



Rewarding Learning

ADVANCED
General Certificate of Education
2014

History of Art

Assessment Unit A2 2

assessing

Module 4: Architecture, Craft and Design

[AD221]

FRIDAY 23 MAY, MORNING

**MARK
SCHEME**

A2 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 non-synoptic knowledge. Recall lacking scope, depth, relevance and/or accuracy.	Limited non-synoptic knowledge. Recall problematic in scope, depth, relevance and/or accuracy.	Satisfactory non-synoptic knowledge. Recall mostly satisfactory in scope, depth, relevance and accuracy.	Good non-synoptic knowledge. Recall extensive, relevant and accurate, with minor lapses.	Excellent non-synoptic knowledge. Recall extensive, relevant and accurate.
Understanding Demonstrate understanding through analysis and make substantiated judgements and sustained discussion and/or arguments (AO2).	Insufficient non-synoptic understanding. Any relevant analysis, judgements, discussion and arguments unsubstantiated and/or unsustained.	Limited non-synoptic understanding. Any relevant analysis, judgements, discussion and arguments problematic.	Satisfactory non-synoptic understanding. Analysis, judgements, discussion and/or arguments mostly relevant and satisfactorily substantiated.	Good non-synoptic understanding. Analysis, judgements, discussion and/or arguments relevant, substantiated and sustained, with minor lapses.	Excellent non-synoptic 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.
Synopsis Apply knowledge and understanding of the relationships between elements of art historical study (AO4).	Insufficient synopsis. Lacking scope, depth, relevance, accuracy and/or substantiation.	Limited synopsis. Problematic in scope, depth, relevance, accuracy and/or substantiation.	Satisfactory synopsis. Mostly relevant, accurate and substantiated.	Good synopsis. Extensive, relevant, accurate and substantiated, with minor lapses.	Excellent synopsis. Extensive, relevant, accurate and fully substantiated.
Marks available for each AC	1 2 3	4 5 6	7 8 9	10 11 12	13 14 15

Throughout this mark scheme:

- subject content specifically identified within any particular examination *question* and belonging to that particular A2 subject content section is deemed non-synoptic; all other content, synoptic
- *insufficient* – clear that minimum required standard for an A2 pass has not been achieved
- *limited* and *problematic* – unclear that minimum required standard for an A2 pass has been achieved.

A2 2 Mark Scheme

Candidates' demonstrated knowledge and understanding of the indicative content will be assessed against the assessment criteria and performance descriptors within the A2 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.

Subject content specifically identified within any particular *question* and belonging to that particular A2 subject content section will be deemed non-synoptic; all other content, synoptic.

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.)

References below to particular subject content are mostly by title, abbreviations sometimes also being used in the form of 'AS 1.1' for AS 1 subject content section 1 and 'A2 2.5' for A2 2 subject content section 5.

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).

A2 2 Section 1 – Roman architecture

142.401: Identify and discuss three major factors influencing the physical size or scale of Roman architectural works, establishing contexts and referring to appropriate works. Physical size or scale can here be small, large or anything in between.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context:
 - **Etruscan and Greek influences** Etruscan influences superseded by Greek after 146 BC when Greece falls to Rome; styles based on three Greek orders, with addition of Tuscan and Composite.
 - **Materials and methods** Development of concrete; arcuated (arch) construction and its permutations; military factor; slave labour.
 - **Civic and religious** Cross-continental scale; town planning; military factor; civil engineering; aqueduct, public baths (thermae), theatre, amphitheatre; temple; major examples.
 - **Domestic** Domus, insula, villa; major examples.
- Identification of required practitioners and works, and description of works, e.g.:
 - Architect(s) unknown.
 - Pont du Gard; stone-built arched aqueduct and bridge across Gard River, near Remoulins, southern France; c. 19 BC–early 1st century AD.
 - One of the best preserved examples of Roman civic architecture. Part of an aqueduct supplying Nîmes' population of about 50,000 an estimated 200 million litres/ 44 million gallons of water daily, sourced from springs 31 miles/50 km away at Uzès. Three-tiered construction with bridge on lowest tier and aqueduct on highest; the aqueduct tier 48.8 m/160 ft high and 456 m/1,496 ft long, falling 2.5 cm/0.98 in over that length (a gradient of 1 in 18,241). Over the aqueduct's full length the total fall is 17 m/56 ft, giving an average gradient of 1 in 3,000. This steady but almost imperceptible gradient maintained through all manner of terrain, bridging and tunnelling where necessary.
 - Architect(s) unknown.
 - Pantheon ('Temple to all the gods'), Rome; original building commissioned by Emperor Agrippa, c. 27–25 BC; destroyed in fire 80 AD; reconstructed under Emperor Domitian; reconstructed in present form under Emperor Hadrian, c. 118–125 AD.
 - Domed circular temple of brick and concrete; could perfectly enclose a sphere 43.4 m/142.5 ft in diameter. Interior at ground level has four rectangular columned recesses interspersed with three semi-circular niches flanked by colonnettes, plus rectangular entrance passage. Coffered walls progressively thinner towards open 'oculus' (diameter 8.2 m/27 ft) at top. Aggregate in the concrete progressively lighter towards top. Rotunda attached to earlier Greek-style portico, erected by Agrippa, eight monolithic unfluted Egyptian granite Corinthian columns wide and four deep.
 - Architect(s) unknown.
 - Hadrian's Villa, near Tivoli (about 15 miles/24 km from Rome), 118–134 AD. Luxury residence with ancillary buildings and lands reputed to have covered more than 7 sq miles/18 sq km, largest known Roman villa ever built.
 - Disparate collection of buildings, united by little more than sense of architectural virtuosity and disregard for conventional rectilinear forms.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Architect(s) unknown.
 - Pont du Gard.
 - Major testimony to Roman expertise in mapping, planning, structural engineering, functional design, and quality of enduring construction. Testimony also to Roman ambition and social/cultural self confidence.

- Architect(s) unknown.
 - Pantheon.
 - Best preserved and arguably most significant surviving example of Roman architecture. One of the world's greatest domed buildings. Exceptional demonstration of structural use of concrete. Apart from the doors, oculus provides only natural lighting, thus sunlight moves around building in way that reflects Roman belief in more than one god.
- Architect(s) unknown.
 - Hadrian's Villa.
 - Hadrian (Emperor 117–138 AD), one of the greatest ever architectural patrons, as evident from not just his villa, but such as the Pantheon (118–c. 128), his Mausoleum (c. 135; now remodelled as the Castel Sant'Angelo), and the Temple of Venus in Rome (consecrated 135). His villa and other works characterised by extensive architectural knowledge, structural adventurousness and enormous ambition and scale.
- Factors influencing size or scale, e.g.:
 - construction materials
 - timber
 - stone (including limestone, travertine, marble, granite)
 - brick
 - concrete
 - construction methods
 - frame
 - trabeated (post and lintel)
 - brickwork
 - arcuated (arch, vault and dome)
 - concrete (with brick, stone and/or timber formers)
 - construction tools and machines, development stage
 - iron and steel (chisels, drills...)
 - hoists
 - lathes
 - power/labour
 - man (citizen tradesmen, military, slave)
 - animal (horse, mule, oxen...)
 - wind/water
 - imperial scale
 - extending geographically and administratively from Hadrian's Wall in the north to Arabia in the south, from Portugal in the west to the Euphrates in the east
 - population incorporating many ethnic groups, races and cultures
 - unprecedented scale of wealth and resources
 - unprecedented scale of physical civic infrastructure (ports, roads, viaducts, towns, cities...)
 - unprecedented scale of individual physical structures (temples, viaducts, thermae/baths, amphitheatres...)
 - tendency to build on a grandiose scale arguably reflecting
 - imperial/private might and authority, and the need to subjugate/impress/placate others
 - imperial/private indulgence and egotism
 - essentially materialist world views
 - practical responses to large urban populations.

SYNOPSIS

- Referencing one or more of, e.g.:
 - Roman sculpture
 - Greek architecture
 - Greek sculpture
 - High Renaissance and Mannerist Italian architecture
 - European architecture Baroque to Romanticism.
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 2 – High Renaissance and Mannerist Italian architecture

142.402: Identify and discuss three major factors influencing the physical size or scale of High Renaissance and Mannerist Italian architectural works, establishing contexts and referring to appropriate architects and works. Physical size or scale can here be small, large or anything in between.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context:
 - **High Renaissance** Rome as centre; also Florence; period of Reformation in Germany; Church patronage; realised and unrealised projects of Donato Bramante, Michelangelo (Buonarroti), Antonio da Sangallo the Younger.
 - **Mannerism** Rome as centre; also Florence, Mantua and Venice; traumatic time for Italy with war and religious upheaval; Spanish Habsburgs in control 1529–1559; Counter-Reformation; ostentation, exaggeration, experimentation; realised and unrealised projects of Michelangelo (Buonarroti), Giulio Romano, Giacomo Barozzi da Vignola; classical tendency within Mannerism, Andrea Palladio.
- Identification of required practitioners and works, and description of works, e.g.:
 - Donato Bramante (b. near Urbino 1444, d. 1514); architect, engineer and painter. 1477, painting in and around Milan in a style influenced by Piero della Francesca and Mantegna. 1478, remodelled much of 9th century church of Santa Maria presso San Satiro in Milan, retaining plan of Greek cross within a square within a circle, and himself painting in perspective the east (choir) wall to create illusion of depth. 1492–1499, designed domed chancel at east end of Santa Maria delle Grazie, Milan. 1499, his patron Ludovico Sforza, Duke of Milan, fled the city before an invading French army, and Bramante relocated to Rome. Gained support of Cardinal Della Rovere, who in 1503 became Pope Julius II, one of the greatest papal patrons of the arts. 1503, commissioned to design rebuild of St Peter's Basilica (largest European architectural project of 16th century), building work beginning 1506 on a centralized Greek cross plan, Romano-Byzantine in form. Details of plans now lost, and subsequently much modified by others (including Raphael, Peruzzi, Sangallo and Michelangelo), but the massive building revived use of concrete and, in design, was based on the square and circle. Among other major projects: Palazzo Caprini (or House of Raphael), Rome, 1501–1502; cloisters of Santa Maria della Pace, Rome, 1504; and Belvedere Courtyard in the Vatican, begun 1505.
 - Tempietto, S. Pietro in Montorio, Rome; authorized/commissioned c. 1502 by King Ferdinand and Queen Isabella of Spain; completed probably after 1511.
 - Small circular Doric colonnaded 'temple' surmounted by a dome, authorized/commissioned by King Ferdinand and Queen Isabella of Spain and/or Cardinal Della Rovere/ Pope Julius II to mark what was believed to be site of crucifixion of St Peter.
 - Michelangelo (b. Caprese 1475, d. Rome 1564); sculptor, architect, painter, draughtsman and poet, dominating High Renaissance and helping shape Mannerism. In view of many, the greatest of all western masters. 1488, trained briefly with Florentine painter Domenico Ghirlandaio before joining household of Lorenzo de' Medici, with access to family's art collection, and especially its sizeable collection of ancient Roman sculpture. Among many major works: colossal marble *David*, 1501–1504; Sistine Chapel Ceiling fresco, 1508–1512; Laurentian Library, S. Lorenzo, Florence, 1524–1530; and *Last Judgement* fresco, on altar wall of Sistine Chapel, 1536–1541. After about 1545, devoted himself mostly to poetry and architecture, with Pope Paul III in 1546 entrusting to him the design of St Peter's Basilica.
 - St Peter's Basilica, Rome, 1546–1564 (earlier work mostly to Bramante's 1503–1506 plans; dome completed by Giacomo della Porta, 1590).
 - Project had seen little progress since death of Bramante, and subsequent input from Raphael, Peruzzi and Sangallo. Michelangelo appointed following death of Sangallo. Proposed a return to Bramante's centralized Greek cross plan but, instead of Bramante's stepped hemispherical dome above a narrow drum (echoing Pantheon), designed a high dome sitting on buttresses fronted by colossal paired columns, imparting a strong sense of vertical thrust. Tall lantern further emphasized vertical, and same colossal paired columns within and without the main structure brought sense

of organic unity and compactness to building as a whole. Brunelleschi's Florence Cathedral dome, 1420–1436, with its double-shell construction and Gothic profile, clearly influenced Michelangelo.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Bramante. His Roman projects and buildings generally considered most characteristic examples of High Renaissance style, and the most respectful towards Classical heritage.
 - Tempietto.
 - With its severe Roman Doric colonnade, the Tempietto may be seen as a trial commission from Julius II in preparation for the – very far from restrained – massively ambitious St Peter's Basilica. Although his designs for St Peter's never carried out, they formed basis for the concept, scale and proportions of the Michelangelo design which, although also modified, is largely what is seen today.
 - Michelangelo.
 - St Peter's Basilica.
 - Architectonic unity informed by use of the square and circle working in conjunction with the sculptor's eye for massing, compactness, thrust and organic unity. Massive scale reflecting Rome's central importance within the Church, an importance recently challenged by the Reformation.
 - Factors arguably influencing proportionate human scale, e.g.:
 - Humanism, as reflected in Ancient Greek artefacts and writings, including the credo "man the measure of all things"
 - Ancient Roman sculptural realism, such as commemorative, funerary, portrait busts and figures
 - Christian theology; "God made man/flesh", emphasis on humility.
 - Factors arguably influencing large or grandiose scale, e.g.:
 - Rome's continuing central cultural position following fall of Western Roman Empire (and rise of Christendom)
 - Imperial Roman architectural heritage an ongoing challenge to Italian Renaissance and Mannerist architects and patrons
 - Reformation, beginning c. 1517, and progressive national independence (Germany, England...) leading to Counter-Reformation in which ambitious building projects played a major part
 - powerful and ambitious individual patrons (Pope Julius II, various Medici...)
 - accomplished and ambitious individual architects (Brunelleschi, Bramante, Michelangelo...).

SYNOPSIS

- Referencing one or more of, e.g.:
 - High Renaissance and Mannerist Italian art
 - Early Renaissance Italian architecture
 - Early Renaissance Italian art
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 3 – European architecture Baroque to Romanticism

142.403: Identify and discuss three major factors influencing the physical size or scale of European architectural works Baroque to Romanticism, establishing contexts and referring to appropriate architects and works. Physical size or scale can here be small, large or anything in between.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context
 - **Baroque Italy** Italy politically divided; effectively, within Spanish Empire; Counter-Reformation and papal patronage; Pietro da Cortona, Gianlorenzo Bernini, Francesco Borromini.
 - **Neoclassical Britain** Age of Enlightenment; the Grand Tour; influence of Palladio; Colen Campbell, William Kent, Robert Adam.
 - **Eclectic Romanticism** The 'battle of styles'; influence of writings of Pugin and Ruskin. Classical Tendency: John Nash, John Soane. Gothic Revival: Charles Barry, George Gilbert Scott.
- Identification of required practitioners and works, and description of works, e.g.:
 - Gianlorenzo Bernini (b. Naples 1598; d. Rome 1680), architect, sculptor and widely credited as almost single-handedly launching Baroque style – a style in which the architectural tends to closely combine with the sculptural. His sculptural work generally deemed more radical than his architectural. Son of Florentine sculptor Pietro Bernini (1562–1629) and born in Naples but, from 1605, brought up in Rome and based there. Influenced by Michelangelo and Raphael but perhaps more so by Hellenistic and Ancient Roman architecture and sculpture, and by the paintings of Caravaggio. A total of eight popes gave him architectural and/or sculptural commissions, among the most prestigious and demanding of the 17th century and requiring him to employ many assistants. 1629, appointed architect of St Peter's Basilica, Rome.
 - St Peter's Square (or Piazza San Pietro), Rome, c. 1656–1667.
 - Large piazza providing transition from the city (and the world) to St Peter's and regularly hosting up to half a million, such as for the pope's Easter urbi et orbi blessing (to the city and to the world). On city side, elliptical and partially enclosed by two colonnades of colossal, unfluted, Tuscan Doric columns, carried out in travertine (a coarse golden limestone); piazza narrowing to trapezoid in front of the church. Entablature also severely simple. Balustrade carries row of statues. Centre of ellipse marked by an obelisk, and fountains mark the two foci.
 - Church of S. Andrea al Quirinale, Rome, 1658–1670.
 - Exterior façade dominated by simplified but monumental orders and tympanum. Entrance canopy supported on only two columns. Central-plan domed church with oval interior. Opposite entrance, double-columned altar niche with oversized sculpted figure of the saint's martyrdom above the pediment.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Bernini.
 - St Peter's Square.
 - Powerfully symbolic: Bernini himself referred to his colonnades as being designed "to receive Catholics in a maternal gesture in order to confirm their belief, heretics in order to reunite them with the Church, and infidels in order to reveal to them the true Faith" (quoted in David Watkin, *A History of Western Architecture*, 1986; 3rd edition, Laurence King Publishing, London, 2000, p. 284). Sculptural and ornamental treatment extremely severe and constrained, but, in the larger architectural scale, the design grand and encompassing. Decorative constraint also appropriate for the limited budget (given the task).
 - Church of S. Andrea al Quirinale.
 - Bernini here adopts oval plan he was already using for St. Peter's Square (he was also restoring the circular-planned Pantheon at the time). Dramatic use of sculpture, scale, proportion and lighting.

- Factors arguably influencing proportionate human scale, e.g.:
 - Humanism, Classicism and/or Neoclassicism, as reflected in Ancient Greek artefacts and writings, including the credo “man the measure of all things”
 - Ancient Roman sculptural realism, such as commemorative, funerary, life-size portrait busts and figures
 - Christian theology; “God made man/flesh”, emphasis on humility.
- Factors arguably influencing large or grandiose scale, e.g.:
 - Rome’s continuing important cultural position (following fall of Western Roman Empire, late-antiquity rise of Christendom and Papacy, and 16th century Counter-Reformation)
 - Imperial Roman, Renaissance and Mannerist architectural heritages ongoing challenges to Italian Baroque architects and patrons
 - 16th century Counter-Reformation, to help meet challenge of Protestantism, launches ambitious building projects
 - from 16th century, Christendom, as a socio-political union, gradually disintegrating into more or less independent national states; ambitious building programmes often used in attempts to establish or re-establish authority
 - powerful and ambitious individual patrons
 - accomplished and ambitious individual architects
 - growing urban populations
 - growing expertise in designing and building large structures (e.g., Robert Hooke’s Law, 1660–1675, which in one of its applications states “the arch stands as the loaded chain hangs”).

SYNOPSIS

- Referencing one or more of, e.g.:
 - European architecture Baroque to Romanticism
 - Baroque Italy, Neoclassical Britain and/or Eclectic Romanticism, as not already covered.
 - European art Renaissance to Romanticism
 - European architecture Renaissance to Rococo
 - Greek architecture
 - Bernini’s St Peter’s Square colonnade more akin to a Greek (column-based) design than to Roman (wall-based).
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 4 – Architecture 1945–1970

142.404: Identify and discuss three major factors influencing the physical size or scale of architectural works 1945–1970, establishing contexts and referring to appropriate architects and works. Physical size or scale can here be small, large or anything in between.

Indicative content

- Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context
 - **Post-war modernism** Ludwig Mies van der Rohe, Le Corbusier, Richard Neutra, Eero Saarinen; Brutalism, Louis Kahn, Ernö Goldfinger, Alison and Peter Smithson.
 - **Independents** Frank Lloyd Wright, Alvar Aalto, Luis Barragán, Kenzo Tange, Felix Candela, Jørn Utzon.

Identification of required practitioners and works, and description of works, e.g.:

- Ludwig Mies van der Rohe (b. Aachen, Germany, 1886; d. Chicago, USA, 1969). A leading Modernist, or International Style, architect, principally renowned for his contribution to the development of a 'minimalist' aesthetic of the kind most commonly associated with skyscrapers. Son of a mason and 1900–1902 apprenticed as a stone cutter. 1908–1911 trained under Berlin architect and designer Peter Behrens. 1930–1933 Director of the Bauhaus. 1937 emigrated to the USA. 1938 appointed Director of Architecture at the Illinois Institute of Technology in Chicago.
 - Farnsworth House, Plano, Illinois, 1946–1951.
 - Commissioned as a weekend retreat by Chicago doctor Edith Farnsworth. Secluded wood-land site near to the Fox River. Single-storey severely rectangular dwelling of plate glass and white-painted steel girders. Eight steel uprights hold it off the ground, serving not just an aesthetic but practical function – the site liable to flooding from the nearby river. On all four external sides the house is glazed floor to roof, privacy being afforded by a central core, finished in hardwood, containing the kitchen and bathroom. Outside, between ground- and floor-level, a terrace platform, also in white steel, is offset from the house.
- 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 (1910–1911).
 - Unité d'habitation, Marseilles, France, 1945–1952.
 - 17-storey block housing about 1600–1800 in 23 types of duplex apartments (double-height living areas; single-height kitchen and sleeping areas). Reinforced concrete frame, with entire block raised on massive pilotis (columns), and individual apartments slotting in like bottles in a wine-rack, as Le Corbusier himself described the concept. On the 7th and 8th storeys a small internal mall – shops, restaurant, hairdresser's, etc – and on the roof a nursery, kindergarten, outdoors gymnasium, open air theatre and running track. Le Corbusier himself identified prospective tenants as middle class professionals (teachers, civil servants, etc) rather than working class.
- Alison and Peter Smithson (1928–1993 and 1923–2003).
 - The House of the Future, Daily Mail Ideal Home Show, London, 1956.
 - Concept building mock-up designed, primarily by Alison Smithson, to be mass-produced and factory preassembled out of plastic. Novel features for the time also included curved transitions between walls and floors, to aid cleaning; self-cleaning bath, and remote controls for television and lighting.
- 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 humanise mechanical forms. 1916–1921 studied architecture at

Helsinki Polytechnic Institute. Early work shows uneasy mix of Gothic and Classical elements – the latter relating to the Nordic Classical architectural movement, active c. 1910–1930. Early examples of his work are: Tuberculosis Sanatorium, Paimio, 1928–1933 (design extended to furniture and fittings); Municipal Library, Viipuri (now Vyborg, Russia), designed 1927–1933, built 1933–1935; and the Villa Mairea, Noormarkku, Finland, 1937–1938. 1946, appointed a visiting professor at the Massachusetts Institute of Technology.

- Baker Dormitory/ House, Massachusetts Institute of Technology, Cambridge, USA, 1946–1949.
 - Senior students' dormitory block of red brick, with a serpentine front overlooking the Charles River and a busy road, and a zigzag rear looking onto the campus. Bedrooms facing the front, the serpentine form lending variety of form and view to the fairly austere cubicles. Furniture and fittings also designed by Aalto. Staged staircases, set out from the rear façade, descend symmetrically to meeting point, echoing the zigzag theme. Communal rooms rectangular and placed on the diagonal at ground level – lounge and dining area double-height and partly below ground. Horizontal windows to front: vertical to rear.
- Town Hall, Säynätsalo, Finland, 1949–1952.
 - Small multi-purpose complex for prosperous island community mostly engaged in forestry. Four blocks, in various heights and rectilinear configurations, surrounding a raised informal courtyard accessed by two open staircases, one of timber and compacted earth. Western block contains a library, with shops below. The almost cubic eastern block, with slanting roof, contains the Council Chamber (circuitous access route ending in a narrow stairway) and municipal administration offices. The other two blocks contain apartments. Red brick construction; copper roofs; wooden ceilings; dark window frames, some vertically slatted; little or no applied decoration.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Mies van der Rohe.
 - Farnsworth House.
 - The house's forms – roof, floor, terrace and the connecting steps – appear to float above the ground. Their rectilinear geometry and pristine whiteness act as foils to the natural surroundings and also 'frame' the natural world seen through them. The Farnsworth House effectively a domestic 'module' capable of almost indefinite multiplication horizontally and vertically, as in Mies's own Lake Shore Drive Apartments, Chicago, 1948–1951. Severity of design and lack of privacy or 'homeliness' off-putting for many, including Dr Farnsworth, who quickly turned against the house, and Mies.
 - Le Corbusier.
 - Unite d'habitation.
 - Highly influential and reportedly still successful design – tenants/owners still tending to be middle class professionals. However, the many public housing projects directly inspired by it worldwide have been severely criticised in many instances, reasons including: climatic conditions unsuitable (the Unité itself enjoys a benign Mediterranean climate); 'Brutalist' forms and surfaces widely disliked by tenants and others; the 'Brutalist' aesthetic sometimes an excuse for cheap or shoddy design and building practices; the culture of successful apartment living not always embedded or easily nurtured; internal streets often perceived as dark and hostile spaces.
 - Smithsons.
 - The House of the Future.
 - Attempt to apply modern materials and methods, and economies of scale and mass production, to domestic architecture. Cross-over between architecture and product design. Radical rejection of historicism.

- Aalto.
 - Baker Dormitory.
 - Innovative design is practical, aesthetically stimulating and symbolically expressive. Traditions of red brick construction in both Finland and New England – curved bay windows also traditional to Boston and New England generally. Aalto chose especially rough bricks for added texture and visual interest, facilitating a weathered, aged look at a time when International machine-perfect Modernism was fashionable. Concrete and stonework introduced in lounge and dining room area to contrast with brickwork.
 - Town Hall, Säynätsalo.
 - Earth-coloured brickwork, mostly natural materials, and easy flow between steps and levels allow complex to sit very gently in the forested landscape, especially with grass encouraged to grow on one of the open staircases. Inner courtyard, reminiscent of traditional Finnish farmyard, has feeling of slowly evolving or ‘growing’, rather than having been designed. The buildings themselves quite severely geometrical – grass and surrounding fir trees act as foils.
- Factors arguably influencing small scale, e.g.:
 - addressing needs of single person/couple/family
 - depressed or deflated Post-WWII economy in UK and Europe
 - extensive rebuilding required in UK and Europe following WWII destruction
 - limited capital/resources
 - demand for building space exceeding supply
 - technological and/or design advances enabling miniaturisation, multiple-purpose use and/or other efficiency savings.
- Factors arguably influencing proportionate human scale, e.g.:
 - addressing needs of single person/couple/family
 - WWII in UK marks transition from an imperial ethos to a more modest (Commonwealth, new Welfare State...) one
 - Modernist/Functionalist aim of ergonomically sound design (“form follows function”)
 - Le Corbusier’s influential Modulor architectural proportioning system (based on application of Golden Section and Fibonacci Series to a notional 6ft human figure).
- Factors arguably influencing large scale, e.g.:
 - addressing mass-housing needs
 - inflated economy
 - plentiful capital/resources
 - supply of building space exceeding demand
 - powerful and ambitious individual patrons
 - accomplished and ambitious individual architects
 - growing urban populations
 - growing expertise in designing and building large structures, including further development of
 - reinforced concrete
 - steel-framing
 - glass (plate, double-glazing units...)
 - prefabrication.

SYNOPSIS

- Referencing one or more of, e.g.:
 - Architecture 1835–1918
 - Architecture 1900–1945
 - Three-dimensional craft and design 1945–1970
 - Textiles and fashion design 1945–present
 - Graphic design 1945–present
 - Automotive design 1945–present
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 5 – Architecture 1970–present

142.405: Identify and discuss three major factors influencing the physical size or scale of architectural works 1970–present, establishing contexts and referring to appropriate architects and works. Physical size or scale can here be small, large or anything in between.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context
 - **Late modernism** Richard Rogers, Renzo Piano, Norman Foster.
 - **Postmodernism** Sensitive to Modernism's distancing from a general public but unsure how to reconnect; classical references, irony, scepticism, pastiches, parodies; Charles Moore, Robert Venturi, James Stirling, Michael Graves, Philip Johnson, Ieoh Ming Pei.
 - **New directions** Frank O. Gehry, Daniel Libeskind, Will Alsop, Zaha Hadid.
- Identification of required practitioners and works, and description of works, e.g.:
 - Norman Foster (b. Reddish, Stockport, Greater Manchester, 1935; created Baron Foster of Thames Bank, 1999). One of the world's leading architects, with many major commissions completed in Europe, Asia and America. American architect and engineer Richard Buckminster Fuller (1895–1983) an early influence.
 - Sainsbury Centre for the Visual Arts, University of East Anglia, 1974–1978.
 - Large cuboid aluminium-clad steel structure, with one end almost entirely glass, on sloping grassland site; large open-plan interior with structural steelwork exposed.
 - Robert Venturi (b. 1925, Philadelphia, USA), Postmodernist architect and theorist.
 - Sainsbury Wing of the National Gallery, London, 1987–1991.
 - Wing/extension blends with pre-existing Neoclassical building, and neighbouring buildings, but with structural and aesthetic anomalies.
 - Daniel Libeskind (1946–), Polish-born Jewish American architect, designer of many prestigious and much discussed buildings, and winner of the 2003 competition to rebuild the World Trade Center in New York.
 - Jewish Museum, Berlin, 1989–2001 (opening September 11, 2001, same day as World Trade Center attack).
 - Zinc-clad building, predominantly zigzag in plan and elevation, externally and internally. Narrow windows, seemingly irrationally placed, of various unconventional rectilinear configurations and sizes. Adjoining Garden of Exile and Emigration contains a memorial to the Holocaust in the form of 49 seven-meter-high concrete columns topped with vegetation. 48 of the columns – representing 1948, the year state of Israel was formed – contain soil from Berlin, and the 49th, in the centre, contains soil from Jerusalem. Museum contained no exhibits for its first two years. Internally, a tall, bare concrete shaft named the Holocaust Tower; plus a catwalk-crossed void called The Embodiment of Absence.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Foster:
 - Sainsbury Centre.
 - One of the architect's first major commissions and representing a further development of functionalism and modernists' interest in new building materials and methods/ techniques, sometimes adapted from industrial or civil engineering sources. Hence such work sometimes being referred to as 'Hi-tech'. Building probably most resembles an aircraft hangar. Open-plan interior means partitions have to be installed for hanging artworks.

- Venturi arguably leading theorist of Postmodern architecture; coined phrase “less is a bore” to characterise contrast with functionalist modernism and Mies van der Rohe’s “less is more” epithet:
 - Sainsbury Wing of the National Gallery.
 - Clearly refers to Neoclassical architectural heritage but denies the structural logic behind these forms, as over the main entrance where ‘blocks’ of Portland stone are actually merely cladding over a hidden steel frame, or where the Corinthian pilasters gradually change in form to more closely match those of the neighbouring building.
- Libeskind:
 - Jewish Museum.
 - Location within the German capital of deep symbolic significance, as also (unintentionally, except possibly by the bombers) the timing of its opening. Tilting, disorienting, aggressively angular forms, spaces and voids give powerful expression to a tragic period in recent history and to the ongoing complexities of human relationships. Continuing a line of development (taken by Wright, Stirling, Gehry and others) in which the museum itself becomes the exhibit: architecture as art/sculpture.
- Factors arguably influencing small scale, e.g.:
 - addressing needs of single person/couple/family
 - depressed or deflated economic circumstances
 - limited capital/resources
 - demand for building space exceeding supply
 - technological and/or design advances enabling miniaturisation, multiple-purpose use and/or other efficiency savings.
- Factors arguably influencing proportionate human scale, e.g.:
 - addressing needs of single person/couple/family
 - Modernist/Functionalist major aim of ergonomically sound design (“form follows function”)
 - Le Corbusier’s influential Modulor architectural proportioning system (based on application of Golden Section and Fibonacci Series to a notional 6ft human figure).
- Factors arguably influencing large scale, e.g.:
 - addressing mass-housing needs
 - buoyant or inflated economic circumstances
 - plentiful capital/resources
 - supply of building space exceeding demand
 - restricted building land forcing taller constructions
 - powerful/ambitious/competitive individual/corporate/state patronage
 - accomplished/ambitious/competitive architects
 - growing urban populations
 - growing expertise in designing and building large structures, including further development of
 - reinforced concrete
 - steel-framing
 - glass (plate, double-glazing units...)
 - prefabrication
 - plastics and other man-made materials.
 - rejection of Modernist/functionalist prioritisation of ergonomically sound design in favour of aesthetics/expression.

SYNOPSIS

- Referencing one or more of, e.g.:
 - Architecture 1835–1918
 - Architecture 1900–1945
 - Architecture 1945–1970
 - Three-dimensional craft and design 1918–1945
 - Sculpture 1945–present
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 6 – Three-dimensional craft and design 1945–1970

142.406: In relation to three-dimensional craft and design 1945–1970, critically appraise the work of one craftsperson and one designer, establishing contexts and referring to appropriate works.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context
 - **Craft** Hans Wegner, James Krenov.
 - **Post-war British modernism** Utility Furniture, Festival Style: Ernest Race, Robin Day. Craft To Design: cutlery, street furniture, table- and kitchen-ware; David Mellor.

or

- **Post-war European and American modernism** Less ascetic interpretations of 'functionalist' and 'truth to materials' precepts; Alvar Aalto, Arne Jacobsen, Charles and Ray Eames, Eero Saarinen, Dieter Rams.

or

- **Streamlining to Pop** Streamlining: Raymond Loewy, Henry Dreyfuss. Pop: George Nelson, Ettore Sottsass, Verner Panton, Eero Aarnio, Joe Colombo.
- Identification of required practitioners and works, and description of works, e.g.:
 - Hans Wegner (b. Tønder, Denmark, 1914; d. 2007). A leading practitioner of Scandinavian design. Son of a master cobbler and served carpentry and furniture making apprenticeships before working with leading Scandinavian designer Arne Jacobsen.
 - *Model No. JH50 Peacock* chair, designed for manufacturer Johannes Hansen, 1947.
 - Finely crafted hardwood chair with turned legs and rails; large rounded backrest with flat sections in middle of the radiating slats.
 - Robin Day (b. High Wycombe, Buckinghamshire, 1915; d. 2010). 1931–1933 studied at local art school – High Wycombe once Britain's leading furniture manufacturing town – followed, 1934–1938, at the Royal College of Art, where he specialised in furniture and interior design. He married the textile designer Désirée Lucienne Conradi (1917–2010) in 1942 and worked as a freelance graphic, exhibition and industrial designer before opening a London design office with his wife in 1948. More so than their US contemporaries Charles and Ray Eames, with whom they are frequently compared, the Days often worked independently as designers. 1948, with Clive Latimer won first prize for plywood and metal storage furniture design in the International Low-cost Furniture Competition held at MOMA in New York. In 1949 Day began working as a design consultant for Hille, a British furniture manufacturer hitherto specialising in period designs but now wanting to move into low-cost mass-produced furniture using new materials such as plywood, tubular steel and injection-moulded thermoplastic. The working relationship continued to 1993 – Day was appointed Hille's chief designer in 1950 – and led to more than 150 domestic, office and street furniture design products.
 - *Hillestak* plywood stacking chair, 1950; for Hille International.
 - New plastic glues used in the beechwood frame and moulded plywood seat construction. Inverted V-shaped splayed legs.
 - *Polyprop* stacking chair, designed for manufacturer Hille International, 1962–63.
 - Self-coloured injection-moulded polypropylene seat mounted on thin tubular steel legs.

or

- George Nelson (b. 1908, Hartford, Connecticut; d. 1986, New York). Modernist designer who as a designer, writer, editor and lecturer strongly influenced post-WWII American industrial design. 1924–1928 studied architecture at Yale University. 1931 studied Fine Arts at the Catholic University of America, Washington. 1932–1934 studied at American Academy in Rome. 1945, his and Henry Wright's *Storagewall* concept featured in *Life* magazine leading to association 1946–1965 with firm of Herman Miller. 1947 opened his own architecture and design office in New York. Published books on modern living spaces (1952), chairs (1953), and storage (1954).

- *Basic Cabinet Series* components, 1946.
 - Development of the *Storagewall* idea that Nelson and fellow associate editor of the *Architectural Forum* Henry Wright had presented in 1944 – freestanding, standardised storage modules (shelving, drawers, writing table, radio/ television/ speaker installations) that could be mounted on legs or platforms and set against a wall or used as a room divider.
- *Marshmallow* sofa, designed 1956 for manufacturer Herman Miller.
 - Set of (usually 18) round pill/marshmallow-shaped cushions individually mounted on open steel frame to form a sofa; the cushions detachable, allowing easy cleaning, rotation to alleviate wear, or changes of colour/pattern/fabric.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Wegner.
 - *Model No. JH50 Peacock* chair.
 - Informed by modernism but, as with most 20th century Scandinavian design, softening the geometrical and mechanical in the direction of organic/natural forms, and maintaining traditional high standard of craftsmanship. Variation on traditional English Windsor chair. The chair back mindful of a peacock's display.
 - Day. Carries forward the sense of frugality and design responsibility from Utility Design but with lighter forms and making use of new materials and construction techniques. The practical, accessible 'democratic' quality of his designs ensure their widespread influence.
 - *Hillestak* chair.
 - Economical, efficient and well constructed using minimal materials and components. Close resemblance to the Eames' *Plywood Chair* of 1945–1946.
 - *Polyprop* chair.
 - Ubiquitous design mass-produced in millions and spawning many further variations and imitations. Often praised for its 'democratic' design credentials. Practical, economical and hard wearing.

or

- Nelson. His works stretch from Bauhaus-based modernist functionalism through to Pop and the beginnings of Postmodernism.
 - *Basic Cabinet Series* components.
 - Modular design allows for efficient and economical production and also flexibility of use.
 - *Marshmallow* sofa.
 - Early example of Pop design; modernism with quirky humour; functional; economical to produce; innovative.

SYNOPSIS

- Referencing one or more of, e.g.:
 - Three-dimensional craft and design 1945–1970
 - Post-war British modernism, Post-war European and American modernism, and/or Streamlining to Pop, as not already covered.
 - Architecture 1945–1970
 - Three-dimensional craft and design 1850–1918
 - Three-dimensional craft and design 1918–1945
 - Affluence after austerity of immediate WWII period; Cold War and Space Race between USA and USSR super-powers, representing forces of Liberal Capitalism and Communism respectively; television; youth culture.
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 7 – Three-dimensional craft and design 1970–present

142.407: In relation to three-dimensional craft and design 1970–present, critically appraise the work of one craftsperson and one designer, establishing contexts and referring to appropriate works.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context:
 - **Craft** Role of craft in post-industrial age; craft as art; James Krenov, John Makepeace.
 - **Late modernist design** Ingvar Kamprad/Ikea, Terence Conran, Braun, Herman Miller, Knoll International, David Mellor.

or

- **Postmodernist design** Ettore Sottsass/Memphis, Robert Venturi, Alessandro Mendini.

or

- **New directions** Philippe Starck, Tom Dixon, Jonathan Ive.
- Identification of required practitioners and works, and description of works, e.g.:
 - James Krenov (b. Uelen, Siberia, USSR, 1920; d. Fort Bragg, California, 2009). Influential wood-worker and writer. Son of Russian “not quite aristocrats” and raised in Siberia, China, Alaska (where his parents worked for seven years as teachers) and, from the mid-1930s, Seattle. In Seattle, he worked as a ships’ chandler and also in a boatyard, building yachts. He acknowledged the influence of boat design on his work: “There’s hardly a straight line on them, but there’s harmony. People think right angles produce harmony, but they don’t. They produce sleep” (http://en.wikipedia.org/wiki/James_Krenov). He moved to Europe in 1947, travelling through France and Italy before settling, for 30 some years, in Sweden. He studied furniture design for two years in Stockholm under Carl Malmsten, one of the country’s leading furniture designers of the time. Over the following years he gradually established a reputation as an inspirational woodworker and writer, producing five books: *A Cabinetmaker’s Notebook*, 1976; *The Fine Art of Cabinet-making*, 1977; *The Impractical Cabinetmaker*, 1979; *Worker in Wood*, 1981; and *With Awakened Hands*, 2000. He gave talks and lectures around the world and in 1981 was invited to found the Fine Woodworking Program at the College of the Redwoods, Fort Bragg, California, where he continued to teach until 2002.
 - Showcase in pear wood with hickory legs and frame, undated (illustrated in <http://www.finewoodworking.com/ProjectsAndDesign/ProjectsAndDesignArticle.aspx?id=32946>)
 - Rounded and tapered legs support small horizontal cabinet, with glass-fronted display case flanked by a narrow cupboard either side. The legs extend to above the top of the cabinet and curve out in the form of short horns.
 - Ingvar Kamprad (1926–). Swedish entrepreneur, founder in 1943 of the international home furnishing retail chain Ikea. By the 1990s, Ikea was the world’s largest furniture manufacturer and Kamprad one of its wealthiest individuals. Under his direction the company pioneered high-volume, low-cost, flat-pack furniture in practical uncluttered designs akin to those of pioneering Scandinavian ‘organic modernists’ such as Aalto, Jacobsen and Aarnio. The company’s annual catalogue – distributed freely in-store, by mail and, more recently, online – has long been its main marketing tool, aside from the very large stores themselves. Self-assembly is promoted as minimizing manufacturing, handling and transport costs. Manufacture, as at 2008, was spread across some 50 countries, with China foremost and followed by Poland, Italy and Sweden.
 - *Poäng* armchair; designer Noboru Nakamura; date of design unknown.
 - Self-assembly layer-glued bent birch or beech frame, with removable cushions and covers available in various materials, patterns and colours.
 - *Expedit* self-assembly storage system; designer and date of design unknown.
 - Fibreboard and ABS (acrylonitrile butadiene styrene, a common thermoplastic) over particleboard and paper core; modular system of units that can be used vertically, horizontally, floor-standing, stacked or wall-hung.

or

- Tom Dixon (b. Sfax, Tunisia, 1959). London-based industrial designer and creative director. 1979–1980, spent six months on Foundation Course at Chelsea Art School before dropping out. Early 1980s, small-scale manufacturer and retailer. 1983, whilst recovering from a motorcycle injury, taught himself to weld. Designed, made and sold limited editions of welded furniture. 1989, opened Space shop to sell his own and others' design work. 1994, co-founded Eurolounge to manufacture plastic products, including his own *Jack Light*. 1998, appointed head of design UK at Habitat. 2004, appointed creative director of Artek, the Finnish furniture manufacturer founded in 1935 by Alvar Aalto.
 - *S-chair*; welded steel frame with wicker and rush seating, 1985–1992; manufactured by Cappellini, Italy.
 - Free-flowing 'S'-shaped welded frame.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Krenov. Influential through his writings and talks as well as his practical works. His books not so much on the how of fine woodworking as on the why. In many respects his approach romantic, poetic and impractical – as he himself acknowledged in one of his titles (*The Impractical Cabinetmaker*, 1979). No construction drawings provided in any of his books and he himself, if he used preparatory drawings at all, apparently tended to use only small, rough thumbnail-sized sketches. Driven by a love of fine woods and willing to let the wood to a large extent suggest the way it be handled, thus more akin to the way an artist works than a traditional craftsman. Some of his followers have got into financial difficulties trying to emulate this idealist approach in their own workshops (offering parallels with, say, William Morris and the Arts and Crafts Movement). Craft as art; seen against general culture of growing affluence, multi-national corporations, mass production, rapid product obsolescence.
 - Showcase.
 - Typical Krenov cabinet: small, subtly curved, tool marks still evident on close inspection; light timber minimally waxed or varnished.
 - Kamprad/Ikea
 - *Poäng* armchair.
 - Practical, economical and aesthetically pleasing within the modernist aesthetic. Very closely resembles Aalto's *Armchair* 402, 1932–1933.
 - *Expedit* storage system.
 - Typifies both advantages and disadvantages of the Ikea 'high-volume, low-cost, flat-pack' concept – economical, functional, flexible, modular, scalable (to different sized spaces), cleanly designed, but also anonymous and susceptible to wear and damage.

or

- Dixon
 - *S-chair*.
 - Associations with Adhoc and Post-industrial design. Similarities with Verner Panton's free flowing plastic *Panton Chair*, 1960–1967. Exemplifies his declared interest in the interface between industrial technologies and handcraft.

SYNOPSIS

- Referencing one or more of, e.g.:
 - Three-dimensional craft and design 1970–present
 - Late modernist design, Postmodernist design and/or New directions, as not already covered.
 - Architecture 1970–present.
 - Three-dimensional craft and design 1918–1945
 - Affluence after austerity of immediate WWII period; Cold War and Space Race between USA and USSR super-powers, representing forces of Liberal Capitalism and Communism respectively; television; youth culture; Feminism.
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 8 – Textiles and fashion design 1945–present

142.408: Critically appraise the work of one textile designer and one fashion designer (either haute couture or ready-to-wear) active 1945–present, establishing contexts and referring to appropriate works.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context
 - **Textiles** Marianne Straub, Lucienne Day, Issey Miyake, Zandra Rhodes.
 - **Haute couture** Economic, practical, technological, gender, personal, lifestyle, social, cultural factors; Cristobal Balenciaga, Christian Dior, Issey Miyake, Yves Saint Laurent, Karl Lagerfeld, Vivienne Westwood, Jean-Paul Gaultier, John Galliano, Alexander McQueen.

or

- **Ready-to-wear** Prêt-à-porter; economic, practical, technological, gender, personal, lifestyle, social, cultural factors; André Courrèges, Laura Ashley, Giorgio Armani, Mary Quant, Ralph Lauren.
- Identification of required practitioners and works, and description of works, e.g.:
 - (Désirée) Lucienne Day (née Conradi; b. Coulsdon, Surrey, 1917; d. 2010). Influential textiles and ceramics designer. 1934–1937, studied at Croydon School of Art. 1937–1940, studied at Royal College of Art. 1942, married furniture designer Robin Day (1915–2010). 1942–1947, taught at Beckenham School of Art. 1948, established a design studio in collaboration with husband Robin Day, she specialising in mass-market textiles (such as *Herb Antony*, 1956, and *Cockaigne*, 1961) until mid 1970s, after which she turned to one-off textile art pieces she termed “silk mosaics” – large tapestries using Thai and Indian silks.
 - *Calyx* textile for Heal Fabrics; commission for Festival of Britain, 1951.
 - Boldly coloured abstract pattern based on plant forms – simplified mushroom-like forms, some inverted, some patterned, connected by thin hand-drawn lines. Originally lime-yellow, vermilion, black and white on an olive green ground but subsequently produced in various colour combinations.
 - 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, 1936–1939, forced him to move operations to Paris, his first fashion show there in 1937. Rapidly recognized as revolutionizing force in fashion.
 - Day dress, wool, 1955–1956; collection The Metropolitan Museum of Art, New York; item no. C.I.64.4.3. Illustrations and detailed description at <http://www.metmuseum.org/toah/works-of-art/C.I.64.4.3>.
 - Calf-length, chemise-cut, day dress in dark brown wool jersey, coupled with sleeveless bodice fitted with large rolled collar.

or

- Issey Miyake (b. Hiroshima, Japan, 1938). Textiles and fashion designer. Aged 7 when the atomic bomb was dropped on his home city, leading to his mother, a teacher, being badly burned and dying 4 years later. 1959–1963 studied graphic design at Tama Art University, Tokyo. Relocated to Paris in 1965 and worked for Guy Laroche 1966–1968, and Hubert de Givenchy 1968–1969. Worked for Geoffrey Beene in New York 1969–1970. Opened his own Tokyo studio in 1970 and rapidly established a reputation as an innovative textile and fashion designer, blending eastern and western influences, natural and synthetic fabrics, and traditional and contemporary techniques. Experimental and innovative in approach (e.g., using paper and rattan as clothing). 1971, showed his first collection in Tokyo and New York. 1973, showed in Paris. Traditional Japanese dress and Madeleine Vionnet (1876–1975) acknowledged major influences. Author of two books, *East Meets West* (Tokyo, 1978) and *Bodyworks* (Tokyo, 1983).
 - *Pleats Please* line, 1993.
 - Constructed massively oversize in lightweight polyester and then pleated: a reversal of usual process but enabling the clothes to be easy to wash, quick to dry and wrinkle resistant.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Day.
 - *Calyx*.
 - The abstract or semi-abstract paintings of Wassily Kandinsky, Paul Klee and Joan Miró acknowledged influences. In turn, Day's work in this and other textiles designs quickly influential internationally. *Calyx*, in particular, seen as a radical development after the dreary utility of the war years.
 - Balenciaga.
 - Day dress.
 - Transition or early example of 'sack' female profile created by Balenciaga: structured, loose fitting over waist, tapering in at mid thigh. Influenced by Japanese kimono. Fluid effect of the chemise-cut anticipates 1960s shift dress.
- or
- Miyake.
 - *Pleats Please* line.
 - Example of his questioning the very nature of clothing, as well as its materials and forms. Much influenced by Vionnet's use of the bias cut, allowing the body to move easily under the fabric.

SYNOPSIS

- Referencing one or more of, e.g.:
 - Textiles and fashion design 1945–present
 - Textiles, Haute couture and/or Ready-to-wear, as not already covered.
 - Textiles and fashion design 1850–1945
 - Affluence after austerity of immediate WWII period; Cold War and Space Race between USA and USSR super-powers, representing forces of Liberal Capitalism and Communism respectively; television; youth culture; Feminism.
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 9 Graphic design 1945–present

142.409: In relation to graphic design 1945–present, critically appraise the work of one designer specialising in posters and/or title sequences and one designer specialising in typography and/or information systems. Establish contexts and refer to appropriate works.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context:
 - **Posters, title sequences** Abram Games, Saul Bass, Robert Brownjohn.
 - **Typography** Jan Tschichold, Robert Brownjohn, Adrian Frutiger, Alan Fletcher, Derek Birdsall, Matthew Carter, Neville Brody.

and/or

- **Information systems** Road Signage: Jock Kinneir and Margaret Calvert. Software: Microsoft Corporation, Apple Macintosh (Mac) Computer.
- Identification of required practitioners and works, and description of works, e.g.:
 - Abram Games (b. Abraham Gamse, London, 1914; name changed 1926; d. London 1996). A leading English graphic and product designer renowned especially for his drawn and airbrushed WWII and Festival of Britain poster designs, also his Cona Coffee machine, 1959. Son of a Latvian artist-photographer and Russo-Polish seamstress. Largely self taught, having studied for two terms only at St Martin's School of Art, London. 1932–1936, worked as a 'studio boy' for London design studio Askew-Young – sacked for leaping over chairs as a prank. 1935, won first prize in a London City Council poster design competition. 1936, established his own studio, in time gaining clients that included London Transport, the General Post Office, and Shell. 1941, appointed official WWII poster designer, eventually designing over 100 posters for the war effort. His declared design principle, "maximum meaning, minimum means". 1945, returned to freelance practice, eventually with clients that included British European Airways (BEA), British Overseas Airways Corporation (BOAC), The Times, The Financial Times, Guinness and BBC. 1948, won competition to design symbol for the 1951 Festival of Britain. Recipient of several prestigious awards including an OBE (1957) and a Designers & Art Directors Association lifetime achievement award (1991).
 - Festival of Britain Emblem, 1951 (as reproduced in Charlotte and Peter Fiell, *Design of the 20th Century*; Taschen; Köln, London, etc; 1999, p. 272).
 - Vertical format with grey background and other colours limited to red, white and blue. Centred image based on a schematic four-pointed 'compass', each of the four pointers sharply divided down the middle with white on one side and, on the other, alternating red for the east-west and alternating blue for the north-south. The upper part of the north pointer takes the shape of a left-profile female head, lips parted in a slight smile, wearing a Greek-style helmet. Draped between the west and east pointers is a semicircle of red, white and blue bunting. Within the 'south-west' quadrant, so formed, is the number '19', in an italicised shadowed serif font, and in the 'south-east' quadrant is the number '51' – the '19' in blue and the '51' in red.
 - Jan Tschichold (b. Leipzig, Germany, 1902; d. Locarno, Switzerland, 1974). Calligrapher, typographer, book designer, writer and teacher. Trained at the Academy of Graphic Arts and Book Design in Leipzig 1919–1922. 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 type-faces, 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 1946–1949, 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. 1930–1931; *Saskia*, c. 1931–1932; and *Sabon*, c. 1964–1967. Internationally influential through his works and writings.

- Penguin Books cover design development, 1947–1949.
 - Orange and black over white paperback cover, featuring penguin logo; symmetrical typography.
- *The Pelican History of Art* prospectus cover, 1947, with Pelican symbol drawn by Berthold Wolpe.
 - Symmetrical typography.
- The Penguin Shakespeare generic cover, 1947, for Penguin Books, London.
 - The company’s general aim was 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.

or

- Apple Computer Incorporated. Founded by Steve Jobs (1955–2011) and Steve Wozniak (b. 1950) in California in 1976; incorporated 1977. Designers and manufacturers of personal computers, servers, software, networking solutions, peripherals, digital music players, mobile telephones and digital media distribution. The company – and effectively the personal computer industry – was launched from Jobs’ family garage in 1976 with the *Apple I*, an off-the-shelf computer running its own operating system. The Apple hardware and software package had a 5 year lead on IBM’s PC (Personal Computer), launched in 1981 with Microsoft’s MS-DOS text-based operating system. Also in 1981, however, with its *Star* workstation, Xerox launched into the corporate market the first computer featuring a Graphical User Interface (GUI) – a means of interacting with the computer other than by typing (these particular means tend to be known by the acronym WIMP: windows, icons, menus and pointing device – a mouse usually, at least initially). Jobs launched the first Apple computer with a GUI in 1983. A PC GUI operating system, Microsoft Windows, followed in November 1985. Jobs was forced to leave Apple in 1985. He rejoined in 1997, by which time the company was financially weak and personal computing was dominated by IBM or IBM-compatible PCs running Microsoft Windows operating systems. Graphic design computing was one sector Apple dominated. Under Jobs’ leadership (cut short by cancer in 2011), Apple was rejuvenated, building upon a reputation for easy-to-use and elegant products, and significantly increasing its market share in personal computing and consumer electronics with products such as the iMac, iPod, iPhone and iPad.
 - *Apple Mackintosh* (*Mac*) personal computer, introduced 1984.
 - *The Apple Mac* was a development of the *Lisa*, 1983, which Apple had aimed at the corporate market. The *Mac* was the first personal computer with a GUI and bit-mapped graphics. Information was organised using windows, icons, (drop-down) menus, radio buttons and check boxes, and input was via a mouse and keyboard. Software included a digital page-layout language, Postscript, developed by Adobe, also based in California.

NON-SYNOPTIC UNDERSTANDING

- Analysis/interpretation/significance/appraisal, e.g.:
 - Games.
 - Festival of Britain emblem.
 - The Festival of Britain part of national celebrations for WWII victory and the end of war-time rationing. Also centenary of the Great Exhibition of 1851. The smiling female warrior head, with the accompanying sword- or dagger-like forms, can be related to representations of Britannia, Nike (the Greek goddess of victory; an ‘archaic smile’ a feature of Archaic period Greek sculpture) and/or Boudica/Boadicea/Boudicca (in Celtic languages the name’s root may again mean ‘victory’). The compass-like form creates arrows simultaneously pointing outwards and inwards, symbolising the

‘four corners’ of the UK (or Commonwealth) being brought together in celebration. The celebratory ‘bunting’ can also be seen as symbolising the rays of a benign sun emerging after the grey years of war and rationing.

- Tschichold.
 - Penguin Books cover design development.
 - Books designed and priced for British mass market of the time – national war debts, rationing and other austerity measures. The Penguin concept very similar to that of the publisher Bernhard Tauchnitz’s ‘Collection of British and American Authors’, launched 1841 (the Tauchnitz publishing house based in Tschichold’s home city of Leipzig). The Tauchnitz cover designs of the 1930s also very similar to the Penguin covers – in which Tschichold departs from his earlier asymmetrical, modernist typography but retains a modernist sans serif typeface.
 - *The Pelican History of Art* prospectus cover.
 - Traditional symmetrical typography, serif typeface and symbol. Departure from his earlier, modernist, asymmetrical, sans serif typography. Catering for more elite market.
 - *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 present. Illustrates Tschichold’s later considered view that books were best served by symmetric typography, and asymmetric typography’s role was in advertising, letter-heads and such-like.

or

- Apple Computer.
 - *Apple Mackintosh* (‘Mac’).
 - Hitherto the domain of IT experts and corporations, computing increasingly became accessible to all following the launch of the Mac with its greatly enhanced ease and efficiency of use. Its impact was felt in many fields but perhaps none greater than graphic design, where ‘desk-top publishing’ now became a practical possibility. Corporations, institutions, societies and individuals began to publish ‘in-house’, by-passing or collapsing the traditional roles of compositor, typesetter, editor, designer and printer. A revolutionary ‘democratisation’ of print or information was coming about on a similar scale to that brought about by the invention of the printing press in the 15th century.

SYNOPSIS

- Referencing one or more of, e.g.:
 - Graphic design 1945–present
 - Typography or Information systems, as not already covered.
 - Graphic design 1850–1945
 - Affluence after austerity of immediate WWII period; Cold War and Space Race between USA and USSR super-powers, representing forces of Liberal Capitalism and Communism respectively; television; youth culture; Feminism.
- Any other valid content to be identified at the standardising meeting and credited.

A2 2 Section 10 – Automotive design 1945–present

142.410: In relation to automotive design 1945–present, critically appraise the work of one designer or manufacturer specialising in family car design and one specialising in another form of automotive design. Establish contexts and refer to appropriate examples.

Indicative content

Answers should include the following:

NON-SYNOPTIC KNOWLEDGE

- Immediate context
 - **Family car** Citroën, BMW, Mercedes-Benz, Volkswagen, Raymond Loewy, Pininfarina, William Lyons/Jaguar, Alec Issigonis, Giorgio Giugiaro.
 - **Other** Off-road or utility; sports/touring and/or bus: Land Rover/Range Rover, Raymond Loewy, Enzo Ferrari, William Lyons/Jaguar, BMW, Aston Martin, Ferry Porsche/Porsche, Lamborghini, Colin Chapman/Lotus.

or

- **New directions** Issues, needs, desires, problems, and possible solutions in automotive design; local, global; concept vehicles.
- Identification of required practitioners and works, and description of works, e.g.:
 - Raymond Loewy (b. Paris, France, 1893; d. 1986). American industrial designer.
 - Studebaker *Avanti* saloon car, 1961–1963.
 - In 1961, as commissioned design consultant, Loewy assembled and headed small team given 40 days to style and produce scale model of a saloon car for launch in 1963; to be styled with younger buyers in mind. Generally flowing lines; front wings project forward of bonnet and headlight assembly, and angular front bumper accentuates this.
 - Colin Chapman (b. London 1928; d. 1982). Designer, inventor, car manufacturer and Formula One racing team boss. Studied structural engineering. Brief experiences of flying and aeronautical engineering.
 - *Lotus 7*, 1957; two-seater open-top sports car available fully assembled or as kit of parts for self-assembly.
 - Extremely lightweight tubular steel spaceframe chassis with stressed aluminium body panels; could be used on the public road or for club racing on short tracks. Caterham Cars still manufacturing a version as the Caterham Seven.

or

- Toyota Motor Corporation; development team led by Takehisa Yaegashi; styling by Toyota's California design studio. 2004 redevelopment team led by Shigeyuki Hori.
 - *Prius*, 1997–present (time of writing 2012); hybrid petrol-electric family car. 2004, major redesign as medium-sized family hatchback.
 - 1992, in response to global warming and other 'green' environmental concerns, Toyota release their Earth Charter, an undertaking to develop and market low emission vehicles. 1994, design brief formalised: a family car design demonstrating responsibility towards the Earth's resources and environment whilst retaining the benefits of a modern car. Design of the electric motor technology adapted from the Shinkansen bullet train. 1995, *Prius* (Latin for 'prior' or 'before') concept car, a petrol-electric hybrid, exhibited at Tokyo Motor Show. 1997–1999, mass production begins, for Japanese market only, this generation of vehicles' selling price estimated at about half the production costs. 1999–September 2010, over 2 million sold in some 70 countries, the USA and Japan the top selling markets. In the USA and some other countries, buyers of the car qualify for tax credits due to its 'green' credentials. 2005, voted European Car of the Year.

NON-SYNOPTIC UNDERSTANDING

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

- Loewy.
 - *Avanti*.
 - General continuity with his earlier ‘streamlined’ designs for locomotives, coaches and cars, but angular treatment of front serves no aerodynamic purpose; seemingly, rather, for styling/image reasons. It thus connects with the inappropriate ‘aerodynamic’ streamlining he gave to domestic products, such as refrigerators and vacuum cleaners.
- Chapman.
 - *Lotus 7*.
 - Small, simple, lightweight, reasonably affordable, innovatively engineered, high performance, arguably the earliest true Lotus car. Chapman sometimes expressed his design philosophy of paring everything to the minimum (and beyond, some critics have said) in the words of one of his university tutors, “Any fool can build a bridge that doesn’t fall down. It takes an engineer to build a bridge that *just* won’t fall down” (source unavailable). Clear dangers/ disadvantages also to such an approach.

or

- Toyota.
 - *Prius*.
 - Aerodynamically and ergonomically efficient design but perhaps nothing exceptional by contemporary standards. With its dual drive system and heavy nickel-metal hydride (Ni-MH) battery pack, the *Prius* is criticised by some as less convenient, less fuel-efficient, more polluting, and more costly to the Earth’s resources and environment, than some conventional petrol-powered or, especially, diesel-powered cars. Concerns also raised over its electro-magnetic (radiation) field levels, lifetime energy usage (one report having it in excess of that of a Hummer), and quietness in electric mode (safety hazard for other road users). Some critics and rival manufacturers contend the *Prius*’s high profile and commercial success largely due to fashion, celebrity endorsement and political correctness.

SYNOPSIS

- Referencing one or more of, e.g.:
 - Automotive design 1945–present
 - Other or New directions, as not already covered
 - Automotive design to 1945
 - Affluence after austerity of immediate WWII period; Cold War and Space Race between USA and USSR super-powers, representing forces of Liberal Capitalism and Communism respectively; television; youth culture; Feminism.
- Any other valid content to be identified at the standardising meeting and credited.