

Awards in Hairdressing

Sample questions

About the Hairdressing question papers

To gain the International Vocational Qualification in Hairdressing it is necessary to pass a combination of one written test and practical assessments at each level.

The written test at the certificate level is a one hour multiple choice test where candidates are asked to identify the correct answer from a range of options. There are 40 questions and candidates must answer all the questions.

The written tests at diploma and advanced diploma level are what we call short structured answer tests. Here the candidate is asked to write short answers to each of the parts within a question. The marking scheme gives guidance about how much time and attention should be given to each question.

At diploma and advanced diploma levels there are separate papers for candidates depending on whether they are following the option for 'All hair types except Afro-Caribbean' or the option for 'Afro-Caribbean'. At diploma level 60% of each paper is based on knowledge that is common to both options and 40% is specific to the hair type.

The diploma level paper has 9 questions and candidates must answer all questions. At advanced diploma level approximately 75% of each paper is based on common knowledge and 25% on specific hair types.

How are papers prepared and marked?

All our papers are prepared according to strict quality control procedures to make sure that all candidates are treated fairly and equally. Before a paper is used it is carefully edited to make sure that it meets our standards. For example, every paper is written to a particular format and the format stays the same so candidates are not disadvantaged by an unfamiliar look to the paper. Each paper must only contain questions that are based on the syllabus. The questions must be written in clear English so that each paper is a test of the candidates' knowledge about the subject area and not their ability to understand complex English.

After each examination is completed, written papers are marked in the UK by examiners who are professionally competent in the subject area and trained by us in the role and responsibilities of the examiner. Each examiner uses an agreed marking scheme. When all the papers have been marked, each examiners' marking is reviewed to ensure all candidates' have been treated fairly. Multiple choice answer sheets are marked by computer and we use the analysis from the computer marking to review the papers and confirm, again, that all candidates have been treated fairly. Only when we are satisfied that the results are a fair and accurate measure of each candidate's performance, do we send them to our centres to be released.

Although we have our own quality control procedures, we also submit these procedures to independent organisations as an additional way of ensuring the highest possible quality.

The questions shown are only examples of the types of question that may feature in the examination and candidates should not expect to be asked the same questions in the actual paper. The questions show which part or parts of the syllabus they have been based on.

Examination paper

Page

Hairdressing 1122-01/02-001 (Certificate)

Hairdressing 1122-03-011/1122-04-012 (Diploma)

Hairdressing 1122-05-021/1122-06-022 (Advanced Diploma)

Specimen questions

Paper number

1122-01/02-001

Examination

Certificate in Hairdressing

Date as advised

Date as advised

Series

2001 onwards

Paper

Hairdressing Skills Principles 1

1 hour

You should have the following for this examination

this question paper

an answer sheet

a pen with black or blue ink

MC

This question paper is the property of The City and Guilds of London Institute and is to be returned after the examination.

Read the following notes BEFORE you answer any questions.

! You **MUST** use a pen with black or blue ink to complete ALL parts of the answer sheet.

1	<input type="radio"/> a	<input type="radio"/> b	<input checked="" type="radio"/> c	<input type="radio"/> d
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! Check that you have the correct answer sheet for the examination.

! Check that your name and candidate details have been printed correctly at the top of your answer sheet.

! Inform the invigilator if your name or examination details are not correct.

! Each question shows **FOUR** possible answers (lettered >a=, >b=, >c= and >d=); only **ONE** is correct.

Decide which **ONE** is correct and mark you answer on the **ANSWER SHEET** with your **PEN**.

For example if you decide >c= is correct, mark your answer like this

If you want to change your answer, cancel your first choice by filling in the lower half of the box like this

Then mark the answer which you have now decided is correct.

! Any calculations or rough work can be done in this question book.



! Attempt all questions; if you find a question difficult, leave and return to it later.

This paper contains 40 questions. Answer them using the 'boxes' numbered 1 to 40 on the answer sheet.

The above instructions appear on the actual examination paper.

See next page

1122-01/02-001 Hairdressing Skills Principles 1 (Certificate)

1. The main reason for applying surface conditioners to the hair is to
 - a. open the cuticle
 - b. heal damaged hair
 - c. smooth down the cuticle
 - d. prepare the hair for chemical services.

(section 1)

2. Which ONE of the following should be checked regularly for safety?
 - a. The comb.
 - b. The air temperature.
 - c. The brush.
 - d. The clips.

(section 1)

3. Which ONE of the following ingredients can be found in shampoo for dry hair?
 - a. Lemon.
 - b. Coconut.
 - c. Mango.
 - d. Orange.

(section 1)

4. Which ONE of the following would be classed as confidential information and should never be given out?
 - a. Client details.
 - b. Salon telephone number.
 - c. Stylists' names.
 - d. Salon price list.

(section 2)

5. What are the most important details to record when making an appointment?
 - a. Salon's name, the service and time of appointment.
 - b. Stylist's name, the service and time of appointment.
 - c. Client's name the service and time of appointment.
 - d. The service and time of appointment.

(section 2)

6. Which ONE of the following is an example of non-verbal communication?
 - a. Explanation.
 - b. Consultation.
 - c. Discussion.
 - d. Eye-contact.

(section 2)

7. It is important to pass on client concerns promptly to the relevant person so that
- you can do something else
 - they are dealt with by someone else
 - they are dealt with by the correct person as soon as possible
 - you do not have to deal with the concern
- (section 3)
8. What is a weakness?
- An activity that you need training in.
 - An activity you can do.
 - An activity you are good at.
 - An activity that is not part of your job role.
- (section 3)
9. Which one of the following types of fire extinguishers must **not** be used on fires in electrical equipment?
- Water.
 - Dry powder.
 - Fire blanket.
 - Carbon dioxide.
- (section 4)
10. When should the sterilisation of tools take place?
- End of the day.
 - Beginning of the day.
 - At least twice a day.
 - After each client.
- (section 4)
11. What is the pH of a permanent colour?
- 6.5 – 7.5
 - 7.5 – 8.5
 - 8.5 – 9.5
 - 9.5 – 10.5
- (section 5)
12. What effect does perm lotion have on the hair structure?
- Builds linkages in the hair.
 - Breaks linkages in the hair.
 - Joins new linkages in the hair.
 - Destroys linkages in the hair.
- (section 5)

13. What effect does heat have when permanently colouring hair?

- a. Decreases the processing time.
- b. Increases the depth of colour.
- c. Makes the colour brighter.
- d. Increases the processing time.

(section 5)

14. What is the main effect of temporary colour on hair?

- a. It takes the natural colour out of the hair.
- b. It absorbs the colour into the hair shaft.
- c. It coats the outer layer of the cuticle.
- d. It makes the hair dry.

(sections 6 & 7)

15. Which ONE of the following water temperatures should be used to remove bleach from the hair?

- a. Cold.
- b. Lukewarm.
- c. Very warm.
- d. Hot.

(sections 6 & 7)

Answer Key

1122-01/02-001 Hairdressing Skills Principles 1 (Certificate)

- | | | |
|------|-------|-------|
| 1. c | 6. d | 11. d |
| 2. b | 7. c | 12. c |
| 3. b | 8. a | 13. a |
| 4. a | 9. a | 14. c |
| 5. c | 10. d | 15. b |

Sample questions

Paper number	Examination	Date as advised
1122-03-011	Diploma in Hairdressing/	
1122-04-013	Diploma in Afro-Caribbean Hairdressing	

Series	Paper	12 hours
	Hairdressing Skills Principles 2/ Hairdressing Skills Principles 2 (Afro-Caribbean)	

You should have the following for this examination
one answer book

The maximum mark for each section within a question is shown.

Use large, clearly labelled diagrams or sketches wherever these will help your answers.

**The above instructions appear on the actual examination paper.
This paper only provides some specimen questions to give an example of the actual paper.
The actual paper contains 10 questions.**

See next page

1122-03-011 and 1122-04-013 Hairdressing Skills Principles 2 (Diploma)

1. When handling payments as part of reception duties:
- State the items that must be checked on each cheque to ensure valid payment
 - Describe the different payment methods available
 - State THREE potential consequences of failing to handle payments correctly.
- (10 marks)
(section 13)

2. When styling the hair using drying and setting techniques:
- Explain the physical effects of drying and setting on the hair structure
 - Explain the effect that humidity has on the hair structure
 - Describe how excessive heat can affect the hair and scalp.
- (6 marks)
(section 16)

1122-03-011 only

3. When deciding on a colour service for your client:
- State the length of time EACH of the following colouring products can be expected to last on the hair
 - temporary
 - semi-permanent
 - permanent
 - State TWO possible causes and ONE remedy for EACH of the following problems that can be encountered:
 - uneven result
 - scalp irritation
 - coverage not good on white hair
 - hair breakages
 - results to yellow
 - Describe with the aid of sketches the effect that the following colour molecules have on the structure of the hair:
 - temporary
 - semi-permanent
 - permanent
- (15 marks)
(section 19)

1122-04-012 only

4. When carrying out a relaxing service on a client:
- State which analytical tests need to be carried out
 - Name the FIVE types of chemical relaxers and state whether they are classified as lye or non-lye products
 - Explain the differences between lye and non-lye products.
- (13 marks)

Outline answers

1122-03-011/1122-04-012 Hairdressing Skills Principles 2 (Diploma)

Question 1a

- Signature to correspond with cheque card or personal identification
- Correct date
- Name of person to be paid
- Amount to be paid in figures or words
- Check the guarantee number from the holder's card when applicable and check that expiry date is still valid

Question 1b

Cash: Legal tender is the name given to money which is legal to use in different countries. This is usually made up of notes and coins.

Cheque: This is an order from the client to his/her bank to pay the amount stated to the salon.

Debit card: This provides a direct alternative to writing cheques as the sum of money is taken directly from the client's bank account.

Credit card: These types of cards are held by people who have applied to operate a credit account. They are different from a personal current account as each person has a personal limit given to them as to what they can draw against.

Question 1c

- Financial loss
- Potential loss of goodwill
- Disciplinary action against staff responsible

Question 2a

Both setting and drying involves a temporary change in the structure of the hair when wet water enters the hydrogen bonds allowing the hair to stretch further. During drying the water is evaporated and the hair is held in its stretched state in a new position. It will not return to its normal state until the hair again becomes wet.

Hair in its natural state, whether curly, wavy or straight, is described as being in an alpha keratin state. When the hair is wetted, stretched into a new shape and then dried, it is in a beta keratin state.

Question 2b

Humidity will affect the duration of the keratin position to how long a style will hold its shape. Your hair would result in going flat when the weather is wet or damp, as your hair is hygroscopic. This means that it absorbs and retains moisture from the atmosphere and the stretched dried shape reverts back to its natural shape.

Question 2c

Heat may

- damage the outer layer of the hair (cuticle)
- burn the scalp
- cause the hair to break

Question 3 a

- i until the next shampoo
- ii for 6-8 shampoos
- iii not removed until the hair is cut out

Question 3b

	Problem	Causes	Remedy/remedies
I	<i>Uneven result</i>	<ul style="list-style-type: none"> • uneven application • sections too large • incorrect mixing 	Spot tint lighter areas
ii	<i>Scalp irritation</i>	<ul style="list-style-type: none"> • peroxide too strong • client allergic to tint • insufficient product applied 	Remove immediately with cool water
iii	<i>Coverage not good with white hair</i>	<ul style="list-style-type: none"> • hair was resistant • tint under-processed • uneven application 	<ul style="list-style-type: none"> • pre-soften hair in future • re-apply product • spot tint areas not covered
iv	<i>Hair breakage</i>	<ul style="list-style-type: none"> • over-porous • over-processed • over-lapping • combed through too much • incorrect selection of product 	<ul style="list-style-type: none"> • remove immediately • cut if possible • use restructurant/deep penetrating conditioner
V	<i>Results to yellow</i>	<ul style="list-style-type: none"> • under processed • base too dark • incorrect selection of product 	Do elasticity and porous test; if OK, re-bleach

Question 4a

Elasticity, porosity, density and hair texture

Question 4b

Sodium hydroxide	lye product
Potassium hydroxide	non-lye product
Calcium hydroxide	non-lye product
Guanidine hydroxide	non-lye product
Lithium hydroxide	non-lye product

Question 4c

Lye relaxers have a tendency to

- Be irritating to the scalp
- Cause less drying to the hair
- Leave the hair with more sheen
- Penetrate the hair more quickly

Non-lye relaxers have a tendency to

- Be less irritating to the scalp
- Dry the hair and scalp more (the hair will need to be moisturised more often to avoid dryness and breakage)
- Leave the hair in need of more frequent conditioning treatments

- Penetrate the cuticle more slowly

1122-05-021 and 1122-06-022 Hairdressing Skills Principles 3 (Advanced Diploma)

1. Consultation lets the stylist make a series of professional judgements. These provide the basis of planning the right course of action. There are a number of sequences that form part of a consultation. The questions below are based on part of that sequence that will form a part of your final judgement.
 - a. Describe the procedures that take place when carrying out the tests listed below and explain when and why they are used.
Incompatibility; skin; elasticity;
 - b. Explain how you would recognise a hair, skin or scalp condition listed below and what effect, if any, it would have on a hairdressing service.

i	impetigo	ii	Pediculosis Capitis
iii	Alopecia	iii	Psoriasis
v	Monilethrix	vi	Canities
 - c. With the aid of a simple diagram explain the hair structure, including the hair follicle and hair bulb.
 - d. Describe the differences between the three basic types of hair: Mongoloid, Caucasoid and Negroid.

(38 marks)
(Section 31)

2. There are many reasons for a client to choose to colour their hair: to cover white hair, enhance an existing hairstyle or simply because he/she wants a change of image.
 - a. Explain what is meant by natural hair pigmentation and how it affects the natural hair colour that we see.
 - b. Explain the different types of bleaching products available, when they should be used and the effects that a bleaching product has on the hair structure.

(30 marks)
(Section 34)

1122-05-021 only (European)

3. A good perm depends not only on your practical skills but also on your ability to make the right decisions about the hair both before and during perming.
- a. Explain the features of acid and alkaline perming solution and when they should be used for best effect.
 - b. Explain when and how you would use the following perming techniques.
 - Spiral curls
 - Root movement
 - Pin curl
 - Weaving
 - c. Describe the possible causes and the action to be taken for the following perming problems.
 - Hair discolouration
 - Pull burn
 - Straight fizz

(30 marks)
(Section 33)

1122-06-022 only (Afro-Caribbean)

4. A good perm depends not only on your practical skills but also on your ability to make the right decisions about the hair both before and during perming.
- a. Explain the two types of perms used on Afro-Caribbean hair
 - i One step perms/single action perms
 - ii two step perms/dual action perms
 - b. Describe the possible causes and the action to be taken for the following perming problems.
 - Pull burn
 - Straight fizz
 - Curl drops after the perm
 - c. With the aid of diagrams explain the effect that a relaxer has on the hair structure.

(30 marks)
(Section 40)

Outline answers

Hairdressing 1122-05-021 and 1122-06-022 (Advanced Diploma)

1

a. *Incompatibility Test*

Perm lotion and other chemicals that are applied to the hair might react to other chemicals used. An incompatibility test is used to detect chemicals that could react with hairdressing processes such as colour and perm. It is carried out as follows:

- Use Personal Protective Equipment.
- Place a small cutting of hair in a dish.
- Pour a mixture of hydrogen peroxide and ammonium hydroxide on the hair (without bending over the dish).
- Watch for signs of bubbling, heating or discolouration; these indicate that the hair contains incompatible chemicals.

The hair should not be permed or coloured if there are any signs of a reaction as this may discolour or break the hair and could burn the skin.

Skin Test

A skin test is also known as a pre-disposition test, patch test, sabouraud-rousseau test or hypersensitivity test. It is used to test the reaction of the skin to chemical products usually before colouring. To find out whether a client's skin reacts in colouring a skin test is carried out as follows:

- Mix a small amount of tint with the correct amount of hydrogen peroxide.
- Clean an area of skin (about 8in²) behind the ear or fold of arm.
- Use spirit on cotton wool to remove the grease from the skin.
- Apply a little of the tint mixture to the skin; allow this to dry.
- Cover the skin with collodion to protect it. Ask your client to report any irritation or discomfort that occurs over the next 24-48 hours.
- Arrange to see your client at the end of this time so that you can check for signs of a reaction.
- Positive responses include inflammation, soreness or swelling.
- Do not carry out a colour service in these cases. If there is a negative response, you may carry on with the service.

Elasticity Test

This test is used to determine how much the hair will stretch and then return to its original position.

To carry out the tests, proceed as follows:

- Take a hair between the fingers and stretch it to assess the amount of spring the hair has.
- If the hair breaks easily, care needs to be taken before applying any hairdressing process, and further tests should be carried out, such as a test curl or a test cutting.
- Naturally healthy hair in good condition will be elastic and more likely to retain the effects of physical curling or setting longer. The hair will always take chemical processes more readily.

b

i **Impetigo**

This is a bacterial infection of the upper layers caused by a staphylococcal or streptococcal infection. The symptoms are a burning sensation, small spots which become dry, the formation of a honey-coloured crust then spots merge to form larger areas. The doctor must treat this by antibiotics. Impetigo is infectious and services should not be carried out on the client near to the infected area.

ii **Pediculosis capitis** (Head lice)

This is an infestation of the head by lice. The cause of this is an animal parasite that attacks the skin and feeds by puncturing the skin to suck the blood. It lays its eggs (ova) on the hair close to the skin. The symptoms are irritation and red scratch marks and the presence of lice or eggs at the back of the ears. Lice are unable to jump, but are easily spread by direct contact. Treatment is by the use of special products or by the doctor. Do not carry out a salon service.

iii **Alopecia** (Hair loss or baldness)

There are several distinct patterns or types.

Alopecia areata is the name given to baldness in circular areas. It is common on the scalp.

Alopecia totalis is complete hair loss from the scalp.

Alopecia capitis is complete baldness of the head.

Alopecia universalis is complete baldness of the body.

Male patterned alopecia is the most common form of hair loss. Hair recedes at the temples spreading to the top of the scalp, the rate of progression varying individually. Its causes are heredity but androgen hormone levels and age contribute. It is common in the late teenage years of men and the later years of women.

Premature Alopecia is hair loss and baldness in the earlier years of men.

Alopecia cicatricial is the loss of hair follicles and subsequent hair growth due to skin scarring.

Traction Alopecia is the loss of hair due to excessive pulling e.g. plucking, rolling, tonging, brushing and hair straightening.

Alopecia is caused when the hair follicles are unable to produce new hairs to replace old ones. This may be attributed to the malfunction of hair growth mechanisms in the hair papilla and germinal matrix and variation of the anagen, telogen and catagen hair growth patterns. Other factors include general health, diet, sex, heredity, climate, hormone distribution, stress and the effects of a variety of physical and chemical treatments.

The symptoms may vary according to the type of alopecia exhibited, but may manifest as diffused thinning hair, small or large areas of hair loss or completely denuded scalp or skin treatment.

There are a variety of treatments that can be prescribed by the doctor, trichologist or hairdresser with varying efficacy. There is no known cure for baldness or alopecia as yet, with the exception of traction alopecia which may have been self-inflicted or due to physical ill-treatment.

iv **Psoriasis**

Psoriasis is an inflamed, abnormal thickening of the skin. It can be a distressing condition, which usually affects the skin of the inner knees and elbows as well as the scalp. In some people, the whole body can be affected. In serious cases, scales may cover the whole of the scalp and there could be some hair loss. The cause of psoriasis is unknown. The symptoms are areas of thickened skin, which may have become raised and circular. Silvery or yellow scaling may be present. The skin may be very sore, itchy or painful. The treatment of psoriasis should be by a dermatologist.

v **Canities** (grey hair or a mixture of hair colour)

This is the irregular functioning of the colour pigment formation during hair growth where white hair occurs in the absence of normal hair colour pigmentation. The symptoms of canities are the presence of white hairs in small or large areas. The treatment is to apply semi-permanent or permanent colour to the hair.

c. **The hair follicle**

The hair follicle is the point at which the hair grows and is a tiny cup shaped pit buried in the fat of the scalp. The follicle is the point at which the hair grows. It is well supplied with miniature blood vessels that nourish the growing region.

The hair bulb

The hair bulb lies inside the hair follicle, which produces the hair. Special cells in the hair bulb produce the pigment that colours the hair. This is called melanin.

3a The natural hair colour is determined by the colour pigments within the hair's cortex. These are formed when the hair is in the anagen stage. Hair colour pigments (melanin) are deposited into the hair shaft in the papilla and germinal matrix. The hair colour that you actually see is affected by the amount and proportion of the pigments present, the light in which the hair is seen, and, to a certain extent, by the colours of the clothes and make-up worn.

With age, or a period of stress, the reduction of natural pigment may be reduced and the hair's overall colour changes and may become lighter. If no pigment is produced then the new hair will be white. The proportion of white hair among the naturally pigmented ones causes the hair to become grey. The pigments responsible for black and brown hair are called eumelanin and those responsible for red and yellow are called pheomelanin.

b

There are two main forms of bleaches – emulsion and powder – and both types are mixed with hydrogen peroxide.

Emulsion bleaches have the advantage of being particularly suitable for full head bleaches because they have a cooling agent added to them. They also have an excellent consistency that prevents them from dripping and drying out. However, they have a disadvantage of expanding whilst the bleach is working which can cause the product to seep onto other areas of the hair.

Powder bleach is particularly suitable for partial colouring techniques, as it does not expand quite as much as emulsion bleach. If used for full head bleach it could cause scalp irritation.

Bleaching is the process of making the hair colour lighter. Bleaches are alkaline and so have the effect of opening the hair cuticles on the outside of the hair shaft, enabling the bleach to reach the cortex where the natural colour pigment is found. The colour pigment eumelanin is the first to be acted on. This affects the black and brown colouring. The more difficult to alter is pheomelanin, which gives red and yellow colouring. As bleaching proceeds, the hair becomes lighter and lighter and the hair changes colour in this order black - brown - red brown - orange – light yellow – very light yellow.

Owing to the alkalinity and strength of bleaching products, oxidation damage to the hair is inevitable. The cuticle will become more porous and the internal structure of the hair will become weaker and lessen the hair's elasticity and strength. Over-bleaching can result in such weakening of the hair that it will actually break off.

3a

Alkaline perming solution

- Effective on strong, coarse and resistant hair which is difficult to wave
- Has a pH of up to 9 and is suitable for different hair textures (the higher the pH and the stronger the lotion the more potential there is for damage).
- Swells the hair, lifts the cuticle and penetrates the cortex
- Less winding tension is required than with an acid lotion
- No additional heat is required

Acid perming solution

- Suitable for fine, delicate, porous and previously chemically processed hair
- Shrinks hair and smoothes cuticle

- Some require additional heat
- The test curl forms a softer, looser shape
- Acid perms need longer processing time than an alkaline perm

b

Spiral curls

Spiral curls are dependent on the length of the client's hair. Hair less than 250mm long would be difficult/impossible to form spiral shapes of any size.

Spiral curls can be produced from a variety of rods and curl formers which can be screw shape, square, long or flat. Your winding must be firm without undue tension. Wrap cleanly over the rod or former and secure without indenting or marking the wound hair. If you create uneven tension the spiral formation will be inconsistent and there may be gaps in the shape. Alkaline lotion should be used for spiral perming as the lotion is more effective on longer hair.

Root movement

This is perming the lower root ends of the hair. The hair is wound at the roots only with the ends left out and not processed. This allows the hair to produce fullness and volume and is best achieved on short layered hair 100mm-150mm long as the weight of the hair will not pull the root flat. Acid or alkaline lotion is often used as a thick cream or paste. Re-perming must be kept to the regrowth area only.

Pin curl

This is used to give lift and body with soft movements at the ends. It is ideal for use on layered hair on a uniform length of 50-75mm long. Pin curling can be used with either plastic or aluminium pin clips. Acid or alkaline lotion is often used as a thick paste.

Weaving

This is when a section of hair is woven into two, and each section is wound on a different sized rod, or when one section is left out and not permed. This gives a textured soft and stronger movement within the style. It is ideal on layered or graduated hair that is over 75mm long.

Hair Discolouration

The cause of discolouration is either the use of metallic tools or equipment or metallic dye present in the hair. An incompatibility test should be carried out and non-metal tools and equipment should be used. If this does occur then the hair needs to be toned to the correct shade using semi-permanent colour.

Pull burn

The cause of pull burns could be from a number of possible situations such as

- Perm lotion is allowed to enter the follicle
- tension on the hair is excessive when winding the rod
- using winding meshes which are too large
- poor rinsing when removing perming lotion

Remedial action to be taken is to apply a smoothing moisturiser to the affected area or to refer to a doctor if serious.

Straight Frizz

The cause of this could be from a number of possible situations, such as lotion being too strong for the hair, excessive winding tension and hair being over-processed.

Remedial action to be taken: apply restructurant or penetrating conditioner and cut ends to reduce frizz.

4a

Single action perm

This perm remains on the hair throughout the chemical process, first to smooth and straighten the hair. The hair is then wound onto rods and the desired curl pattern is produced.

Dual action perm

In these perms, the first application of ammonium thioglycollate is usually in the form of a cream. This is step one of the rearranger. The first step straightens and smoothes the hair in preparation for winding. The second step is the winding stage and the hair is wound in a weaker solution of ammonium thioglycollate that produces the curl pattern in the hair.

b

Pull burn

The cause of pull burns could be from a number of possible situations such as

- Perm lotion is allowed to enter the follicle
- tension on the hair is excessive when winding the rod
- using winding meshes which are too large
- poor rinsing when removing perming lotion

Remedial action to be taken is to apply a smoothing moisturiser to the affected area or to refer to a doctor if serious.

Straight frizz

The cause of this could be from a number of possible situations, such lotion being too strong for the hair, excessive winding tension and hair being over-processed.

Remedial action to be taken: apply restructurant or penetrating conditioner and cut ends to reduce frizz.

Curl drops after the perm

The cause of this is that the rearranger product selected is too strong or left on too long; hair has become over-processed.

Remedial action to be taken: do not re-perm but treat the hair until it is strong enough to perm. Cut hair if necessary.

c

There are three bonds that are mainly affected when relaxing hair. These are disulphide, salt and hydrogen bonds. Disulphide/sulphur bonds are the strongest. These bonds are broken when the hair is relaxed or permed. If too many bonds are broken during the chemical process, the hair will become weak and break. When a relaxer is used the product causes the cuticle to swell, allowing it to penetrate the cortex. The disulphide bonds in the cortex are broken and one sulphur atom is removed from the broken bond. It rejoins with a new partner: lanthionine. The hair now has one sulphur bond and one lanthionine bond. After the relaxing process, one bond is permanently straight and cannot be altered. Once the hair is relaxed sufficiently, the hair is rinsed to halt the process. The hair is then shampooed using a neutralising shampoo which is acid to remove any traces of alkaline that still remains in the hair.