Section A – Identifying and investigating design possibilities 20 Marks

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| Identifying and investigating design possibilities (20 marks) | Nothing worthy of credit | Limited rationale provided for the context selected with minimalreference to the end user and the constraints that need to beconsidered in formulating a final solution. | Adequate rationale is provided but lacks focus for the context selected with some reference to the end user and consideration of the constraints in formulating a final solution which may lack clarity. | Good rationale provided for the context selected with clear reference to the end user and the constraints that need to be considered in formulating a final solution. | Excellent rationale provided for the context selected, with continuous reference throughout the project to the end user and the constraints that need to be considered in formulating a finalsolution. |
| Student employs a single strategy or technique, which may includepractical activities, to explore design opportunities. Sourcereferencing is minimal. | Student employs a limited range of strategies and techniques, which may include some practical activities, to explore designopportunities. Some sources have been referenced. | Student employs a broad range of strategies and techniques, which may include primary and secondary methods of investigation and/or practical experimentation to explore design opportunities. Most sources have been fully referenced. | Student employs a comprehensive range of strategies and techniques, including both primary and secondary methods of investigation, practical experimentation and disassembly, to thoroughly explore design opportunities. All sources have been fully referenced. |
| First concepts show little relevance to the context and are unlikely to be feasible for further development. These are communicated through basic methods and/or techniques. | First concepts show some relevance to the context and may be feasible for further development and are communicated through a limited variety of methods and techniques that may not be appropriate. | First concepts are mostly relevant to the context and feasible for further development and are communicated through a variety of methods and techniques which are mostly appropriate. | First concepts are both fully relevant to the context and feasible for further development and are clearly communicated through a fullyappropriate variety of methods and techniques. |
| Investigations may not relate directly to the design context, a limited number of issues are identified but not addressed and the student demonstrates only a basic understanding of the informationgathered. | Some investigations relate to the design context, issues are identified but may not be fully addressed and the student demonstrates an adequate understanding of the information gathered. | Most investigations relate directly to the design context, issues are identified and addressed and the student demonstrates a good understanding of the information gathered. | All investigations relate directly to the design context, issues are identified and fully addressed and the student demonstrates a detailed and perceptive understanding of the information gathered. |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Notes |  |  |  |  |

Section B – Producing a design brief and specification 10 Marks

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| Producing a design brief and specification (10 marks) | Nothing worthy of credit | A basic design brief, lacking both clarity and challenge which makes limited use of the investigations, may not address the context in full and only meets some of the needs and wants of the intendeduser(s). | An adequate design brief which may lack challenge and clarity, resulting from partially considered investigations that onlysuperficially address the context and the needs and wants of the intended user(s). | A well considered design brief with a degree of challenge, resulting from well considered investigations, that addresses the context andmost of the needs and wants of the intended user(s). | A comprehensive, clearly stated and challenging design brief resulting from a thorough consideration of investigations undertaken, that fully addresses both the context and the needsand wants of the intended user(s). |
| The student has produced a design specification which contains minimal detail and does not guide their design thinking. | The student has produced a design specification which is lacking in some detail and will only guide student's design thinking to a limited extent. | The student has produced a detailed and partially explained design specification which will help to guide the student's design thinking. | The student has produced a comprehensive, detailed and well explained design specification which will fully guide the student's design thinking. |
| There is minimal evidence of project management being considered as part of the specification. | There is some evidence of a basic project management approach to prototype development including time management anddetermining quantities and costs of materials related to the development of the prototype, but it is not fully integrated into the specification. | There is evidence of a project management approach to prototype development including time management and determining quantities and costs of materials, but may be lacking in detail. | A detailed project management approach to prototype development, including time management and determining quantities and costs of materials, has been fully integrated into thespecification. |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Notes |  |  |  |  |  |  |  |  |  |  |