UBT446

Enhance appearance using scalp micropigmentation techniques

ASSIGNMENT 9

Preparation, equipment, pigments and controlled application

Student name	
Tutor	
Date issued	
Date completed	

Aim

To demonstrate comprehensive knowledge of treatment-day preparation, testing, clinical photography, equipment and cartridge selection, pigment preparation and the controlled variables and techniques used to provide SMP safely in accordance with UBT446.

Instructions

Complete all sections. Modern technical wording is used first; relevant ITEC technique names are retained for examination preparation. Manufacturer instructions, legal requirements, insurance and centre protocols take priority over generic settings.

Student signature	
Date	

Task 1 - Match the terms with the descriptions

1. Treatment-day preparation and testing

Match each term with the correct description. Write the correct number in the answer column.

Term	Answer
A. Treatment-day recheck	____
B. Cooling-off period	____
C. Allergy or product-sensitivity test	____
D. Thermal and tactile assessment	____
E. Scalp and hair preparation	____
F. Topical anaesthetic or numbing product	____
G. Final consent and plan confirmation	____

Descriptions

1. Preparation to the agreed hair length plus cleansing of intact scalp until oils, debris and topical residues are removed without unnecessary irritation.

2. A manufacturer-led test, documented with product, batch, site, method, timing, response and action; a negative result cannot guarantee future tolerance.

3. Reconfirmation of the agreed area, template, products, risks, costs, aftercare and voluntary permission immediately before the procedure.

4. A minimum reflection period of 48 hours between initial consultation and first treatment in UBT446, subject to any longer legal, insurer or centre requirement.

5. Immediate pre-procedure checks of sensation and response used to confirm that the client can correctly identify different sensations in the proposed treatment area.

6. Verification of identity, medical/medicine changes, scalp condition, pre-care compliance, consent, photographs and suitability before setup proceeds.

7. A licensed or appropriately sourced product used only within training, law, insurer and manufacturer instructions; remove it completely before implantation and do not reapply across punctured skin unless specifically authorised and lawful.

Task 1 - Match the terms with the descriptions

2. Clinical photography and hairline template

Match each term with the correct description. Write the correct number in the answer column.

Term	Answer
A. Baseline photograph	____
B. Standardised views	____
C. Clinical photography consent	____
D. Teaching or marketing consent	____
E. Hairline template	____
F. Natural asymmetry	____
G. Template approval record	____

Descriptions

1. Separate explicit permission for promotional or educational use; refusal must not affect access to treatment.
2. A pre-treatment image showing the untreated starting point and areas of concern.
3. Recognition that faces and skulls are not perfectly symmetrical and that forced identical sides may look artificial.
4. Repeatable position, distance, angle, lighting and camera settings used for valid visual comparison without beauty filters.
5. Specific permission to take and securely store images required for the treatment record.
6. A dated photograph and signed or otherwise documented agreement confirming the approved boundary before implantation.
7. A removable drawn guide based on the original hairline, facial proportions, loss pattern, future progression and agreed realistic design.

Task 1 - Match the terms with the descriptions

3. Equipment, workstation and ergonomics

Match each term with the correct description. Write the correct number in the answer column.

Term	Answer
A. Clinically clean workstation	____
B. Machine and compatible power supply	____
C. Protected handpiece and cable	____
D. Lighting and magnification	____
E. Client positioning	____
F. Practitioner ergonomics	____
G. Function check and fault isolation	____

Descriptions

1. Neutral posture, stable support, suitable working height and two-hand control used to reduce strain and improve accuracy.
2. An organised prepared field separating protected clean supplies from contaminated activity and providing nearby sharps/waste disposal.
3. Adequate head and body support giving safe access to the area without compromising comfort, breathing, circulation or dignity.
4. Pre-use confirmation of integrity, compatibility, assembly and smooth safe operation; a defective item is removed from service.
5. A compatible system operated within manufacturer instructions rather than relying on one universal voltage or setting.
6. Disposable barrier film or sleeves used on high-touch components, renewed per client; barriers do not replace cleaning and disinfection.
7. Shadow-free illumination and appropriate visual enlargement used to monitor placement, skin response and coverage accurately.

Task 1 - Match the terms with the descriptions

4. Needle and cartridge selection

Match each term with the correct description. Write the correct number in the answer column.

Term	Answer
A. Single-point or liner configuration	____
B. Multi-point or shader configuration	____
C. Micro or nano terminology (ITEC)	____
D. Needle diameter	____
E. Needle taper	____
F. Cartridge membrane	____
G. Sterile single-use cartridge	____

Descriptions

1. A manufacturer or course descriptor for very fine needle systems; the name alone does not define exact diameter or suitability across brands.
2. The width or gauge of each needle, considered with skin thickness, sensitivity, hair calibre, desired impression and technique.
3. A grouping of more than one point selected only when appropriate for controlled shading, blending or another agreed effect.
4. A feature intended to reduce backflow into a compatible handpiece; it does not replace barriers, handpiece decontamination or safe disposal.
5. A sealed, intact, in-date and traceable component opened for one client and placed directly into sharps waste after use.
6. The length and geometry of the narrowing point, affecting interaction with skin but not determining technique in isolation.
7. One point used when an individual controlled impression or fine linear effect is appropriate to the objective and competence.

Task 1 - Match the terms with the descriptions

5. Pigment selection and preparation

Match each term with the correct description. Write the correct number in the answer column.

Term	Answer
A. Organic and inorganic colourants	____
B. Compatible dilutant or booster (ITEC wording)	____
C. Modifier and colour correction	____
D. Opacity and translucence	____
E. Mixing ratio	____
F. Batch, expiry and period after opening	____
G. Aseptic pigment dispensing	____

Descriptions

1. Selection of warmer/cooler components to neutralise or correct an existing or predicted colour influence without promising an exact healed shade.

2. Documented proportions of pigment, dilutant and modifier used to reproduce or safely adjust the plan later.

3. Pigment categories with different chemical structures and optical properties; the label alone does not establish quality, purity or suitability.

4. Use clean single-use cups and a new sterile single-use transfer device for each bottle, prevent nozzle contact and never re-enter a bottle with a used device.

5. Product-specific use-by and opened-life limits checked before dispensing and recorded with traceability information.

6. An approved manufacturer-compatible product used to adjust concentration or flow; never dilute with tap water or an unapproved liquid.

7. The degree to which a healed deposit masks or allows underlying skin colour to influence perception, affected by formulation, concentration, depth and skin optics.

Task 1 - Match the terms with the descriptions

6. Controlled application variables

Match each term with the correct description. Write the correct number in the answer column.

Term	Answer
A. Needle exposure or hang	____
B. Actual implantation depth	____
C. Angle	____
D. Pressure	____
E. Machine output and speed	____
F. Hand speed and contact time	____
G. Three-point skin support (three-way stretch in ITEC)	____

Descriptions

1. The needle's visible extension from the cartridge; it does not equal exact tissue depth.

2. Stable support in three directions creating a controlled surface without excessive distension, tearing or bruising.

3. The tissue level actually reached, determined by the interaction of exposure, stroke, pressure, angle, hand movement, support and skin resistance.

4. The orientation of entry selected for the area and effect while avoiding dragging or elongated trauma where a crisp impression is intended.

5. The force applied, continually adjusted to thickness, resistance, sensitivity, bleeding and visible tissue response.

6. Device parameters chosen within manufacturer guidance for the cartridge, skin and technique; there is no universal setting for every machine or client.

7. The rate of practitioner movement and duration of needle interaction, coordinated with machine output to control deposit and trauma.

Task 1 - Match the terms with the descriptions

7. Application technique terminology used in ITEC

Match each term with the correct description. Write the correct number in the answer column.

Term	Answer
A. Pointillism	____
B. Pendulum	____
C. Shading	____
D. Blending	____
E. Feathering	____
F. Hair stroke or obovoid method	____
G. Cross-hatching and sweep/stroke methods	____

Descriptions

1. Controlled tonal coverage using appropriately selected repeated deposits or movement rather than presenting every mark as a follicle.

2. A controlled pendular movement described in ITEC; speed, pressure, depth and exit must be managed to avoid dragging or excess trauma.

3. Gradual integration of one treated area, density or tone into another to avoid a visible boundary.

4. Individual discrete impressions used to simulate follicular dots or build controlled texture and density.

5. Intersecting or directional movement patterns described in ITEC for selected effects; they require careful control to avoid overlap and overworking.

6. Light tapered placement used to soften an edge or transition without a repetitive solid line.

7. Linear or elongated/oval effects named in ITEC; use only for an appropriate objective and within competence, not as the default for follicle simulation.

Task 1 - Match the terms with the descriptions

8. Systematic treatment, monitoring and records

Match each term with the correct description. Write the correct number in the answer column.

Term	Answer
A. Small zones and planned sequence	____
B. Controlled wiping	____
C. Spacing and density	____
D. Progressive layering	____
E. Continuous monitoring	____
F. Stop, reassess or adapt	____
G. Complete treatment record	____

Descriptions

1. Build the healed visual effect through controlled passes and sessions rather than excessive saturation during one visit.

2. Document equipment, cartridge/configuration/batch, pigment/dilutant/modifier ratios and batches, settings, techniques, duration, response, photographs and signatures.

3. Remove excess pigment and tissue fluid with appropriate clean material and minimal friction so placement and skin response remain visible.

4. Pause when bleeding, erythema, swelling, trauma, retention, discomfort, distress or equipment performance becomes abnormal; change or discontinue safely.

5. Divide the area, define start/end points and work methodically to control coverage, gaps, overlap and orientation.

6. Observe skin and surrounding tissue, client comfort/wellbeing and implantation quality throughout, using verbal feedback and a 0-10 pain scale.

7. Use planned but non-mechanical variation and gradual concentration, including a soft transition where required by the design.

Task 2 - Answer the questions

Preparation, equipment, pigments and controlled application

1. Describe treatment-day checks, pre-treatment scalp/hair preparation and the advice used to confirm that the client remains suitable and ready for SMP.

2. Explain the UBT446 cooling-off period, allergy/product-sensitivity testing, thermal/tactile assessment, documentation and the limits of a negative result.

3. Describe standardised clinical photography, separate image consents and how a realistic hairline template is drawn, agreed and recorded.

Task 2 - Answer the questions

Preparation, equipment, pigments and controlled application

4. Explain how to prepare a clinically clean workstation, position client and practitioner, protect equipment and complete a safe function check.

5. Explain selection of needle diameter, taper and single/multi-point configurations, including micro/nano, liner/shader and cartridge-membrane terminology.

6. Describe checks for sterile cartridge packaging, expiry, batch, compatibility, opening, loading, test movement, single use and immediate sharps disposal.

Task 2 - Answer the questions

Preparation, equipment, pigments and controlled application

7. Explain pigment selection using hair/skin colour, tone/undertone and objectives. Include organic/inorganic colourants, opacity/translucence, dilutant, booster and modifier terminology.

8. Describe safe shaking/mixing, aseptic dispensing and documentation of pigments, ratios, batches, expiry and period after opening without contaminating original bottles.

9. Explain how needle exposure, stroke, actual depth, angle, pressure, machine output, hand speed, skin support and skin resistance interact during implantation.

Task 2 - Answer the questions

Preparation, equipment, pigments and controlled application

10. Describe pointillism, pendulum, shading, blending, feathering, hair stroke, obovoid, cross-hatching and sweep/stroke terminology, including limits on their appropriate use.

11. Explain systematic work in small zones, controlled wiping, natural spacing, progressive layering, soft transitions and avoidance of overlap or overworking.

12. State when to stop, reassess, adapt or discontinue treatment and list the complete information required in the treatment record after each session.

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

1. What must be reconfirmed before treatment begins?
A. Identity, consent, current suitability and the agreed plan
B. Only preferred density
C. Only pigment shade
D. Only appointment duration
Answer: _____

2. What minimum cooling-off period does UBT446 state?
A. 12 hours
B. At least 48 hours between initial consultation and first treatment
C. 24 hours
D. Seven days in every case
Answer: _____

3. When should required allergy/product testing be completed under UBT446?
A. After the first session
B. Only if a reaction occurs
C. At least 48 hours before treatment
D. During the final session
Answer: _____

4. What does a negative sensitivity test prove?
A. That every product is safe
B. That aftercare is unnecessary
C. That the client cannot develop delayed sensitivity
D. It does not guarantee that no future reaction will occur
Answer: _____

5. Why must thermal and tactile assessment be performed immediately before treatment?

A. To identify altered sensation or sensitivity in the proposed area
B. To determine pigment batch
C. To diagnose every neurological condition
D. To replace medical history
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

6. What is required before clinical photographs are taken?
A. Only a pigment batch number
B. Specific permission for photography and secure storage
C. Treatment must already be complete
D. A social-media account
Answer: _____

7. Which method supports reliable photographic comparison?
A. Beauty filters
B. Changing distance each visit
C. Consistent position, distance, angle, views and lighting
D. Automatic colour enhancement
Answer: _____

8. Which consent is required for marketing or teaching images?
A. None if the scalp is shown
B. Treatment consent automatically covers it
C. Only practitioner approval
D. Separate explicit permission beyond clinical-record photography
Answer: _____

9. When may implantation follow a hairline template?
A. After the client has seen, accepted and documented the final design
B. Before the client sees it
C. Before consultation
D. Whenever the practitioner prefers
Answer: _____

10. How should natural facial asymmetry affect hairline design?
A. It should always be removed
B. It should be considered rather than forcing artificial mirror-image symmetry
C. It is irrelevant
D. It requires maximum density
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

11. What is a clinically clean workstation?
A. Any empty trolley
B. A fully sterile operating theatre
C. An organised field separating clean supplies from contaminated activity
D. A storage cupboard
Answer: _____

12. What should an equipment function check confirm?
A. Only that the machine makes sound
B. Only the highest setting
C. Only cable colour
D. Integrity, compatibility, assembly and smooth safe operation
Answer: _____

13. What should happen to faulty equipment?
A. Remove it from use until competently assessed as safe
B. Continue at lower power
C. Cover the fault with film
D. Ask the client to hold it
Answer: _____

14. Do barriers replace cleaning and disinfection?
A. Yes, on every surface
B. No; they are an additional contamination control
C. Yes, if double layered
D. Only for the handpiece
Answer: _____

15. Why are positioning and ergonomics important?
A. They determine phototype
B. They replace skin support
C. They support access, comfort, stable control and reduced practitioner strain
D. They guarantee pigment retention
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

16. What does needle diameter describe?
A. The number of sessions
B. The machine stroke
C. The treatment-zone size
D. The width or gauge of an individual needle
Answer: _____

17. What does needle taper describe?
A. The length and geometry of the narrowing point
B. The cartridge batch
C. The cable length
D. The pigment viscosity
Answer: _____

18. What does micro or nano terminology guarantee?
A. The same diameter for every manufacturer
B. Nothing exact across brands; dimensions and instructions must be checked
C. Suitability for every scalp
D. A pain-free procedure
Answer: _____

19. Why is there no single cartridge for every client?
A. All cartridges create identical effects
B. Only price matters
C. Selection depends on skin, hair, area, objective and technique
D. Configuration has no effect
Answer: _____

20. What is the role of a cartridge membrane?
A. To sterilise the handpiece
B. To permit cartridge reuse
C. To control pigment colour
D. To reduce backflow in a compatible system without replacing other controls
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

21. What must be checked before opening a sterile cartridge?
A. Correct type, compatibility, intact seal, expiry and batch
B. Only package colour
C. Only client preference
D. Whether it was previously used
Answer: _____

22. What does single use mean?
A. Reuse for the same client next month
B. One client and one procedure followed by immediate sharps disposal
C. Reuse until blunt
D. Clean and return to storage
Answer: _____

23. What should guide pigment selection?
A. The darkest colour available
B. The practitioner's favourite bottle
C. Hair/skin colour, tone/undertone, previous pigment, objective and healed optics
D. Cartridge brand alone
Answer: _____

24. What do organic and inorganic labels describe?
A. Whether pigment is sterile
B. Whether it will never fade
C. Exact healed colour
D. Colourant chemistry categories, not a complete guarantee of quality or safety
Answer: _____

25. How should pigment be diluted?
A. Only with a compatible approved dilutant following instructions
B. With tap water
C. With any saline
D. With leftover pigment
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

26. What is a booster in ITEC terminology?
A. A substitute for pigment records
B. A compatible additive used for a defined manufacturer-supported colour or formulation purpose
C. A medicine added after puncture
D. An unlabelled liquid
Answer: _____

27. Why consider opacity and translucence?
A. They determine hair-loss cause
B. They replace undertone assessment
C. Underlying skin and concentration influence the perceived healed colour
D. They guarantee retention
Answer: _____

28. Which dispensing method best protects the original bottle?
A. Touch the nozzle to the used cup
B. Reuse one syringe across bottles
C. Dip the cartridge into the bottle
D. Use a new sterile transfer device per bottle without nozzle contact or re-entry
Answer: _____

29. What happens to unused pigment in a single-use cup?
A. Discard it safely
B. Return it to the bottle
C. Keep it for another client
D. Mix it into the next batch
Answer: _____

30. Why record pigment ratios, batches and expiry?
A. To determine pain threshold
B. For traceability, evaluation and reproducible future planning
C. To replace consent
D. To diagnose allergy
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

31. Does visible needle exposure equal implantation depth?
A. Yes, exactly
B. Yes, on scar tissue only
C. No; it is only one factor in actual tissue interaction
D. Yes, if the machine is digital
Answer: _____

32. Which group influences actual implantation depth?
A. Hair colour and camera angle
B. Pigment label only
C. Client age alone
D. Exposure, stroke, pressure, angle, hand speed, support and skin resistance
Answer: _____

33. What may result from implantation that is too superficial?
A. Weak retention or early fading
B. Guaranteed migration
C. Permanent hair growth
D. Improved scar texture
Answer: _____

34. What may result from implantation that is too deep or traumatic?
A. Sharper smaller dots
B. Blur, enlargement, migration, cool appearance and increased tissue injury
C. No inflammatory response
D. Guaranteed even retention
Answer: _____

35. Why must pressure be adapted?
A. Maximum pressure is always required
B. Pressure affects only sound
C. Thickness, resistance and response vary across the scalp
D. Pressure cannot influence trauma
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

36. What does needle angle describe?
A. Number of pigment drops
B. Client head position only
C. Cartridge batch
D. Orientation of entry relative to the scalp
Answer: _____

37. Why coordinate machine output with hand speed?
A. Together they influence deposit, spacing and tissue interaction
B. They diagnose hair loss
C. They replace skin support
D. They are fixed for every client
Answer: _____

38. What is three-point skin support (three-way stretch in ITEC)?
A. Maximum stretching force
B. Stable support in three directions without excessive distortion
C. A substitute for depth control
D. A method for opening cartridges
Answer: _____

39. Why avoid excessive skin distension?
A. It guarantees retention
B. It eliminates bleeding
C. It can contribute to tearing, bruising and uneven implantation
D. It makes every impression smaller
Answer: _____

40. What is pointillism?
A. A continuous solid line
B. A disinfecting method
C. A hair-loss scale
D. Controlled placement of individual discrete impressions
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

41. What is blending?
A. Gradual integration of density or tone between treated areas
B. Maximum saturation at every edge
C. A sterile-field method
D. A cartridge test
Answer: _____

42. Which statement about ITEC technique names is correct?
A. Every technique suits every client
B. Each technique must be matched to objective, skin and competence
C. Hair strokes are mandatory for SMP
D. Cross-hatching removes overlap risk
Answer: _____

43. What is the benefit of working in small zones?
A. It removes the need for planning
B. It guarantees one-session completion
C. It helps control sequence, coverage, overlap and skin response
D. It prevents all discomfort
Answer: _____

44. Why is controlled wiping important?
A. It forces pigment deeper
B. It replaces cleansing
C. It removes every implanted mark
D. It reveals placement and response without unnecessary friction or trauma
Answer: _____

45. What creates a soft transition?
A. Gradual spacing and density variation with concentration behind the leading edge
B. A repetitive solid first line
C. Maximum first-row density
D. Identical spacing everywhere
Answer: _____

Task 3 - Multiple-choice knowledge test

Select one answer for each question.

46. When should the practitioner pause and reassess?
A. Only when pigment is empty
B. When skin response, comfort, implantation quality or equipment performance changes
C. Only at the end
D. Never once treatment begins
Answer: _____

47. Which finding may require treatment to stop?
A. A calm expected response
B. An agreed template
C. Excessive bleeding, tissue trauma, client distress or suspected reaction
D. Normal mild sensation
Answer: _____

48. What belongs in the treatment record?
A. Only appointment time
B. Only final photograph
C. Only desired density
D. Cartridge, products/batches/ratios, settings, technique, response, photos and advice
Answer: _____

49. What should be assessed before adding density later?
A. Healed retention, colour, skin response and current treatment objective
B. Only the fresh appearance
C. Only the original bottle
D. Client clothing colour
Answer: _____

50. What is the safest overall application principle?
A. Use maximum depth immediately
B. Use controlled technique, monitor continuously and adapt to the client and objective
C. Use identical settings for every scalp
D. Continue despite abnormal response
Answer: _____