

DESIGN AND TEXTILES

Paper 9631/01
Theory

General comments

The scripts varied widely from those with medium to high marks for some answers and others scoring low marks. Candidates understand the construction of fabrics well (e.g. plain, twill and satin weave) however, many answers in **Section A** (Fibres and Design) lacked enough detail and were brief. A common factor in a number of scripts was not answering the question asked. It is suggested that key words in the question are underlined before answering and a brief plan showing key terms is written at the beginning of the answer. This may help to focus on the specific requirements of the question.

There were a large number of scripts which used textile related words inaccurately. Candidates need to understand the differences between 'fibres' and 'fabrics' as they are not well known, with many answers muddling these words. 'Performance characteristics' is another term which needs to be known. This relates to the fibres and fabrics in use, and is an alternative term to 'properties'.

'Synthetic' and 'regenerated cellulose' were not well known, as is expected at advanced level. It is recommended that guidance about suitable textbooks for this course is followed (see syllabus and/or the University of Cambridge International Examination Teacher Support website <http://teachers.cie.org.uk>).

Comments on specific questions

Section A

Question 1

- (a) Most answers were able to give some information to this question but the term 'thermo-bonded' fabric was not well known. A few high quality responses correctly explained that 'batts' or 'webs' of fibres were prepared, after which they were hot-calendered or fused together to make a fabric. 'Felt' fabric was known more widely although all candidates need to be able to explain the importance of scales on wool fibres, which aid the felting process.
- (b) This section was well answered with many scripts gaining full marks. In some scripts, however, the terms 'fibres' and 'fabrics' were muddled or used incorrectly.
- (c) The construction of fabrics is well known, with the 'weaving' process very well answered. Diagrams were often included which helped candidates to explain the answer more easily. However, although the knowledge was evident, it was not always presented correctly in the answers from the candidates. Often a list of properties was given for wovens, with a further list for non-wovens, with no comparison between them despite 'Compare' being the key descriptor in the question.
- (d)(i) to (iv) Answers from the candidates varied. The answers given for clothing (e.g. interfacings), accessories (e.g. felt slippers or shoe linings) and household uses (e.g. bed covers, mattress protectors) were the most common answers. However, medical uses were not so well known. Non-woven fabrics for this type of use include mainly disposable wipes, with hygiene in mind. In answers which scored only low marks, the discussion, choice and performance characteristics were the least well considered. Candidates tended to write what they know about a subject, rather than highlighting the key words/phrases and selecting the appropriate information to answer them. Low scoring answers also either gave few details or their answers were brief.

Question 2

- (a) There were many good answers to this section with many candidates scoring full marks.
- (b) Answers varied, with some very well answered and others which lacked detail. The differences in the terms 'synthetic fibres' and 'regenerated fibres' were not always well known and were muddled in some scripts. A few answers gave irrelevant information or just gave a list, rather than comparing each point. 'Performance characteristics' relate to what the fibres are like in use. For example a model answer using the moisture absorbency of a fibre such as polyester twill as a performance characteristic would give us: *'polyester twill does not absorb much moisture under normal conditions (0.5% is usual), and this means that it may feel sticky and uncomfortable next to the skin if worn in warm weather, however, cotton cambric fabric absorbs more (6-8%) and feels much more comfortable, so is a preferred choice for warm/hot climates'*. The candidate also needed to specifically give the name of the fabric, as specified in the question.
- (c) This was a well answered question although a few candidates muddled the terms 'acrylics' when they meant 'acetates'.
- (d) There was a wide range of responses with some very good answers. These included points about fabrics which had UV filtering, microencapsulation, use of electronics in textiles, as well as the more well-known developments in viscose-types, such as Lyocell and the use of recycled fibres. The answer did ask for an 'assessment' so just a list of types only scored low marks – candidates needed to write about the 'new developments' in detail to gain high marks.

Section B

Question 3

- (a) (i) This was well attempted with many scripts gaining full marks. Most candidates knew well the terms of 'line', 'shape' and 'proportion' in relation to fashion designing.
- (ii) This part of the question was usually answered well with many very good answers. Many candidates made use of the silhouettes at the end of the paper. The question asked for each of the three dresses to show line, shape and proportion. A few candidates drew three dresses with only one of the features on each, so only low marks could be scored. The candidate needs to be reminded to read the question carefully.
- (b) There were a number of well answered responses to this and a large number of candidates wrote about the designers they had studied. Some answers also included sketches and referred to contemporary fashion trends. However a small number of candidates wrote about home interior trends. This was not required in the answer, which asked only for details about clothing fashion designers.

Question 4

This was the least popular question in this section.

- (a) This was usually well answered and the majority of candidates had explained the terms 'prototype' and 'one-off production', well. Full marks were often awarded.
- (b) (i) and (ii) These questions were well attempted and most answers gained a good number of marks for this section. Most answers gave a good number of examples for both hand and machine processes.
- (c) This question had variable answers although it was straightforward. Some answers included labelled sketches and this is to be encouraged as it often helps to explain processes. Some answers gave few details and where only a list is given, only a few marks can be awarded.

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Paper 9631/02

Practical

General Comments

All Centres have chosen a skirt for the practical exam. Most Centres adapted the skirt pattern to include two hip pockets, and the garments were completed. Centres need to agree with CIE which pattern adaptations and tasks are suitable for AS Level. Again some Centres did not offer their candidates challenging enough tasks for AS Level.

The standard of work varied, but good candidates displayed:

- good planning and organisational skills;
- a very high understanding of pattern adaptation / drafting;
- excellent sewing skills;
- writing ability, and effective use of the English Language.

Where the results were disappointing this was due mainly to a lack of planning and the choice of tasks set. Again some Centres are struggling with the resources required to complete the practical exam.

Comments on specific questions

Task Analysis and Planning

Question 1

- (a) Task analysis varied greatly, with some candidates being supplied with full instruction sheets and commercial patterns to work with, while other candidates showed excellent aptitude for creating their own patterns and solutions.
- (b) A varied assortment of fabrics were used from lightweight cottons, printed cottons, medium to heavy weight twills, brushed fabrics, linens and cotton/lycra mixes.
- (c) Candidates who presented clear shopping lists with descriptions of fabrics and notions, quantities and prices gained the highest marks.
- (d) Fabric choices were well answered and many candidates show extended knowledge of fibre and fabric properties. Components (notions) and the processes to be worked were not answered well and sometimes totally omitted. Both invisible and standard dress zippers were used.
- (e) Candidates need to ensure that they list all the main resources they would need e.g. a sewing machine.

Preparation Session

Question 1

- (a) Candidates who worked from commercially made pocket patterns and instruction sheets lost marks.
- (b) Many candidates omitted the planning stage and their results were weakened by not having a time schedule to work from. Those candidates who wrote out detailed time plans with a breakdown of time allocated to each task and stage benefited in the implementation stage. Some candidates wrote in the actual time taken. Candidates should be clear about the time they have been allocated for the Preparation time and the Implementation time. Many scheduled the Preparation and Implementation time together but do not utilise the five hours allocated.

- (c) Most Centres indicated on the Practical Test Task Mark Sheet whether candidates succeeded in fitting their garment.
- (d) There were no practice samples of specific techniques received.

Implementation

Organisation and Time Management

Question 3

- (a) Candidates were good at assessing how well they had kept to their time plans. Most Centres commented on each candidate's progress.

Tasks

- (b) **Hip pockets** were generally well made and drafted with either square or rounded pocket bags. Square pocket bags tend to gather dirt in the corners and do not wear as well as rounded ones. Where:

- pocket openings were too wide;
- pocket bags were too shallow;
- the large pocket bag divided into two sections, utilising the main fabric and a lining fabric, the candidates lost marks.

"Pocket lining" was misinterpreted and some candidates made unnecessary work for themselves by dividing the large pocket bag into two sections with a seam. A more efficient solution is to appliqué the main fabric to the lining fabric. The small pocket bag was the only one needing a lining. Where the main fabric is lightweight e.g. a cotton poplin there was no need for a lining fabric.

Bar tacking the pocket opening ends, strengthened the pocket (on the heavier weight fabrics), and gave the garment a very professional finish; as did two rows of topstitching in a contrasting colour along the opening edges.

There was a decorative pocket version where a fabric frill was stitched into the pocket edge.

Zippers were inserted into garments to a good standard. Those candidates who used invisible zips achieved a very good standard of finish.

Seams were at the sides and back of the skirts. Most seam allowances were finished off with a zig zag stitch or a clean finish, suitable for those fabrics which frayed badly.

Very few candidates overlocked the seam allowances. Most candidates managed to work the extra bulk created by joining the hip pockets to the seam allowance.

Waistband Attachment. The following were common faults:

- The waistband cut on the double, resulting in too deep a waistband.
- The overlap of the ends of the waistband at the back, overlapping the wrong way round.
- The extension end left on the outside, whereas it is usually concealed inside.
- Grading was cut very severely; in extreme cases the waistband detaches itself from the skirt.
- Buttons were too large for the width of the waistband.
- The stitching was not secured, with uneven and stitch length too short for the topstitching.

Fused interfacing was used successfully and graded.

Most candidates achieved a good quality buttonhole, and either used a ball button with a shank/stem or a 2-holed or 4-holed button with a stitched shank/stem.

Finishing. Most candidates chose a narrow machined hem with either one or two rows of machining. Garments were generally pressed well, folded and placed in a brown envelope.

Evaluation

Question 4

Candidates need to evaluate what they have done in the time given, comment/reflect on their findings and how they could improve on their work if given another opportunity.

Candidates' conclusions often showed an understanding of the processes and procedures they went through with good explanations of their findings and time management.

Credit is given to all candidates who recognise their mistakes and who made corrections, as this clearly shows the individual's potential to develop their learning.

Some candidates' conclusions and findings were far too personal in comment e.g. "I was nervous". Many candidates wrote a log of what they did in the test with little thought or evaluation.

Generally candidates producing the most successful practical results, produced the most realistic and critical evaluations.

There were good comments on time management, with many candidates realising how important it was to plan their time.

Where there was very little output from the candidates and no real understanding of what was needed, candidates gained few marks.

Health and Safety

- **Pins and needles should not be left in candidates' practical work as the Principal Examiner handles each piece of work presented.**
- **Name labels should be stitched on.**

DESIGN AND TEXTILES

Paper 9631/03

Textile Applications and Technology

General comments

Most scripts had correctly followed the rubric although a few had only answered three questions instead of four. It is helpful when candidates have written on the front of the script the number of questions which they have attempted. Some candidates had not read the wording of the question carefully enough and wrote what they knew about a subject, rather than selecting the specific information asked for in the question.

Comments on specific questions

Section A

Question 1

This was a compulsory question and all candidates attempted it.

- (a) This was usually well answered and good number of scripts gained full marks.
- (b) Answers from candidates gave a variety of finishes on synthetic fabrics although not all candidates had answered fully and assessed the different types of fabric finishes, as required in the question. The syllabus has a guide to the types of wording for questions which may be asked, and 'assessment' suggests that a point should be well discussed, giving points for and against. Many candidates gave only a list of points without discussing them. This does not allow the candidate to gain full marks.
- (c) Fabric finishes were given in many answers but the questions asked for 'mechanical' finishes, rather than 'chemical' ones. Candidates needed to ensure they distinguished between these finishes. There were also some very good answers that showed that some candidates had learned their work well.
- (d) This was well answered and there was good discussion in many scripts. Many examples were given on the points which needed to be considered when choosing fabrics and finishes on clothing for people with physical disabilities. A few answers talked about style and design of clothes rather than fabrics. It is recommended that candidates read the questions carefully, and underline the key words before answering. This will ensure that the correct aspect of the subject matter is discussed.

Question 2

This was a compulsory question and was attempted by all candidates.

- (a) This was usually well answered with many scripts gaining full marks.
- (b) (i) and (ii) There were many very good answers with many gaining full marks. A wide variety of designs were chosen and there were some excellent labelled sketches.
- (c) Answers were variable, with some gaining high marks, and others scoring low ones. Some answers did not give a 'specific culture' as asked for in the question, and where only the 'techniques' was given, low marks were scored. Some candidates wrote only a brief list of techniques without assessing them or even explaining them; again low marks were scored in these papers too.

Section B

Question 3

This question was chosen by a large number of candidates.

- (a) This was well answered with many scripts gaining full marks.
- (b) There were variable answers in this section. The focus of the question was about the benefits of having Eco-labelling on garments and most candidates were able to gain marks.
- (c) This section was well answered, with candidates giving many examples of environmentally friendly fibres and fabrics, and full marks were awarded for detailed answers.
- (d) Many good examples of ways in which consumers can help to reduce the environmental impact of textiles were given in answers, some creative ideas as well as some very practical ones. Candidates need to read the question carefully as some wrote about the impact of textiles from the manufacturer's point of view, not the consumers, as asked for in the question.

Question 4

This was a popular question.

- (a) Many answers gained full marks for giving the outline of types of research needed before designing a range of skirts.
- (b) This was usually well answered and a good number of candidates gained full marks.
- (c) There were variable answers for this section. Some candidates wrote about calculating amounts of materials in general, and did not relate it to the 'manufacturer' as asked for in the question. Most answers did refer to the batch of skirts but others did not, so could only gain low marks.
- (d)(i) This was well answered by most candidates. The usual details were expected such as front and back views, and other important style features such as the position of seams/pockets/fastenings etc., and most did this well.
- (ii) This section could relate to the coursework component, as well as to the written component, of this syllabus. When writing a design specification for the coursework item, the basic principles required for that component would be helpful to a question like this.

The main omission by many answers was that more detail was required. General points were given, (for example, candidates might have written '*what sort of colour would the skirt have*' or '*what type of zip should the skirt have*'). However, the answer required the details for one skirt, for which the answers could have been: 'a medium weight cotton denim' or 'a 20 cm dark blue zip with metal teeth'. Some candidates wrote an 'order of work' for the skirt instead of a design specification. Not enough candidates were successful in doing this question.

Question 5

This was the least popular question in this section. Some answers were unfinished, so perhaps there could be an issue with those candidates' time management.

- (a) This was not usually well answered. The main reason was that a list of points was often written and was then not discussed, so few marks were awarded. Candidates needed to consider the key words such as 'specialist garments', as often candidates only discussed normal everyday clothes such as jeans and tops instead. The answer was looking for 'specialist garments' items such as outdoor sports, garments to protect against the weather, such as rainwear, or to protect against the cold.

- (b)** Many candidates attempted this part of the question well. Many knew about batch production and were able to relate the knowledge to this question. The question was straightforward and gave candidates the opportunity to discuss the various points which need to be considered when producing a batch of jackets. High scoring answers gave informed discussion although scripts which gained low marks usually had not given enough detail.

Candidates can always use the number of marks for the question as a good guide for knowing how many points to discuss in a question.

DESIGN AND TEXTILES

Paper 9631/04

Coursework

General comments

Candidates undertook a wide range of appropriate tasks suited to different abilities and interests. Many candidates chose tasks which enabled them to show skills from three different topics or areas of the syllabus. Other candidates though needed to choose their tasks more carefully, in order for each item they produced to demonstrate a different technique or an understanding of a different area of the syllabus, in order to achieve the higher marks.

There were some beautifully presented folders with many showing excellent ICT skills in the presentation of the work. Some candidates appeared to complete their folders at the end of the project and there may be practical reasons why this is done. When selecting work for inclusion in their portfolios candidates should ensure that all relevant work is included, as marks can only be awarded for work seen by the Examiner e.g. the development of a paper pattern is often not found in the folder. The use, by many candidates, of digital photographs of finished products and by some candidates of work in progress, is helpful to the Examiner.

The majority of candidates need to offer evaluation in their folders to ensure they gain full credit for this assessment objective.

The practical work presented included some exceptional products demonstrating high levels of creativity and a wide range of textile skills including traditional textiles techniques. Some candidates spent excessive amounts of time completing large projects with repetitive techniques for which the marks awarded did not justify the time spent e.g. beading. These candidates need to ensure they demonstrate skills in three different areas of the syllabus. In a small number of cases candidates used inappropriate techniques such as gluing for which marks could not be awarded.

The Individual Mark Sheets were all completed and many contained helpful comments from teachers. The syllabus indicates that coursework should also be annotated by the teacher to assist the Examiner. This is especially important in the marking of the 'Carrying out of Coursework Tasks' objective.

Administration

Work was generally well presented and labelled with the majority of Centres ensuring that the work of each candidate was securely fastened together. Most of the work presented was of an appropriate size to demonstrate the candidate's skills and to be easily transported.

However a number of Centres submitted work which was large, heavy and bulky including some pieces glued to large pieces of wood or in wooden frames. More than one candidate submitted work containing glass which was not sufficiently well packed to prevent breakage. This is not to be encouraged.

Can Centres note that the work of several candidates may be packed together in one carton and the work does not need to be presented in individual decorated boxes within the carton.

Comments on Assessment Objectives

Research, Aims and Analysis

Almost all candidates made a simple statement of the aims of their project. Those candidates, who included more detailed information, including the design targets for the task, received higher marks. Candidates should show that they have analysed the work required to complete the task and, to achieve higher marks,

candidates must also show that they have made a time plan for their whole project, including completion of the portfolio.

Many candidates provided interesting and thorough research on a chosen theme for their projects. Some candidates could have achieved higher marks by going on to research the needs of the product user, product sizes etc. and by giving reasons for the choices made in their research. Research into existing products was carried out by many candidates. To obtain high marks for research, candidates need to evaluate the relevance of the research to their own project. Questionnaires were used well by many candidates. Detailed analysis of the results of the questionnaires is needed to achieve a high mark. The number of questionnaires given out should be no more than 20-30 to avoid excessive work for the candidate.

Planning and Development

Marks cannot be awarded for design in this section if the candidate does not make any design proposals. Many candidates who used information from research effectively in their designs did not justify the decisions leading to their chosen design.

A large proportion of candidates used samples of different textile techniques to demonstrate a wide range of textile skills. To gain high marks, samples of trial techniques used to develop a product should always relate to the designs and should be annotated with reasons for choices.

Only a few candidates offered a Design Specification but information that would have been in a specification was rewarded. Detailed shopping lists were used by many candidates and generally demonstrated a good knowledge of materials.

Candidates need to show more evidence of planning which should be done before the product is made. Candidates who demonstrated forward planning usually achieved higher marks. The small number of candidates who offered a time scale with their plan achieved the highest marks. Candidates should be aware that it is not expected that their plan will always be accurate. Marks are also gained for the ability to respond to unexpected changes and problems in completing work.

Process – Carrying out of the coursework tasks

The Examiner is guided by the teacher in marking this section and marks are judged against planning contained in the folder, annotations by the teacher and marks awarded by the teacher. Where teachers had provided detailed reasons for the mark given this was very helpful.

Realisation – Quality of the Outcome

Some very creative and original products were seen, demonstrating excellent skills, especially in fashion garments. Dressmaking skills in particular were of a high standard and work was generally neat and accurate.

A number of candidates made three similar products which did not show sufficient skills in different areas of the syllabus and so did not achieve high marks. Candidates should ensure that each project shows their skills in different textile skills. For example, if beading is a major part of one project, it should only feature in a minor way, if at all, in the other two projects.

Candidates should be discouraged from undertaking tasks requiring hours and hours of repetitive work which does not improve their mark. Gluing beads and fabrics together, or to wood, are not appropriate techniques for this syllabus.

Evaluation

Almost all folders showed that a lot of care had been taken in their production. Candidates need to understand that high marks can rarely be obtained from folders containing considerably less than the 3,000 word guideline.

The great majority of candidates could improve their marks for evaluation. Please see the appendix for suggestions on how this may be achieved.

Appendix

To help candidates to fulfill all the coursework requirements of the syllabus, colleagues may find useful the format below, which details section headings for each aspect of the coursework.

Research, aims and analysis of task

- Aims: State and describe the aims of the task; e.g. I am going to design and make a girl's party dress for girls aged between 3 and 6 years of age. My theme will be....., it will be sold in etc.
- Task Analysis: Explain in detail what has to be done to complete the task. All the constraints and considerations for the design should be explored to obtain high marks. In the example given above, candidates would need to research a theme to assist with designing, find out what sort of party clothes girls wear, what they are usually made from, cost, components etc.
- A Time Plan to show how the task will be completed. This could be a simple step by step plan or a Gantt chart.
- Research sheets - Carry out the research planned and evaluate the research e.g. if pictures of party dresses are presented, their good and bad points should be labelled. Research should be from different sources but should also be selective to achieve the highest marks. Information should be presented in the candidate's own words.

Planning and development

- Summary of Research; to include the relevant information collected, which information will be used and how it will be used to help with designing. Reasons should be given for the decisions made e.g. from my research I discovered that most girl's party dresses are pink. Therefore, I will use this colour for my dress because 16 people in my questionnaire chose this colour. This information could be presented in the form of a table by less able candidates.
- Design Specification: The conclusions reached in the summary of research are used to describe the design constraints. If enough information is contained in the design specification it should be possible for someone else to design the product using the specification as instructions.
- Design Proposals: A range of design proposals (drawings) that answer the original aims of the project and the requirements of the design specification. Labelled and evaluated to achieve higher marks.
- Chosen Design: The best design to carry through to the making stage. Reasons should be given for the choice of design.
- Development of techniques to interpret the chosen design: evidence of experiments with techniques to carry out your design e.g. trial different types of embellishment that could be used to add a flower decoration to the dress. Reasons should be given for choices made. Unsuccessful experiments should be included and evaluated, as these show how choices were made and are good examples of the learning process.
- Product Specification: A description of resources and techniques needed to make the product. There should be enough information to enable someone else to make the product. A shopping list for materials could be included.
- Time Plan for making the product to include estimates of the time that each step of making will take for highest marks. It could be a step by step table, flow chart or Gantt chart.

Evaluation

- Describe what has been achieved i.e. the product
- Does the product answer the project aims and the design specification? Detailed reasons should be given for why the product does or does not match the specification.
- Describe the strengths and weaknesses of the product. Give reasons for these opinions.
- The effectiveness of any plans in achieving the aims of the project. The candidate should evaluate their own strengths and weaknesses and discuss any problems in making the product. Which work in the folder was helpful and which did not help with the final product? Were any changes made to the plan?
- Suggestions for further development: This could include improvements to the product if it was to be made again, or ideas for developing more products e.g. for the party dress a range of matching boy's party clothes or a coordinating set of play clothes for girls could be developed.
- Feedback from potential buyers of a product is useful, but questions must be relevant. This could be in the form of a report on a survey.
- Folder will be well organised and presented and will include all relevant work.