

Now think about decoration / embellishment ...

Colour application techniques:

Printing
Stencilling
Bleaching
Dyeing
3d Paints
Screen-printing
Marbling
Salt diffusion
Thermo chromic paints and dyes
Glow in the Dark paints
Direct application (fabric pens, paints and crayons)

Other Decorative techniques:

Pleating
Cutting
Blueprint fabric
Transfer printing
Patchwork
LEDs (electronics)
Shisha mirror work
UV reactive threads and beads
Trims, lace feathers, motifs, studs, piping, ribbon, fringing, sequins, bias binding
Embroidery (hand and machine)

Fraying
Distressing
Top stitching
Appliqué
Quilting
Beading

How is this done? - Investigate **all** the different ways of decoration / embellishment -Don't forget to investigate smart fabrics and components as well.

You will need to be able to explain at least **two** methods **fully** with the use of diagrams - and don't forget to link them to **your product and the theme of India**

SMART FABRICS

You will be asked about smart fabrics this year.

They may ask about your knowledge of a SMART MATERIAL suitable for your product design:

What are they?

What do they do?

What are their names?

How are they classified? E.g. medical, environmental, sport related etc

How could you incorporate them into your product (or other products) / which ones would be suitable for your product / why they are particularly useful for children's clothing / sports/medical etc

Make your notes and practise some answers here:

SMART FABRICS continued

Write a definition and description of a SMART MATERIAL you have incorporated into your design:

Name

Definition

Description

Diagram to show use in your product

Function

Questions that have appeared on past papers:

What would a designer need to know before they could design their product?

How does studying existing designs help the designer?

Who are you designing for?

What are they like?

How can you find out about your target market tastes?

What is in fashion at the moment? Will this be in fashion next year?

Try to predict future trends

How do you find out what is in fashion?

How would market research be carried out in Industry?

DEVELOPING THE THEME OF "India"

It is important to think as a creative artist at this stage. To gain the most marks you will have to look at all aspects of how you can reflect them in your product design. **It will not be enough to trace a picture and plonk it in the middle of your product for example.** List ways in which you could develop the theme in your product designs in the space below:

Early ideas

Product shape

Colour

Pattern (Traditional /Cultural)

Texture

Fabric choice

Component choice

CONSIDERATIONS BEFORE PRESENTING IDEAS / analysis of research

Why bother to design a new product when there are so many on the market already?

What have you learnt from your research? How will this help you to come up with new ideas?

Designing for your target market (You decide!)

Lots of points need to be considered ...what points can you think of?
Give reasons for these points.

Type of product	Features	Uses

Any other points / notes you would like to make:

In past papers you have been given a design specification or part of one. You cannot be sure it will be on the paper. Using the RESEARCH information you have and remembering the skills you developed when doing your major coursework project, write a design specification for your product in the space below:

DESIGN SPECIFICATION

-
-
-
-
-
-

What is a design specification and what is its value?

INITIAL IDEAS

Present your ideas in the space below. You are usually asked for 2 in the exam
The mark scheme for past papers shows that you must do the following:

- Use a pencil
- Fill the boxes
- **Name the product** so that the examiner is clear what the product is
- Label any parts that are not clear
- Make sure that the ideas are for sufficiently different products
- Do not use colour (sometimes this changes)

Idea 1

Idea 2

In the space below evaluate your two best ideas. You must make it very clear why you are choosing them for further development. Will they meet the specification? Read your design brief again

EVALUATE INITIAL IDEAS

Idea 1

Idea 2

Make a list of all the things you will need to do or consider when you are developing your chosen idea. Remember the theme of **"India"** as you develop your ideas.

The prep sheet says, "Produce some initial ideas you can develop into a final product in the exam". Think about development work you did for your major coursework project.

DEVELOPMENT WORK

PRESENTATION OF THE FINAL DESIGN TO THE CLIENT

What is the job of a designer?

Imagine you have to sell your design to a manufacturer:

What information would you have to give the client / manufacturer as you try to sell him your design?

What methods would you use to present the information?
How could you use ICT?

The exam often asks you to investigate ways in which ICT can be used in the designing stage of your product

USES OF ICT FOR RESEARCHING AND DESIGNING



You now need to develop your best idea into a final design, which you will be questioned on in the exam. The wording of the question in the exam varies. To help you prepare you need to prepare a full working drawing covering all details.

A list of all the things the working drawing must include:

Different views, colour, labels, name of product etc - Add your own points here:

Have a look at past papers and see how much space you have for your final idea. Design to meet the following mark scheme:

- Choice of fabrics and components (6)
- Decorative techniques used (5)
- Originality and inventive use of the theme (5)
- Use of colour and tone (4)
- Form, function and quality of design (5)

FINAL IDEA

- Use this page and the next to present your final idea.
- You must show a back and front view

Final idea continued

Evaluation

There is usually a question asking why people would buy your product or why it is a good design

Why would my product be popular?
Why would the product be of good value to the customer?

MANUFACTURING THE PRODUCT - Choosing fabrics, components, and fastenings.

List all the materials and components you will need, cost them

<u>Fabrics, components, fastenings</u>	<u>Reason for choice</u>	<u>Cost</u>

PRODUCT SPECIFICATION

In the past students have been asked to write the following specifications: Design, Product, Manufacturing and Fabric. Make sure you know the difference

<p><u>PRODUCT SPECIFICATION</u></p> <p>What is a Product specification and who uses it?</p> <p>Write out the product specification for your final design:</p> <ul style="list-style-type: none">•••••
--

Name the fabric you have chosen for your product: _____

Find out about this fabric and write some bullet points to help you revise.

BULLET POINTS ABOUT THE FABRIC

Fibre content

What qualities must the fabric have?

Fabric properties

Past papers show that you might be asked to write out a fabric specification. You may be asked about the performance of the fabric. Ensure you can fully describe 3 or 4 different suitable fabrics. Some papers in the past have asked you to describe the fabric construction in detail.

DESCRIPTION OF THE FABRIC TO BE USED

Appearance

Method of manufacture / construction

Colour

Texture

Pattern

Feel

Cost

Fabric finish

FABRIC TESTING / FINISHES

What qualities should your fabric have?

How could you test these?

Name 2 "finishes" that could be added to your fabric during the manufacturing

Other past questions have been about the fabric specification

FABRIC SPECIFICATION

-
-
-
-
-

If your product has components on it you will need to fill in the following:

- Components used
- Cost
- Reasons for choice
- Reflecting the theme

The manufacturer will need to have a pattern in order to make your product

How would you make the pattern for your product?

How would they do it in Industry?

MANUFACTURING / CONSTRUCTION TECHNIQUES

Make a note on all the stages involved in the manufacture of your product from lay planning right through to packaging. Make sure you know how to apply them to your product, and you can discuss manufacturing in quantity

e.g. Batch, Mass etc

PLANNING THE PRODUCTION

The Prep Paper states that you must research different manufacturing systems.

Different ones are used depending upon what product you are making.

Make notes on the various types of manufacturing systems and have a definition of each ready for the exam

One off / Haute Couture

Batch Production

Mass Production

Also mention here: Sub assembly lines

Production lines

JIT Production

CIM

Describe two areas of your product that would have the following:

	<u>Input</u>	<u>Process (transformation)</u>	<u>Output</u>
<u>1</u>			
<u>2</u>			

CAD and CAM in industrial production systems -

This is another popular area on exams ...

	Definition	Uses in industry Advantages/ Disadvantages
CAD		
CAM		
CIM		

USES OF ICT DURING MANUFACTURE



AFTERCARE AND MAINTENANCE

What aftercare would the product need? Design a care label

Make sure you understand what the codes are for all clothes labelling and what the ITCLC stands for

COSTING

You will have looked at the type of questions that are asked on exam papers about costing. Make sure that you have worked out the following for your product design: Costs of materials and components for the sample or prototype and cost of manufacture. Look at the additional notes you have been given on industrial manufacture. Could the product be made more cheaply?

COSTING OF MATERIALS AND MANUFACTURE

HOW COULD YOU REDUCE COSTS?

MANUFACTURE - QUALITY CHECKS

When and where would you carry out quality control checks during the manufacture of your product? What is meant by tolerance level? Look at past question papers.

Tolerance levels

Quality checks

TESTING THE PRODUCT

How could the designer and manufacturer test the final product?
Does it meet the specification?

PRODUCT TESTING

MEETING THE SPECIFICATION

PRODUCT EVALUATION

Fitness for purpose

Quality of design

Safe to make

Safe for consumer

Environmentally friendly

- Fabrics used
- Dyes and methods of production

ENVIRONMENTAL ISSUES (This is also a possible area - though not definite)

There are lots of pointers in the revision guide - you might need to be able to discuss issues like:

Use of pesticides to increase cotton crop yields

GM crops

Industrial pollution

Waste disposal

Preservation of natural resources

Recycling of materials

Excessive packaging

Transportation issues - pollution by fumes, increased risk to other people on the road e.g. risk of accidents e.t.c.

By products in the dyeing process - chemicals polluting rivers e.t.c.

Natural fibres - be aware that they have bad points as well: requiring higher washing temperature, cotton has to be bleached before it can be use in the manufacturing process

Synthetic fibres - have some good points: produce less effluent, last longer and can be washed at lower temperatures. Bad points - they are made from oil, which is not a renewable source.

Recycling

Recycling symbols: Fill in the following chart...

	Sketch Symbol	Definition of meaning
Mobius Loop		
Mobius loop (% recycled)		
Eco-Label		
Green Dot		
Recycle now logo		

What is Eco Labelling?

Explain the Cradle to Grave approach

What are the main ways in which the general public could recycle old textile products?
e.g use clothing banks

How do manufacturers or designers recycle old textile products?

What are the main **ADVANTAGES** of designing recycled textile products?

What are the main **DISADVANTAGES** of designing recycled textile products?

What are the 3 R's of recycling?

- 1
- 2
- 3

Official regulations

There are government regulations regarding the safety and labelling of children's products.

Research these areas on the Internet <http://www.toysadvice.co.uk> is a good starting point - you may need to be able to discuss these areas.

- Laws / regulations

Labels - What do these mean?



OTHER AREAS

In the past the following topics have also cropped up on papers. Make sure you can answer them in relation to **YOUR PRODUCT** on the exam paper.

Health and safety issues
Environmental issues
Labelling
Shop display or point of sale
Logos
Equipment

Fabric construction
Packaging
Marketing
Mail order catalogues
Sub Assembly

Have definitions ready for a variety of terms as well:

Tolerance level
Smart fabric
Sub assembly line
One off Production
Batch Production
Mass Production
Focus group
Component
Design specification
Product specification
Fabric specification
Manufacturing specification
Batik
Appliqué
Environmentally friendly
CAD
CAM
CIM
JIT Production
Eton system
Value for money

Understand what is being asked of you if the following appear in questions:

Discuss

Explain how

Evaluate

NOTES

