



Materials Design and Technology ATAR course

Practical (portfolio) marking key

2017

Marking keys are an explicit statement about what the examiner expects of candidates in the practical (portfolio) examination. They are essential to fair assessment because their proper construction underpins reliability and validity.

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(38 marks)

Description	Marks
Criterion 1: Statement of intent or design proposal	
Detailed identification of the design problem or situation to be solved and provides a detailed list of client requirements and limitations.	4
Clearly identifies the design problem or situation to be solved and provides a list of client requirements and limitations.	3
Describes the design problem or situation to be solved and provides a general list of requirements and limitations.	2
States the design problem or situation and lists any limitations proposed in the design brief.	1
Total	4
Criterion 2: Research	
Uses extensive and different research strategies to source, investigate, analyse and evaluate relevant images, correctly referenced data and information, and applies design fundamentals related to proposed solutions to meet client needs and the design problem or situation.	6
Investigates and evaluates a range of relevant images, referenced data and information considering design fundamentals which facilitates a solution to the design problem or situation.	5
Investigates a range of images, referenced data and information considering design fundamentals which facilitates a solution to the design problem or situation.	4
Investigates some images and information considering design fundamentals which facilitates a solution to the design problem or situation.	3
Provides a collection of images and information to choose a solution to the design problem or situation.	2
Provides a collection of images relevant to the design problem or situation.	1
Total	6
Criterion 3: Development of ideas and concepts	
Demonstrates extensive and clearly annotated development of ideas, initial concepts and examination of features of the design, explaining images and concepts relating to relevant design fundamentals, justifying product design specifications and selection against design brief to propose a final concept developed into an appropriate solution.	6
Demonstrates clearly annotated development of design ideas and concepts around relevant design fundamentals and justifying product design selection against design brief to propose an appropriate solution.	5
Explores annotated development of design ideas and concepts relating to some design fundamentals to propose a solution to the design problem or situation.	4
Provides a progressive development of design ideas and concept sketches with limited annotations.	3
Provides some progression in the development of design ideas and concept sketches.	2
Shows a collection of isolated design ideas and concept sketches.	1
Total	6

Description	Marks
Criterion 4: Production proposal (drawings)	
Provides accurate context appropriate drawings with relevant technical information to produce the final product including a presentation drawing.	3
Provides context appropriate drawings with relevant technical information to produce the final product.	2
Provides drawings with limited information to produce the final product.	1
Criterion 4: Production proposal (materials)	
Provides a comprehensive materials list of all components of the designed item with accurate cost calculations.	2
Provides a costed list of the major materials required for manufacture of the item.	1
Criterion 4: Production proposal (planning process)	
Provides a detailed, sequential and accurately timed (minutes/hours) management schedule for production including details of equipment and safety procedures.	4
Provides a detailed, sequential and accurately timed (minutes/hours) management schedule for production.	3
Provides a production plan which indicates some time management schedule.	2
Provides a list of the steps for the production of the item.	1
Total	9
Criterion 5: Evidence of production (process)	
Provides a comprehensive record of the production processes including justification of decisions made, and any changes or modifications including revised plans.	5
Provides a record of the production processes including decisions made, and any changes or modifications including revised plans.	4
Provides a detailed record of the production processes and any changes or modifications.	3
Provides a record of the production processes and any changes or modifications	2
Provides a record of the production processes.	1
Criterion 5: Evidence of production (time)	
Provides a detailed timeline of the production processes.	2
Provides a timeline of the production processes.	1
Criterion 5: Evidence of production (visual)	
Provides sequential photographic images of the production processes.	2
Provides photographic images of the production processes.	1
Total	9
Criterion 6: Finished product and final evaluation	
Provides critical evaluation of the finished product designed for a particular purpose in relation to the design brief and statement of intent including photographic evidence of the product.	4
Provides critical evaluation of the finished product in relation to the design brief and statement of intent including photographic evidence of the product.	3
Provides evaluation of the product in relation to the design brief and statement of intent including photographic evidence of the product.	2
Provides evaluation of the product including photographic evidence of the product.	1
Total	4

Note: Zero will be used for each criterion when there is no evidence demonstrated relating to that criterion.