



2011 Fashion and Textile Technology

Higher Technological Project

Finalised Marking Instructions

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STEP 1 Total mark allocation – 22 marks

1 : 1 Identification of the key points with explanation – 6 marks available

The candidate should identify the 'core' key points – these are all the main key words of the Technological Project brief.

The number of 'core' key points which can be identified will depend on the wording of the Technological Project brief.

Candidates should number each key point identified.

Identify the key points – 3 marks

Candidates who record all the 'core' key points.	2 marks
Candidates who record ½ or more, but not all the 'core' key points.	1 mark
Candidates who record less than ½ the 'core' key points.	0 marks

Candidates who provide an additional key point, other than those identified as 'core' will be awarded an additional **1 mark**.

Basic and accurate explanation of key points – 2 marks

Marks are determined by the number of key points which have a basic and accurate explanation.

If all key points have a basic and accurate explanation.	2 marks
If ½ or more but not all of the key points have a basic and accurate explanation.	1 mark
If less than ½ the key points have a basic and accurate explanation.	0 marks

Detailed and accurate explanation – 1 mark

Candidates who provide further accurate detail within the explanations will be awarded an additional mark. Extra detail means one additional point of explanation is provided for any one of the key or additional points.

Brief 1

Develop a textile item which is influenced by a previous fashion trend.

Brief 2

Develop a textile item for children which encourages learning.

Brief 1

Key points

1. develop
2. (a) textile
3. item
4. (which is) influenced
5. (by a) previous
6. fashion trend.

Brief 2

Key points

1. develop
2. (a) textile
3. item
4. (for) children
5. (which) encourages
6. learning.

Example of basic accurate explanation of key points

Develop • create or devise ideas for a new item

Example of further accurate detail in explanation of key points

Develop • create or devise ideas for a new item
• make an item which is original or different to what is available at present

Brief 1 – Previous fashion trend

Additional Key Points

7. Facilities/resources available
8. Aesthetic appeal
9. Time available for manufacture
10. Skills/abilities
11. Hygiene/ease of care
12. Safety
13. Likes/dislikes/appeal to target group
14. Money available/budget of target group
15. Current market trends/fashion
16. Quality/standard required for sale
17. Gender of target group
18. Age range of target group
19. Suitable for mass production
20. Allergies
21. Season of year

Brief 2 – Encourages learning in children

Additional Key Points

7. Facilities/resources available
8. Aesthetic appeal
9. Time available for manufacture
10. Skills/abilities
11. Hygiene/ease of care
12. Safety
13. Likes/dislikes/appeal to target group
14. Money available/budget of target group
15. Current market trends/fashion
16. Quality/standard required for sale
17. Gender of target group
18. Age range of target group
19. Suitable for mass production
20. Allergies
21. Season of year

1 : 2 Draw up appropriate criteria for a specification – 10 marks available

Candidate's specification allows for a range of possible solutions 1 mark

Specification allows for a range of possible solutions which are relevant to the brief	1 mark
If a range of solutions is not possible – 0 marks	0 marks

Candidate provides five specification points, each containing more detail than the brief 2 marks

Note: Candidates are expected to provide a **minimum of five** specification points. However due to constraints of the time allocated for the Technological Project the candidates should not identify more than seven specification points as this would involve the candidate in unnecessary work.

Specification points must be **valid** (derived from the brief) to gain marks in this section. When drawing up the criteria for the specification candidates should not just rewrite the key points – greater detail is required.

Five valid specification points contain more detail than the brief.	2 marks
Three or four valid specification points contain more detail than the brief.	1 mark
Less than three valid specification points contain more detail than the brief.	0 marks

Candidate has written all specification points in measurable/able to be tested terms 2 marks

Candidates must indicate how each specification point should be able to be measured/tested by a valid method.

All specification points are measurable/tested.	2 marks
½ or more, but not all specification points are measurable/tested.	1 mark
Less than ½ the specification points are measurable/tested.	0 marks

Candidate has linked each specification point to the key points and additional key point(s) **2 marks**

Candidates must show that each specification point is linked to the key points and additional key points identified in Step 1 : 1. All key points should be covered.

Specification points are linked to all key points and additional key points.	2 marks
Specification points are linked to ½ or more, but not all key points and additional key points.	1 mark
Specification points are linked to less than ½ the key points and additional key points.	0 marks

Candidate provides basic explanations **2 marks**

Basic explanations of the specification points, relevant to the project brief, should be provided by the candidate.

Basic explanations are provided for all specification points.	2 marks
Basic explanations are provided for ½ or more, but not all specification points.	1 mark
Basic explanations are provided for less than ½ the specification points.	0 marks

Candidate provides detailed explanation **1 mark**

If further detail, relevant to the project brief, is provided within the explanation then an additional mark will be awarded. Extra detail means one additional point if explanation is provided for any one of the specification points.

Step 1.2 Specification		
Brief 1 – Previous fashion trend		
Item must:		Measured by:
1	<ul style="list-style-type: none"> be made of fabric 	Interview with textile technologist/Trading Standards Officer/textile retailer Resources/component checklist
2	<ul style="list-style-type: none"> be made using suitable fabrics 	User/wearer trial of prototype Interview with textile technologist/fabric retailer
3	<ul style="list-style-type: none"> take account of current fashion trends/ be fashionable 	Interview with textile technologist/retailer/ manufacturer/designer Internet/literary search confirmed by a specified expert Interview/questionnaire to target group
4	<ul style="list-style-type: none"> be inspired by previous fashion 	Interview/survey textile technologist/ appropriate teacher/retailer/appropriate expert
5	<ul style="list-style-type: none"> be different to other products/be original 	Check against current products Interview with retailer/textile technologist
6	<ul style="list-style-type: none"> be a single item/product 	Questionnaire/interview to retailer/tourist Interview with textile technologist/retailer
7	<ul style="list-style-type: none"> be comparable in cost to other similar items 	Costing exercise & price check/comparison Interview with textile technologist/retailer
8	<ul style="list-style-type: none"> be cost effective to produce/be good value for money 	Costing exercise & interview with food/ textile technologist/retailer Costing exercise & interview/questionnaire target group
9	<ul style="list-style-type: none"> be within the budget of the target group 	Costing exercise & questionnaire to target group Costing exercise & interview with textile technologist/retailer/target group
10	<ul style="list-style-type: none"> be aesthetically pleasing to target group 	Interview/questionnaire to target group Interview with textile technologist/retailer Sensory testing with target group User/wearer trial of prototype
11	<ul style="list-style-type: none"> take account of likes/dislikes of target group 	Questionnaire/survey to target group Interview with textile technologist/retailer Sensory testing with target group
12	<ul style="list-style-type: none"> be of an acceptable/satisfactory standard 	Interview with textile technologist/Trading Standards Officer/retailer/target group Sensory testing with target group/textile technologist/tourists/retailer Quality checklist & interview with textile technologist/retailer
13	<ul style="list-style-type: none"> be durable 	User/wearer trial of prototype Interview with Trading Standards Officer/ textile technologist/retailer
14	<ul style="list-style-type: none"> be made using the facilities/resources available to the candidate 	Interview with textile technologist Checklist of facilities/component checklist
15	<ul style="list-style-type: none"> be within the capabilities/skills of the candidate to produce 	Trial of prototype Quality checklist Interview with textile technologist Skills analysis & confirmed by an expert
16	<ul style="list-style-type: none"> be made in the time available to candidate 	Timed trial of prototype & interview with textile technologist Interview with textile technologist

Step 1.2 Specification (continued)		
Brief 1 – Previous fashion trend		
Item must:		Measured by:
17	<ul style="list-style-type: none"> be made using the facilities/resources available to the manufacturer/designer 	Interview with textile technologist Checklist of facilities/component checklist
18	<ul style="list-style-type: none"> be within the capabilities/skills of the designer/manufacturer to produce 	Trial of prototype Quality checklist Interview with textile technologist/designer
19	<ul style="list-style-type: none"> be made in the time available to the manufacturer/designer 	Timed trial of prototype & interview with textile technologist/designer/manufacturer Interview with textile technologist/designer/manufacturer
20	<ul style="list-style-type: none"> be made under hygienic/safe conditions 	Interview with textile technologist Quality checklist & interview with textile technologist
21	<ul style="list-style-type: none"> be safe in use/wear 	Interview with a textile technologist/retailer/manufacturer/Trading Standards Officer Literary/Internet search and quality checklist
22	<ul style="list-style-type: none"> be suitable for mass production 	Interview with textile technologist
23	<ul style="list-style-type: none"> be able to be laundered/be easy to care for 	Interview with textile technologist/retailer User/wearer trials of prototype

Note:

- A textile technologist could include a person working in textile product development or a Home Economics teacher.

- NB**
- Specification Points** – It must be checked that the specification points are different.
– A candidate may use different wording to state the same thing.
 - Measured by** – The candidate must specify the term ‘expert’ if used.

Method of measuring must be able to check/assess whether the specification point has been met.

Basic explanation of specification point

- be colourful/attractive/appealing to target group
- so the target group will like them

Detailed explanation of specification point

- be colourful/attractive/appealing to target group
- to encourage the target group or consumer to try the product again

Step 1.2 Specification		
Brief 2 – Encourages learning in children		
Item must:		Measured by:
1	<ul style="list-style-type: none"> be made of fabric 	Interview with textile technologist/ Trading Standards Officer/textile retailer Resources/component checklist
2	<ul style="list-style-type: none"> be made using suitable fabrics 	User/wearer trial of prototype Interview with textile technologist
3	<ul style="list-style-type: none"> be suitable for children 	Interview with textile technologist/ appropriate teacher/manufacturer/ target group/parent/carer
4	<ul style="list-style-type: none"> be different to other products on the market/be original 	Check against current product range and interview with textile technologist/retailer
5	<ul style="list-style-type: none"> be a single item/product 	Questionnaire/interview to retailer Interview with textile technologist/retailer
6	<ul style="list-style-type: none"> be stimulating/promote learning 	Questionnaire/interview to retailer/parent/ carer/target group/appropriate teacher Interview with textile technologist/retailer/ carer/parent/target group/appropriate teacher
7	<ul style="list-style-type: none"> be educational 	Questionnaire/interview to retailer Interview with textile technologist/retailer/ carer/parent/target group/appropriate teacher
8	<ul style="list-style-type: none"> be comparable in cost to other similar items 	Costing exercise & price check/comparison Interview with textile technologist/retailer/ target group/parent/carer
9	<ul style="list-style-type: none"> be cost effective to produce/good value for money 	Costing exercise & interview with textile technologist/retailer/target group Costing exercise & interview/questionnaire target group/parent/carer
10	<ul style="list-style-type: none"> be within the budget of the target group 	Costing exercise & questionnaire to target group/parent Costing exercise & interview with textile technologist/retailer/target group/parent/ carer
11	<ul style="list-style-type: none"> be aesthetically pleasing/appeal to target group 	Interview/questionnaire to target group/ parent Interview with textile technologist/retailer Sensory testing with target group User/wearer trial of prototype
12	<ul style="list-style-type: none"> take account of likes/dislikes of target group 	Questionnaire/survey to children/parent/ carer Interview with textile technologist/retailer Sensory testing with target group/textile technologist/retailer
13	<ul style="list-style-type: none"> be of an acceptable standard 	Interview with textile technologist/ appropriate teacher/Trading Standards Officer/retailer/target group/parent/carer Sensory testing with target group/textile technologist/parent/carer/retailer Quality checklist & interview with textile technologist/retailer/target group/parent/ carer

Step 1.2 Specification (continued)		
Brief 2 – Encourages learning in children		
Item must:		Measured by:
14	<ul style="list-style-type: none"> be durable 	User/wearer trial of prototype Interview with Trading Standards Officer/ textile technologist/retailer/manufacturer
15	<ul style="list-style-type: none"> be made using the facilities/resources available to the candidate 	Interview with textile technologist Checklist of facilities/component checklist
16	<ul style="list-style-type: none"> be within the capabilities of the candidate 	Trial of prototype Quality checklist Interview with textile technologist Skills analysis
17	<ul style="list-style-type: none"> be made in the time available to candidate 	Timed trial of prototype & interview with textile technologist Interview with textile technologist
18	<ul style="list-style-type: none"> be made using the facilities/resources available to the manufacturer/designer 	Interview with textile technologist Checklist of facilities/component checklist
19	<ul style="list-style-type: none"> be within the capabilities/skills of the designer/manufacturer to produce 	Trial of prototype Quality checklist Interview with textile technologist/designer
20	<ul style="list-style-type: none"> be made in the time available to the manufacturer/designer 	Timed trial of prototype & interview with textile technologist/designer/manufacturer Interview with textile technologist/designer/ manufacturer
21	<ul style="list-style-type: none"> be prepared under hygienic/safe conditions 	Interview with textile technologist/ Environmental Health Officer
22	<ul style="list-style-type: none"> be safe in use/wear 	Interview with a textile technologist/retailer/ manufacturer/Trading Standards Officer Literary/Internet search Quality checklist
23	<ul style="list-style-type: none"> be suitable for mass production 	Interview with textile technologist/ manufacturer
24	<ul style="list-style-type: none"> be able to be laundered/be easy to care for 	Interview with textile technologist/retailer User/wearer trials of prototype
25	<ul style="list-style-type: none"> be fashionable/take account of current fashion trends 	Interview with textile technologist/retailer/ manufacturer/designer Internet/literary search confirmed by a specified expert Interview/questionnaire to target group

Note:

- A textile technologist could include a person working in textile product development or a Home Economics teacher.

- NB**
- **Specification Points** – It must be checked that the specification points are different.
– A candidate may use different wording to state the same thing.
 - **Measured by** – The candidate must specify the term ‘expert’ if used.

Method of measuring must be able to check/assess whether the specification point has been met.

Basic explanation of specification point

- be colourful/attractive/appealing to target group
- so the target group will like them

Detailed explanation of specification point

- be colourful/attractive/appealing to target group
- to encourage the target group or consumer to try the product again

1 : 3 Devise an overall plan for investigations – 6 marks available

Candidate presents a list of investigations (minimum five)

2 marks

Candidates who provide a list of possible investigations which focus clearly on

- the core key points of the project brief
- the candidates specification points
- have a clear aim/purpose

will be awarded **2 marks**.

Candidates who provide a list of investigations which do not focus clearly on the key points and the specification will be awarded **1 mark**.

Obvious omissions from the list of investigations will result in marks being deducted.

Candidate identifies techniques to be used

2 marks

All techniques must be appropriate for the investigations and so allow the candidate the possibility of collecting relevant data/information.

Where techniques are not consistently appropriate, candidates will be awarded **1 mark**.

Candidate justifies the need for the investigation

2 marks

All justifications must be

- well thought out
- linked to the investigation.

Lack of clarity within the justification will result in candidates being unable to gain the full mark allocation available.

From the proposed list of investigations drawn up in 1 : 3 above, candidates should form a prioritised list of those investigations which they propose to undertake.

No marks are awarded at this stage but candidates are expected to focus on those investigations most relevant to the needs of the project brief. A number of investigations may be combined by using one technique.

No more than 3 investigations depending on their nature, could be realistically carried out in the time available. The three investigations identified should ensure that all specification points are investigated. Candidates will be disadvantaged if they do less than 3 as they will not have collected sufficient data to create a valid solution.

Candidates who intend to use a questionnaire as an investigation must issue 20 in order to gain valid results. If, however, too many questionnaires are distributed, collecting the data may become problematic for candidates.

Candidates should complete this work on pages 9 – 11 of the pro forma.

Step 1.3		
Brief 1 – Previous fashion trend		
Investigation – to establish/find out/investigate		Technique
1	<ul style="list-style-type: none"> Current fashion trends 	Interview/questionnaire to target group/textile technologist/retailer Survey of retail outlets Literary/Internet search
2	<ul style="list-style-type: none"> Previous fashion trends 	Interview/questionnaire to target group/textile technologist/retailer Survey of retail outlets Literary/Internet search
3	<ul style="list-style-type: none"> Possible inspiration from previous fashion 	Interview with textile technologist/retailer/manufacturer/tourist officer Literary/Internet search Survey of retail outlets
4	<ul style="list-style-type: none"> Possible target market 	Interview with textile technologist/retailer/manufacturer Literary/Internet search
5	<ul style="list-style-type: none"> Current product range 	Survey of retail outlets Literary/Internet search Interview with textile technologist/retailer/manufacturer
6	<ul style="list-style-type: none"> Range of suitable fabrics/trimmings/fastenings available 	Survey of retail outlets Literary/Internet search Interview with textile technologist/retailer/manufacturer
7	<ul style="list-style-type: none"> Range of retail outlets 	Survey of retail outlets Literary/Internet search
8	<ul style="list-style-type: none"> Ideas for potential solutions 	Survey of retail outlets Interview with textile technologist/manufacturer/retailer Literary/Internet search Manufacture of prototype(s) and check Sensory testing/survey/interview with target group
9	<ul style="list-style-type: none"> Choice of fabrics for potential solutions 	Survey of retail outlets Interview with textile technologist/manufacturer/retailer Manufacture of prototype(s) and check Sensory testing/survey/interview with target group
10	<ul style="list-style-type: none"> Suitability for the target group/end use 	Interview with textile technologist/retailer/manufacturer Interview/questionnaire/survey/sensory testing with target group
11	<ul style="list-style-type: none"> Price range of similar products/potential solutions 	Interview with target group/textile technologist Survey of current product range
12	<ul style="list-style-type: none"> Cost of potential components/solutions Cost effective/good value for money 	Costing exercise Survey of retail outlets
13	<ul style="list-style-type: none"> Budget of target group/amount target group is prepared to pay 	Interview/questionnaire with target group/textile technologist
14	<ul style="list-style-type: none"> Aesthetic appeal of potential solutions 	Sensory testing/interview/questionnaire with target group/textile technologist/retailer

Step 1.3 (continued)		
Brief 1 – Previous fashion trend		
Investigation – to establish/find out/investigate		Technique
15	<ul style="list-style-type: none"> Likes and dislikes of target group 	Interview/questionnaire to target group/textile technologist/retailer Sensory testing with target group
16	<ul style="list-style-type: none"> Facilities/resources available to the candidate 	Interview with textile technologist Resource/equipment checklist
17	<ul style="list-style-type: none"> Skills necessary for manufacturing of the potential solution by the candidate 	Interview with textile technologist Skills audit & check with textile technologist
18	<ul style="list-style-type: none"> Time available for manufacturing of the potential solution/by the candidate 	Interview with textile technologist Timed trial of prototype & check with textile technologist
19	<ul style="list-style-type: none"> Facilities/resources available to the manufacturer 	Interview with textile technologist/manufacturer Resource/equipment checklist
20	<ul style="list-style-type: none"> Skills necessary for manufacturing of the potential solution by the manufacturer 	Interview with textile technologist/manufacturer Skills audit & check with textile technologist/manufacturer
21	<ul style="list-style-type: none"> Time available for manufacturing of the potential solution/by manufacturer 	Interview with textile technologist Timed trial of prototype & check with textile technologist/manufacturer
22	<ul style="list-style-type: none"> Hygiene/safety requirements for production 	Interview with textile technologist/ Environmental Health Officer
23	<ul style="list-style-type: none"> Quality requirements of potential solutions 	Interview with textile technologist Manufacture prototype(s) & trial Sensory testing/questionnaire/interview with target group/parents/carer
24	<ul style="list-style-type: none"> Suitability for mass production 	Interview with textile technologist/retail manager
25	<ul style="list-style-type: none"> Influencing factors on final product 	Interview with textile technologists Interview/questionnaire to target group
26	<ul style="list-style-type: none"> Durability of potential solutions 	Interview with Trading Standards officer Literary/Internet search User/wearer trial
27	<ul style="list-style-type: none"> Safety in use/wear 	Interview with Trading Standards Officer/textile technologist Literary/Internet search
28	<ul style="list-style-type: none"> Care requirements of materials/resources used 	Interview with textile technologist Literary/Internet search Trial of prototype(s)

Note:

- The candidate **must** specify the term 'expert' if used
- A textile technologist could include a person working in textile product development or a Home Economics teacher
- Retailer outlet must be relevant to investigation and be specified

Step 1.3		
Brief 2 – Encourages learning in children		
Investigation – to establish/find out/investigate		Technique
1	<ul style="list-style-type: none"> Range of educational textile items 	Interview textile technologist/retailer/ manufacturer Survey of retail outlets Literary/Internet search
2	<ul style="list-style-type: none"> Current range of textile items to promote learning 	Interview textile technologist/retailer/designer/ manufacturer/parent/carer/appropriate teacher Survey of retail outlets Literary/Internet search
3	<ul style="list-style-type: none"> Current range of textile items for children 	Interview textile technologist/retailer/ manufacturer/parent/care Literary/Internet search Survey of retail outlets
4	<ul style="list-style-type: none"> Ideas/methods to promote learning/ stages of development 	Literary/Internet search Survey of retail outlets Interview appropriate teacher/parent/carer
5	<ul style="list-style-type: none"> Range of suitable fabrics/trimmings/ fastenings available 	Survey of retail outlets Literary/Internet search Interview with textile technologist/retailer/ manufacturer
6	<ul style="list-style-type: none"> Range of retail outlets offering suitable fabrics/trimmings/fastenings Suitability for target group 	Survey of retail outlets Literary/Internet search
7	<ul style="list-style-type: none"> Ideas for potential solutions/potential solutions on the market 	Survey of retail outlets Interview with textile technologist/ manufacturer/retailer Literary/Internet search Manufacture of prototype(s) & check Sensory testing/survey/interview with target group/parents/carers
8	<ul style="list-style-type: none"> Choice of fabrics/decorations/trimmings for potential solutions 	Survey of retail outlets Interview with textile technologist/ manufacturer/retailer Manufacture of prototype(s) & check Sensory testing/survey/interview with target group
9	<ul style="list-style-type: none"> Price range of similar textile products 	Interview with target group/parents/carers/ textile technologist Survey of current product range
10	<ul style="list-style-type: none"> Cost of potential components/solutions Cost effective/good value for money 	Costing exercise Survey of retail outlets
11	<ul style="list-style-type: none"> Budget of target group/amount target group is prepared to pay 	Interview/questionnaire with target group/ parent/carer/textile technologist
12	<ul style="list-style-type: none"> Aesthetic appeal of potential solutions 	Sensory testing/interview/questionnaire with target group/parents/carers/textile technologist/retailer
13	<ul style="list-style-type: none"> Likes and dislikes of target group 	Interview/questionnaire to target group/ parents/carers Sensory testing with target group/parents/ carers

Step 1.3 (continued)		
Brief 2 – Encourages learning in children		
Investigation – to establish/find out/investigate		Technique
14	<ul style="list-style-type: none"> Current trends/fashion 	Interview/questionnaire to target group/ parents/carers/textile technologist Survey of retail outlets Literary/Internet search
15	<ul style="list-style-type: none"> Facilities/resources available to the candidate 	Interview with textile technologist Resource/equipment checklist
16	<ul style="list-style-type: none"> Skills necessary for manufacturing the potential solution by the candidate 	Interview with textile technologist Skills audit & check with textile technologist
17	<ul style="list-style-type: none"> Time available for manufacturing of the potential solution/by the candidate 	Interview with textile technologist Timed trial of prototype & check with textile technologist
18	<ul style="list-style-type: none"> Facilities/resources available to the manufacturer 	Interview with textile technologist/ manufacturer Resource/equipment checklist
19	<ul style="list-style-type: none"> Skills necessary for manufacturing of the potential solution by the manufacturer 	Interview with textile technologist/ manufacturer Skills audit & check with textile technologist/ manufacturer
20	<ul style="list-style-type: none"> Time available for manufacturing of the potential solution/by manufacturer 	Interview with textile technologist Timed trial of prototype & check with textile technologist/manufacturer
21	<ul style="list-style-type: none"> Hygiene/safety requirements for potential solution 	Interview with textile technologist/ Trading Standards Officer
22	<ul style="list-style-type: none"> Quality requirements of potential solutions 	Interview with textile technologist Manufacture prototype(s) & trial Sensory testing/questionnaire/interview with target group/parents/carers
23	<ul style="list-style-type: none"> Suitability for mass production 	Interview with textile technologist
24	<ul style="list-style-type: none"> Influencing factors on final product 	Interview with textile technologist
25	<ul style="list-style-type: none"> Durability of potential solutions 	Interview with Trading Standards officer Literary/Internet search User/wearer trial
26	<ul style="list-style-type: none"> Safety in use/wear 	Interview with Trading Standards Officer/ textile technologist Literary/Internet search
27	<ul style="list-style-type: none"> Care requirements of materials/ resources used 	Interview with textile technologist Literary/Internet search Trial of prototype(s)

Note:

- The candidate **must** specify the term 'expert' if used
- A textile technologist could include a person working in textile product development or a Home Economics teacher
- Retailer outlet must be relevant to investigation and be specified

STEP 2 (Investigating) Total mark allocation

15 marks

2 : 1 Implement the overall plan for investigations – 12 marks available

The mark allocation for this area will be based on candidates' performance in a series of investigations.

Candidates will be assessed on the results and conclusions from each investigation – see the marking criteria breakdown listed on the next page.

Teachers/lecturers must ensure candidates present the results and conclusions of each investigation on pages 9 – 11 of the pro forma only.

Candidates using computer software to produce results eg bar charts or graphs must ensure that these are presented only on the pages allocated for this work ie pages 9 – 11 of the proforma.

Candidates who present the results and conclusions of each investigation on more than one A4 sheet of paper will be penalised.

See Appendix 1 for guidance on carrying out investigations/tests.

Implement the overall plan for investigations

- Results must be brief, concise and easy to interpret
- Results must show a clear link to the aim/purpose of the investigation.
- Results must be derived from the investigations and based on facts and evidence
- Conclusions must be based on the results obtained

All investigations candidates have fulfilled the aims on page 8 of the pro forma	3 marks
½ or more investigations candidates have fulfilled the aims on page 8 of the pro forma	2 marks
Less than ½ investigations candidates have fulfilled the aims on page 8 of the pro forma	1 mark
In no investigations candidates fulfilled the aims on page 8 of the pro forma	0 marks

All investigations contain brief/concise/easy to interpret results	3 marks
½ or more investigations contain brief/concise/easy to interpret results	2 marks
Less than ½ investigations contain brief/concise/easy to interpret results	1 mark
No investigations contain brief/concise/easy to interpret results	0 marks

All results are based on fact/valid evidence/relevant to design brief	3 marks
½ or more of the results are based on fact/valid evidence/relevant to design brief	2 marks
Less than ½ of the results are based on fact/valid evidence/relevant to design brief	1 mark
No results are based on fact/valid evidence/relevant to design brief	0 marks

All conclusions are based on the results of investigations and/or show progression	3 marks
½ or more conclusions are based on the results of investigations and/or show progression	2 marks
Less than ½ conclusions are based on the results of investigations and/or show progression	1 mark
No conclusions are based on results of investigations and/or does not show progression	0 marks

2 : 2 Derive a solution from the investigations – 3 marks available

Generate one solution – 2 marks (ie ONE item) NB it is extremely important that centres strictly adhere to this rule. No marks will be allocated for STEP 3 or STEP 4 if candidates generate more than one solution.

Candidates derive **one solution** which must

Be relevant to the needs of the project brief	1 mark
Be based on the results and conclusions reached in the investigations	1 mark
Describes the solution in detail	1 mark

The solution should be described in detail so it is able to be **visualised**.

Various methods may be used eg– written details, recipes, sketches, diagrams, labelled diagrams, storyboards – to ensure clarity.

**Brief 1: Previous fashion trend
Possible solutions**

Any textile item influenced by a previous fashion trend.

**Brief 2: Encourages learning in children
Possible solutions**

Any textile item for children which encourages learning.

NB Stop marking if more than one solution is given and refer technological project to Principal Assessor.

STEP 3 (Manufacturing and Testing) Total mark allocation**21 marks****3 : 1 Manufacture the chosen solution – 10 marks available****Candidate completes the planned sequence of work****5 marks**

Candidates must complete the plan **before** starting to manufacture the solution.

Candidates will be penalised if the plan is written **retrospectively**.

Candidates who draw up a sequence of work which consistently demonstrates effective deployment of time	5 marks
Candidates who draw up a sequence of work with minor lapses in the deployment of time	4 marks
Candidates who draw up a sequence of work with occasional lapses in the deployment of time	3 marks
Candidates who draw up a sequence of work with regular lapses in the deployment of time	2 marks
Candidates who draw up a sequence of work with frequent lapses in the deployment of time	1 mark
Candidate who submits a retrospective sequence of work	0 marks

Candidates may choose to present their sequence of work in an appropriate form eg table, chart, written details, flow chart. An indication of dates, times and details of the proposed work to be undertaken must demonstrate effective use of time by the candidate.

The sequence of work must show logical progression and allow the solution to be manufactured

Candidates' work must be completed on page 13 of the pro forma.

Candidate identifies and requisitions equipment and resources**3 marks**

Candidates who identify and requisition all resources and equipment	3 marks
Candidates who identify and requisition most resources and equipment	2 marks
Candidates who omit any obvious resources and/or equipment	1 mark

Resources will depend on the chosen solution and may relate to textiles, equipment.

Note: all resources and equipment required for manufacture must be listed and take into account

- exact types and colours of textiles and trimmings including sizes/dimensions.

Candidate consistently justifies effective deployment of equipment and resources

2 marks

Justification should relate to all the identified equipment and resources to gain full marks.

After completing the **plan** for manufacture, candidates should start to manufacture the solution.

Candidates should be encouraged to make notes on page 15 as they are carrying out the manufacturing process. Notes may be made on how manufacture is proceeding, any problems encountered and any changes/modifications made to the plan.

Photographic evidence of the candidates' work must be attached to page 16 of the proforma.

Two photographs are required:

- one should provide evidence of the solution **during manufacture**.
- the other should provide evidence of the **completed** solution.

Although the quality of the photographs is not important, they **must** give an indication of the type of work being carried out and completed by the candidate.

Although no marks are awarded here, **photographic evidence must be provided** of the candidates' solution.

If photographic evidence is not provided, no further marking of the Technological Project will be carried out as no evidence has been provided on which to base the marking of the next stages of work.

If problems occur with photographic evidence, then the teacher/lecturer should contact Graeme Findlay, Qualifications Manager (0845 213 5492) or Romana Howells, Qualifications Officer (0845 213 5480) immediately.

Please note:

Page 16 of the electronic version of the pro forma has been set up to allow the electronic insertion of digital photographs.

Such photographs **should not** be cut and then pasted into the spaces provided. Photographs should be inserted in the spaces provided by using the *'insert picture from file'* facility in Microsoft Word.

3 : 2 Devise two tests for the manufactured solution – 3 marks available

Candidate presents two tests **1 mark**

Candidates should present **two** appropriate tests – failure to do this will result in no marks being awarded.

Candidate identifies techniques to be used **1 mark**

Two different techniques should be identified.

Techniques must be **appropriate** to the tests, allowing candidates to collect relevant data/information.

Candidate justifies the two tests **1 mark**

Justifications should be

- clear and well thought out
- linked to the test.

NB Candidates are expected to include any literary titles/authors, web addresses and the title of any person/expert interviewed. Candidates are expected to identify the target group which are used during testing.

Briefs 1 & 2

Test	Technique	Justification
1. Examination by a specified expert eg manufacturer/retailer/textile technologist	Interview/questionnaire with specified expert Sensory test with specified expert	<ul style="list-style-type: none">• To check aesthetic qualities• To check if item is marketable• To check cost effectiveness/profitability of item
2. Examination by target group/parent/carer of target group	Interview/questionnaire/with target group/parent/carer Sensory testing with target group/parent/carer Observational checklist Wearer/user trial with target group/parent/carer	<ul style="list-style-type: none">• To find out if item is acceptable/appropriate to target group• To establish marketability
3. Costing exercise	Costing exercise confirmed by interview with an expert, eg textile technologist/retailer	<ul style="list-style-type: none">• To establish whether item is cost effective to produce• To establish a selling price for the finished item

3 : 3 Implement the tests for the manufactured solution – 8 marks available (revised)

Implement the overall plan for investigations

Marking Criteria

- Results must be brief, concise and easy to interpret
- Results must show a link to the aim/purpose of the test
- Results must be derived from the tests and based on facts and evidence
- Conclusions must be based on results obtained

For both tests – candidates have done as they intended from page 15	2 marks
For 1 test – candidates have done as they intended from page 15	1 mark
No test – candidates have done as they intended from page 15	0 marks

Both tests contain brief/concise/easy to interpret results.	2 marks
One test contains brief/concise/easy to interpret results.	1 mark
No test contains brief/concise/easy to interpret results.	0 marks

All results of tests are based on fact/valid evidence/relevant to specification points/design brief.	2 marks
One result of tests is based on fact/valid evidence/relevant to specification points/design brief.	1 mark
No results of tests are based on fact/valid evidence/relevant to specification points/design brief.	0 marks

Conclusions for two tests are based on the results of tests and/or show progression	2 marks
Conclusions for one test are based on the results of tests and/or show progression	1 mark
No conclusions for the tests are based on results of tests and/or show no progression	0 marks

STEP 4 Total mark allocation**12 marks****4 : 1 Evaluate the chosen solution – 6 marks available****Candidate provides accurate evaluation some of which is detailed against the specification****5 marks**

Candidates must rewrite (or copy and paste) the specification points in the appropriate column. Candidates must evaluate the solution against each specification point. Candidates should use the results of the investigations, manufacture and/or testing where appropriate.

Candidates who evaluate all or five specification points	5 marks
Candidates who evaluate four specification points	4 marks
Candidates who evaluate three specification points	3 marks
Candidates who evaluate two specification points	2 marks
Candidates who evaluate one specification point	1 mark

Candidate provides detailed accurate evaluation against specification**1 mark**

If further detail is provided within the evaluations then an additional mark will be awarded.

Extra detail means that one additional point of evaluation is provided for **any one** of the specification points.

4 : 2 Evaluate the Technological Project – 6 marks available

Candidates evaluate the Technological Project: Step 1 Analysing, Step 2 Investigating and Step 3 Manufacturing and Testing

All of the following criteria must be used in the evaluation

- time
- resources
- skills and abilities.

Marks will not be awarded to candidates who do not use these criteria in their evaluation.

The evaluation, which may include adaptations/modifications, **must be based on evidence** which can be found within the candidates' Technological Project pro forma eg from investigations, manufacture and/or testing.

In the evaluation the candidates should give an opinion based on facts from their Technological Project and then explain the consequences for the final solution.

Candidates should provide **two** points of evaluation for **each** step of the Technological Project.

One mark should be awarded for each point of evaluation. A minimum of one mark must come from each step evaluated.

Step 1	Analysing	2 marks
Step 2	Investigating	2 marks
Step 3	Manufacturing and Testing	2 marks

Pages 23 to 24 of the pro forma should be used for the evaluation.

Appendix 1 Higher Technological Project Guidance on Carrying out Investigations/Tests

Three investigations and two tests must be carried out.

The aim, which should be linked to the candidates' specification, should be rewritten or cut and pasted from page 8 of the pro forma onto the top of the investigation page.

Questionnaire

- Minimum of 20 respondents.
- Minimum 5/8 relevant/valid questions linked to aim/specification to allow relevant data to be collected.
- Questions and all possible answers must be displayed.
- All responses must be displayed including nil responses.
- Given constraints of space, it is not necessary to display results as pie charts/graphs.
- Table format for displaying results of questionnaires can be space saving.

Survey

- Must identify the source(s) of information.
- Source of information must be relevant to investigation.
- The following sources could be used including the Internet, literary, shop, restaurant/café as a source of information.
- The source of information should be identified.
- The place selected should be related to the quality and quantity of the data available rather than the number of sources however more than one source should be used.
- Information should be displayed using appropriate headings, sub-divisions etc.

Interviews

- Carefully consider the suitability of the person interviewed. Must clearly identify their position in establishment/job title.
- Minimum 5/8 relevant questions linked to aim/specification to allow relevant data to be collected.
- Open-ended questions should be used to allow more data to be collected from the interviewee.
- Questions should be carefully formatted to extract useful facts and avoid one word responses such as Yes/No.
- All questions and responses must be displayed.

Internet/Literary search

- All sources must be clearly identified.
- Should be related to the quality/quantity/relevance of the data available rather than the number of sources.
- Graphics may be included where relevant.
- Data collected should be organised using appropriate headings/sub-divisions etc.
- Information should not be lifted 'en bloc' from websites. It is appropriate to summarise key points which are relevant to the aim/specification.

Costing

- Breakdown cost of all ingredients/components must be included.
- Details of quantities and unit costs must be included.
- Sources should be included where appropriate.
- Comparative costing should measure 'like for like'.

NB Costing only proves cost of items/components. On its own it does not provide low/high cost, value for money, acceptability of price to target group.

Nutritional Analysis

- Sources must be shown.
- All nutrients relevant to the aim should be shown.
- Nutritional analysis of all ingredients must be included. (A 'total' for a dish is not acceptable).
- Sufficient data must be accessed in order to draw relevant conclusions.
- When used as a test the suitability of the results should be assessed by a suitable expert eg community dietician, food technologist etc.

Fabric Analysis

- There is no need to repeat fabric tests where information is already easily available in textbooks/websites.
- Fabrics used for testing must be clearly identified ie construction/fibre composition.
- Only fabrics being considered for potential solution should be tested/sampled/ investigated towards final solution.
- Details of method testing must be given.

Sensory Testing

- All potential solutions must be clearly described.
- Breakdown of results must be shown. Summary of results is not acceptable.
- Key must be provided.
- It is appropriate to ask questions to elicit potential improvements/modifications.
- It is suggested for sensory testing that a minimum of five people are used to assess the products.

Technological Project Higher

Summary Mark Allocation

Total 70 marks available

Step	Mark Breakdown	Allocation
1 . 1	Identification of the key points with explanation Identify the key points Additional key points Key points plus basic and accurate explanation Key points plus detailed and accurate explanation	2 marks 1 mark 2 marks 1 mark Total mark allocation 6
1 . 2	Draw up appropriate criteria for a specification Allow for a range of possible solutions Contain more detail than the brief Be written in measurable/able to be tested terms Link each specification point to the key points Provide basic explanations Provide detailed explanations	1 mark 2 marks 2 marks 2 marks 2 marks 1 mark Total mark allocation 10
1 . 3	Devise an overall plan for investigations Present a list of investigations Identify techniques to be used Justify the need for the investigations	2 marks 2 marks 2 marks Total mark allocation 6
Total mark allocation for Step 1		22 marks
2 . 1	Implement the overall plan for investigations Aims fulfilled Brief, concise, easy to interpret Relevant and valid results Conclusions	3 marks 3 marks 3 marks 3 marks Total mark allocation 12
2 . 2	Derive a solution from the investigations Generate one solution – based on evidence Relevant to brief Describe the solution in detail	1 mark 1 mark 1 mark Total mark allocation 3
Total mark allocation for Step 2		15 marks

Step	Mark Breakdown	Allocation
3 . 1	Manufacture the chosen solution Step by step sequence of work showing effective deployment of time Requisition of resources Justification of resources/equipment	5 marks 3 marks 2 marks Total mark allocation 10
3 . 2	Devise two tests for the manufactured solution Present two tests Identify techniques to be used Justify the two tests	1 mark 1 mark 1 mark Total mark allocation 3
3 . 3	Implement the tests for manufactured solution Aims fulfilled Brief, concise and easy to interpret Relevant and valid reasons Conclusions	2 marks 2 marks 2 marks 2 marks Total mark allocation 8
Total mark allocation for Step 3		21 marks
4 . 1	Evaluate the chosen solution Accurate explanation some of which is detailed against each specification point (to include results of investigations and/or tests where appropriate) Valid evaluations Provide detailed accurate explanation	5 marks 1 mark Total mark allocation 6
4 . 2	Evaluate the Technological Project Candidate can evaluate Steps 1-3 of the Technological Project with detailed reference to the following criteria: Time Resources Skills/abilities Step 1 Analysing Step 2 Investigating Step 3 Manufacturing and Testing	2 marks 2 marks 2 marks Total mark allocation 6
Total mark allocation for Step 4		12 marks

[END OF MARKING INSTRUCTIONS]