

This series of test questions, created for use with your students, provides short answer, multiple-choice, true/false, fill-in-the-blank and discussion/essay questions based on the text and arranged by chapter. A separate answer key is available.

Chapter 1: Context

- 1 What was the Silk Road and why was it important?
- 2 In 1500, where did the Spanish and Portuguese develop trade links with?
- 3 Name two unique African textiles influenced by the interchange between cultures as a result of trade.
- 4 What invention created by John Kay in 1733 led the way to powered weaving?
- 5 What was the main benefit of the spinning jenny invented by James Hargreaves in 1764?
- 6 What did Joseph Jacquard in France invent in 1801?
- 7 What is the name 'Oberkampf' synonymous with? What is the name in England of the printed textiles produced by this technique?
- 8 Which man-made textile was developed during the 1930s? What was it made from?
- 9 What synthetic fiber was developed by du Pont in 1959?
- 10 Outline the advantages of synthetic over natural dyes.
- 11 What are the environmental advantages of digital inkjet printing?
- 12 What was the underpinning philosophy of the Bauhaus in 1920s Germany? What was it committed to?
- 13 Name two fine artists who made major creative contributions to textile design in the early part of the twentieth century.
- 14 Who was the chief designer for the Swiss design studio Mira-X?
- 15 What is NUNO? What is NUNO's design philosophy?
- 16 Alexander Girard led the textile division of which furniture manufacturer between 1952 and 1973? What was Girard's design ethos?

- 17 Who was known in the 1950s as 'the prince of prints'?
 - a. Junichi Arai
 - b. Desiree Palmen
 - c. Charles Eames
 - d. Emilio Pucci
 - e. none of the above
- 18 Who created the iconic textile design Melooni in 1963?
- 19 Which is the main environmental concern in textile printing?
- 20 What is an "eco-textile"?

Discussion/essay questions

- 1 Write an essay on the history of textile design and manufacture from the ancient Egyptians up to the Industrial Revolution in the eighteenth century. Mention the importance of the interchange between cultures brought about by trade and the creation of unique textiles, particularly in Africa.
- 2 Summarize the key manufacturing inventions of the Industrial Revolution in eighteenth century Britain. Discuss what impact these inventions had on the design and production of textiles and on the workers employed in the textile industry.
- 3 Choose two of the following textile designers and for each one outline his/her career, work and influence: Anni Albers, Verner Panton, Reiko Sudo, Alexander Girard, Lucienne Day, Emilio Pucci, Vuokko Nurmensniemi.

Chapter 2: Printed textile design

- 1 Briefly explain what the process of block printing involves.
- 2 What was block printing replaced with at the start of the Industrial Revolution?
- 3 Which invention transformed textile printing in the 1930s? Briefly explain the process.
- 4 Which printing method was introduced in 1962?
 - a. hand-screen printing
 - b. digital inkjet printing
 - c. CAM
 - d. rotary screen-printing
 - e. none of the above
- 5 For each of the following fabrics indicate which type of dye yields the best result:

- cotton
 - silk
 - nylon
 - wool
- 6 What pre-production stage is necessary before a design is printed? What does this involve?
 - 7 What is an initial design often called?
 - a. an Indiennes
 - b. a croquet
 - c. a ghost image
 - d. a croquis
 - e. none of the above
 - 8 Briefly explain what happens in the manual color separation method.
 - 9 Hand screen-printing a textile design on to cloth is done on a flatbed printing table. What does this table normally consist of?
 - 10 True or False? The order of hand screen-printing often follows the sequence of darker colors first to lighter colors last.
 - 11 What is mixed with a concentrated pigment ink to enable the color to be transferred on to the fabric?
 - 12 What are the advantages of pigment inks? Why might dyes be preferred to pigment inks?
 - 13 Briefly explain the devoré printing method for silk/viscose velvet.
 - 14 Dyes are fixed to cloth by _____.
 - 15 What was the heat-transfer printing technique developed for?
 - 16 What is an “engineered design”?
 - 17 What is the main function of digital inkjet printing?
 - 18 Why do new digital printers, such as the Reggiani Dream, have the potential to bring about major changes in the textile and fashion industries?
 - 19 Briefly explain how the digital inkjet printing process works.
 - 20 Name the four CMYK inks.
 - 21 What does dpi stand for?
 - a. dots per item
 - b. dashes per inch
 - c. dots per inch
 - d. design per inch
 - e. none of the above

- 22 Explain the difference between computer-aided design (CAD) and computer-aided manufacture (CAM).

Discussion/essay questions

- 1 Write an essay which explores the history of printing from ancient times through to the twenty-first century. Consider such processes as block printing and screen printing, and discuss the impact of the advent of new technology such as digital inkjet printing.
- 2 Discuss the use of two of the following design and pattern types in the interior furnishings and fashion markets: floral, paisley, toile de Jouy, geometric, conversational, camouflage, world cultures. For each pattern, research a contemporary designer or company who uses that pattern type in their textiles.
- 3 Discuss the work of the Textiles Environment Design (TED) group and Design4Science in relation to environmental and sustainable textile design.

Chapter 3: Woven textile design

- 1 In a woven fabric what is the warp thread and the weft thread?
- 2 How do dobby and treadle looms operate?
- 3 True or False? The more shafts in a dobby loom the greater the range of pattern and color options.
- 4 What are the two main groups of yarns? Explain the difference between them.
- 5 In weaving, a single warp thread is called an _____.
- 6 A single weft yarn or thread is known as a _____.
- 7 What is the framework developed by the designer to describe weaves known as?
 - a. heddle plan
 - b. notation system
 - c. flotation system
 - d. weave structure
 - e. none of the above
- 8 For each of the following weave types describe its characteristics:
 - plain weave
 - twill weave
 - satin and sateen weaves
 - tweed

- 9 Why are wool fabrics normally scoured after weaving?
- 10 What is piece dyeing?
- 11 Why might the fulling/felting process be used on wool fabrics?
- 12 Three integrated pieces of equipment enable the realization of the digital jacquard weave. What are they?
- 13 In new technology, what is meant by “actuation” and “smart textiles”?

Discussion/essay questions

- 1 Research further smart textiles which incorporate nanotechnologies. What uses can such textiles be put to both today and in the future? Are there any disadvantages to such fabrics?

Chapter 4: Mixed media textile design

- 1 What technique is embroidery thought to have been inspired by? What evidence is there to support this?
- 2 Who brought the technique of quilting from the Middle and Far East to Europe? What was it used for?
- 3 What is the function of an embroidery hoop or frame?
- 4 What is a large needle with a sharp point used for sewing on leather known as?
 - a. a couching
 - b. a glover
 - c. a stab stitcher
 - d. a quilter
 - e. none of the above
- 5 Select two of the following types of embroidery stitch and explain how each is made:
 - straight stitch
 - backstitch
 - chain stitch
 - blanket stitch
 - feather stitch
 - cross stitch
 - knotted stitch
 - couching
- 6 Briefly explain how fabric is mechanically fed through an embroidery machine.
- 7 What is the peyote stitch in beadwork?

- 8 Name the three layers of cloth which are stitched together in the quilting technique.
- 9 Which stitch is most commonly used in quilting? What other stitches are alternatives?
- 10 Why is “cording” often used in quilting?
- 11 What does appliqué involve?
- 12 What types of fabric is turned-edge appliqué usually used with?
- 13 In simple terms, what is a “pleat”?
- 14 For each of the following types of fabric manipulation briefly explain what they involve:
 - gathering
 - ruffle
 - smocking
- 15 Why is laser cutting fabric far superior to other cutting methods?
- 16 What is the fundamental difference between laser cutting and laser engraving?

Discussion/essay questions

- 1 Discuss some of the commercial and cultural uses of embroidery in the West today. Why do you think the technique is still used? Provide some examples of innovative embroidery work by contemporary textile designers or textile design companies.
- 2 Research in more detail the Gee’s Bend quilters collective in the United States. Write an essay which explores the history of this collective and the quilts they produced.

Chapter 5: Design principles

- 1 What is a “concept”? What does this mean in textile design?
- 2 List the three primary and three secondary colors on the color wheel.
- 3 What is a tertiary color? Give two examples of tertiary colors.
- 4 Select two of the following color contrasts and outline what each refers to:
 - hue contrast
 - black and white contrast
 - cold to warm
 - complementary contrast
 - simultaneous contrast

- saturation contrast
- extension contrast

- 5 What are the two types of primary colors in CAD?
- 6 What is a color-matching system? Why are such systems important in textile manufacturing?
- 7 What is meant by “primary visual research” and “secondary visual research”?
- 8 What is the difference between a block repeat and a composite repeat?
- 9 Describe what is meant by a “sateen repeat”.
- 10 What do “visualization and styling” describe?

Discussion/essay questions

- 1 Discuss the advantages and disadvantages of CAD. Do you think that CAD will ever totally replace the use of traditional drawing tools?
- 2 Write an essay on the role and importance of trend forecasting in textile design. Consider what is meant by trend forecasting and look at the work of a number of the international trend-forecasting agencies for fashion, interiors and industrial products, such as Trend Union and WGSN.
- 3 Research in more detail the contribution of twentieth century artists, such as Bridget Riley and Jim Lambie, to the exploration of pattern or, alternatively, research the attitude towards pattern of the Memphis group in Milan, Italy. Write an essay on your findings including examples of work of your chosen artist/group.

Chapter 6: Creating a collection

- 1 What is meant by “fieldwork”?
- 2 What is the purpose of a mood board?
- 3 What is meant by a “brief”? Who determines/provides it?
- 4 True or False? Fabric sampling should only take place when the design ideas are finalized.
- 5 Why can fabric sampling be expensive?
- 6 What is the main responsibility of a textile designer in the production of a textile collection?
- 7 True or False? Manufacturers of furnishing

fabrics and household textiles produce two main ranges a year.

- 8 What is the function of textile trade fairs?