out-of-court settlement in 1952. 1953, he merged with Massey-Harris to become Massey-Harris-Ferguson Co., and subsequently Massey-Ferguson Co. Later developments, through Ferguson Research Ltd, included four-wheel-drive systems for family, sports and racing cars.
 - *Ford-Ferguson 9N* tractor, 1939–42
 - *TE20* tractor, 1946–56 and/or
 - *Ford-Ferguson 8N* tractor, 1947–52.
 - Note: *TE20* and *Ford-Ferguson 8N* examples within the specification’s penalty-free dating tolerance (specification page 10).
 - The *TE20* (Tractor England, 20 horse power) also informally known as the *Wee Grey Fergie*. *Black Tractor* prototype of 1933 led briefly to production of the *Model A* by David Brown Tractors, Huddersfield, 1936–38, before full production of the *TE20* by The Standard Motor Company at Coventry, over 500,000 being produced 1946–56. The *TE20* closely based on the *8N*, the latest of the Ford-Ferguson collaborative designs. A major innovation introduced by Ford was pneumatic rubber tyres. Small, economical lightweight tractors with three-point linkage and hydraulics systems, designed to operate a wide range of implements, including the first wheel-less plough.
- UNDERSTANDING
- Analysis/ interpretation/ significance/ appraisal, e.g.:
 - Ferrari.
 - *Auto Avio Costruzioni 815*.
 - Unsuccessful racing results but the *815* already exemplifies Ferrari’s design priorities, whether for racing or sports cars: innovative engineering to minimize weight and air resistance, and to maximize power and driveability; innovative styling to maximize brand appeal and product desirability/value.
 - Lyons/Jaguar.
 - *SS100* sports car.
 - Classic British 2-seat sports car; lightweight, speedy and reasonably affordable to buy and run; substantial potential market. Considered by many to be one of the most aesthetically pleasing of Lyons’ designs.
 - Ferguson.
 - *Ford-Ferguson 9N*, *TE20* and/or *Ford-Ferguson 8N*.
 - These and the earlier Ferguson System tractors established the basic design of the modern agricultural tractor, three-point linkage and hydraulics systems enabling safe and efficient operation of a very wide range of agricultural tasks. Adaptable, affordable system, suitable even for the smallest farms and/or hilly conditions. Significant aid to food production worldwide.
- Any other valid content to be identified at the standardising meeting and credited.