Qualification title: Level 3 Advanced Technical Diploma in Beauty and Spa Therapy (540)
Test title: Level 3 Beauty and Spa Therapy - Theory exam (1)
Version: April 2017
Base mark: 80

1

a) State **two** different forms of advertising that could be used to promote a new treatment in a spa or salon.                     (2 marks)

b) Explain **two** advantages for **each** form of advertising identified in a).               (4 marks)

(Total 6 marks)

**Answer**

1 mark per form of advertising identified (to a maximum of 2 marks) and 1 mark for each advantage described (to a maximum of 4 marks).

- **Leaflets / flyers**
  Ease of distribution (1) which communicates to a range of people (1).
  Provides detail of the salon/treatments/promotions (1) which attracts customers (1).
  Easier to control cost (1).

- **Press release**
  Communicates across a wider area (1).
  Edited/written by a professional journalist (1).
  Opportunity to include a promotional offer (1).

- **Promotional event/In store promotion**
  Visual so the client can see treatments/products (1).
  Can demonstrate the treatment/products (1).
  Opportunity to for the client to sample (1) which encourages clients over the threshold (1).

- **Social media**
  Quick to set up/implement (1) which allows budget to be spent elsewhere (1).
  Able to communicate regularly and immediately (1) to a wider audience (1).
  Can be updated quickly and instantly (1).

  Any other appropriate justifiable response.

- **Banners.**

**Test spec reference: 301 1.1**

Total marks: 6
2
Describe each of the following anatomical terms.
   a. Prone.
   b. Lateral.
   
**Answer**
1 mark for each of the following
   • Prone - Lying face down/lying on abdomen.
   • Lateral - Towards the outer side of the body / the side of the body.

Test spec reference: 302 1.1  Total marks: 2

3
Explain the effects of UV radiation on the skin.
   
**Answer**
1 mark each for any of the following, to a maximum of 4 marks
1 mark for each effect up to a max of 2 marks. 1 mark for each correctly linked impact or consequence
UV radiation penetrates the skin (1) which stimulates mitosis (1) causes premature ageing of the skin/ wrinkles and fine lines (1).
More melanocytes are produced (1) which injects more melanin into the surrounding cells to absorb harmful rays (1).
Excessive exposure damages the underlying tissue causing redness/dry dehydrated skin (1) and increase risk of skin cancer (1).
Can produce uneven melanin distribution (1) and thickening of the epidermis / leathery appearance (1).
Begin the process of vitamin D production (1).

Test spec reference: 302 2.1  Total marks: 4

4
Explain how joint movement affects the synovial joint.
   
**Answer**
1 mark for each of the following, to a maximum of 4 marks
Increases flexibility and mobility / range of movement (1) by improving the flow of synovial fluid (1) within the joint capsule (1). Stimulates blood flow to the joint (1).

Test spec reference: 302 3.4  Total marks: 4
5
State the bones located in the shoulder girdle. 

**Answer**

1 mark for each of the following
- Clavicle
- Scapula

*Test spec reference: 302 3.3*  
*Total marks: 2*

6
State the muscle responsible for each of the following movements.
- Flex the hip and internally rotate the knee. (1 mark)
- Abduct and rotate the hip. (1 mark)
- Flex the elbow, supination and pronation of the forearm. (1 mark)

**Answer**

1 mark for each of the following
- Sartorius
- Gluteus minimus/gluteus medius
- Brachioradialis

*Test spec reference: 302 4.2*  
*Total marks: 3*

7
Explain how the pulmonary circulation system differs from the systemic circulation system.  

**Answer**

1 mark each for any of the following, to a maximum of 4 marks.

**Pulmonary**
- Pulmonary arteries operate under high pressure (1) transporting blood from the heart to lungs (1) removing deoxygenated blood more quickly from the body (1).
- Veins transport oxygenated blood a short distance from the lungs to the heart (1).
- A small, closed circulatory system between two organs (1) so that blood can flow between a smaller area (1) to provide oxygen and remove waste quickly (1).

**Systemic**
- Systemic circulation carries oxygen and nutrients from the heart to the body (1) and deoxygenated blood from body to heart (1).

*Test spec reference: 302 5.1*  
*Total marks: 4*
8
State the location of the thymus gland. (1 mark)

**Answer**
1 mark for the following:
- Behind the sternum.

Test spec reference: 302.2 Total marks: 1

9
Describe the function of the thoracic duct. (2 marks)

**Answer**
1 mark for each of the following:
- Collects lymph from the left side of the head, neck, left arm, lower limbs and abdomen.
- Drains lymph into the left subclavian vein.

Test spec reference: 302.1 Total marks: 2

10
Describe one cause and one symptom of Bell's Palsy. (2 marks)

**Answer**
1 mark for each of the following:
- Damage to the facial nerves/nerve endings.
- Paralysis or severe weakness which causes the facial muscle on the side of the face affected to droop.

Test spec reference: 302.7.2 Total marks: 2
11

Explain how external respiration physically affects the body. (6 marks)

**Answer**

1 mark for each of the following, maximum of 3 marks per effect, and then additional up to 3 marks for the impact of that effect

- The pressure inside the lungs decreases (1), drawing air into the nasal cavity/mouth. (1)
- During the drawing in of air the diaphragm contracts and flattens (1), increasing the volume of the thoracic cavity. (1)
- The intercostal muscles contract (1), drawing the ribs upwards and outwards, changing the pressure within the lungs. (1)
- The oxygen diffuses across the alveolar walls into the blood capillaries (1) where it is transported to the cells of the body. (1)
- From the cells waste carbon dioxide is taken (1) from the cells of the body via the blood vessels back to the alveoli. (1)
- The pressure in the lungs increase, (1) pushing the air up and out through the nasal cavity/mouth. (1)
- Breathing oxygen in through the nose/mouth (1) where it is moistened/filtered. (1)
- Exhales air (1) and the diaphragm relaxes. (1)

Test spec reference: 302 8.1 Total marks: 6

12

State the advice that should be given to a client who experiences a headache following a body massage. (2 marks)

**Answer**

1 mark for each of the following

- Sip water (1) and rest/relax (1) away from heat treatments/high temperature environments and bright lights (1), apply cold compress (1).

Test spec reference: 303 3.1 Total marks: 2
13

Explain why it is important for a therapist to maintain good posture and apply techniques correctly when carrying out a massage. (6 marks)

**Answer**

1 mark each for any of the following, to a maximum of 6 marks, maximum of 3 marks per effect, and then additional up to 3 marks for the impact of that effect

- Using the correct massage techniques will reduce the risk of therapist repetitive strain injury (1) and discomfort to the client (1) could lose salon business (1)
- Using correct massage techniques helps achieve treatment objectives (1) which can lead to repeat business (1)
- Correct posture will reduce the risk of fatigue (1), and injury to the therapist (1) and will help the therapist in applying smooth flowing massage movements (1)
- Good posture from the therapist will help maintain breathing techniques.

Plus any other suitable response.

**Test spec reference: 303 1.1**

Total marks: 6

---

14

Explain why the negative electrode is used on an oily skin during a desincrustation treatment. (6 marks)

**Answer**

1 mark each for any of the following, to a maximum of 6 marks maximum of 3 marks per effect, and then additional up to 3 marks for the impact of that effect

- Surface sebum (must not accept oils as replacement for sebum) is softened and broken down (1) and hardened comedones are softened (1)
- Sebum and moisture in the skin interact with the negatively charged ions (1) and an alkali is produced resulting in a deep cleansing of the skin (1) known as saponification (1).
- Tight pores on the skin's surface are relaxed/open (1) making extraction easier (1).
- Exfoliates the surface of the skin removing debris and dead skin cells (1).
- Breaks down the acid mantle which aids product absorption (1).

**Test spec reference: 304 2.4**

Total marks: 6
15
State four ways that a salon can promote sustainability and environmental awareness when providing body electrical treatments. (4 marks)

Answer
1 mark each for any of the following to a maximum of 4 marks.
- Effective use of products: Minimise (1) reusable (1).
- Reduce water consumption during treatments
- Recycle packaging
- Re-use packaging
- Switching machines and/or lighting off when not in use
- The use of disposable items where appropriate.

Plus any other suitable response.

Test spec reference: 305 1.2  Total marks: 4

16
Explain why ageing may limit the effectiveness of a course of body electrotherapy treatments. (4 marks)

Answer
1 mark each for any of the following, to a maximum of 4 marks

Muscles become less responsive to stimuli that would improve the tone (1).
Blood/lymph circulation is less efficient (1) so is not stimulated as effectively (1) which means less oxygen is transported to the cells and tissues (1). Waste removal from the tissues is less effective (1).
Elasticity of skin becomes slack (1) and becomes less responsive to the treatments (1).
Cell metabolism slows down (1) and treatments take longer to stimulate the skin/sebaceous flow (1).

Test spec reference: 305 2.2  Total marks: 4
### Question 17

a) State the meaning of physiological and psychological in relation to a spa treatment (2 marks)

b) Explain the physiological and psychological effects of a thermal body wrap treatment (5 marks)

**Answer**

a) 1 mark for each of the following

- Psychological refers to the mental state.
- Physiological refers to the function of the body/physical side of the body.

b) 1 mark each for any of the following, to a maximum of 5 marks. Minimum of 2 marks to be achieved from each category to achieve maximum marks.

<table>
<thead>
<tr>
<th>Physiological</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vasodilation increases the circulation to the area (1) which promotes cellular nutrition (1) and cellular renewal/cellular metabolism (1).</td>
<td></td>
</tr>
<tr>
<td>Desquamation improves skin condition (1).</td>
<td></td>
</tr>
<tr>
<td>Muscle tension is relaxed by the thermal effects (1).</td>
<td></td>
</tr>
<tr>
<td>Assists the lymphatic system to speed up the removal of excess tissue fluid (1).</td>
<td></td>
</tr>
<tr>
<td>Stimulates the renal system (1) to detoxify and speed up the removal of waste through increased urine output (1).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychological</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Relaxing/calming to the mind (1) creating a sense of well being (1) which alleviates the feelings of stress (1) and promotes sleep (1).</td>
<td></td>
</tr>
</tbody>
</table>

**Test spec reference: 306 2.1**

**Total marks: 7**
The information given in the table below is a case study of a client who has come into the salon for treatment. The client has a 4 hour booking, to include consultation.

Propose a treatment plan, including advice and guidance, for the client. Give justification for your choices.

**Name:** Joanne  
**Gender:** Female  
**Age:** 56  
**Height:** 5ft 5in / 1.64  
**Weight:** 9 stone / 57.15g  
**Medical history:** Has a history of sciatica. Post-menopausal use of HRT following a hysterectomy at age 45.  
**Medication:** HRT  
**Comments:** Really enjoys her job which involves lots of travel to and from work. Her occupation is an HR officer and she spends much of her time sitting at a desk working on a computer. Wants to relax.  
Client is concerned about her weight gain on abdominal area and upper thigh area she feels this is due to her occupation, lack of exercise and eating lots of unhealthy convenience food.  
Client has recently returned from a two week break in Dubai and has noticed a change in her facial skin complexion – fine lines seem to be apparent around the eyes. The skin is dehydrated particularly over the cheek area as it looks tight and parched. Around the nose and chin area the skin is rough and flaky in places.

**Physical Body Observations:** Very tanned, pear shaped body frame with dimply appearance on outer upper thighs, soft fat on abdominal area, skin on body generally very dry and flaky on lower legs.

**Answer**  
**Indicative content**  
Candidate’s response may include, but is not limited to, the following:

**Treatment plans**

1. **Body electrical:**
   a. 10 minutes G5 on upper thighs and abdomen to gently warm the area in preparation for galvanic treatment.
   b. 20 minutes of galvanic on the abdomen and outer upper thigh area utilising all the outlets on the machine – to stir up the cells contents and get the fatty deposits moving.
   c. Follow with 20 minutes of lymphatic drainage on abdomen and upper thighs – draining to the inguinal lymph nodes – to stimulate the lymphatic flow to aid the dispersal of fatty deposits.

2. **Dry spa:**
   a. Full body brush or full body exfoliation working distal to proximal up over the body, concentrating on the anterior and posterior of the upper thighs, lower legs and abdominal area – to exfoliate the stratum corneum.
iii. Body massage – full body massage would be beneficial:
   a. Back massage to include head and neck – concentrating on deep effleurage movements to aid relaxation.
   b. Pettrissage movements – on upper back and shoulder area – be mindful of sciatic in lower back and lighten pressure in this area.
   c. Legs, particularly upper thighs, deep pettrissage and tapotement to stimulate the circulation.
   d. Arms – firm pettrissage on upper arms to release tension.

iv. Facial electro-therapy:
   a. Cleanse and exfoliate followed with desincrustation – 10 minutes
   b. Follow with relaxing facial massage incorporating lymphatic drainage (vacuum suction) – 30 minutes
   c. Follow with iontophoresis – 8 minutes
   d. Nourishing mask – 10 minutes
   e. Moisturise – 2 minutes
   Or

v. Micro-dermabrasion facial 1 1/5 hr – cleanse, peel, micro -dermabrasion routine, soothing massage, soothing mask.

Advice and recommendations:
- Correct use of SPF creams daily, recommend to use at least SPF20 – 25 for face.
- Use SPF creams on body when exposed to the sun.
- Recommend course of facials to incorporate micro-dermabrasion for exfoliation or microcurrent and iontophoresis for moisturising and nourishing.
- Body therapy – course of galvanic and lymphatic drainage to work on the upper thighs and abdomen to help stimulate sluggish circulation.
- Body brush legs and arms daily to exfoliate any dead skin cells and stimulate cell mitosis.
- Apply daily nourishing moisturising cream to the body particularly the legs and arms.
- Nourishing serum for face to be used weekly.
- Daily use of moisturising cream to face.
- Gentle facial exfoliation carried out every 3 to 4 days using a mild non-abrasive exfoliator.
- Increase water intake to keep the skin hydrated.

Band 1 (1-5 marks)
Treatments proposed are not in a logical sequence, with no account of timing. Treatments proposed are not always suitable to the client and their needs, with no attention paid to, or understanding demonstrated of, the information provided in the case study. Limited treatment options considered, with no justification provided for choices made. Advice and recommendations are general and not tailored to suit the client's needs. No links made between the effects and benefits of treatments and advice, to the client’s objectives.

To access the higher marks within the band, the candidate has made some attempt to justify their choices made, but this is not always accurate or relevant to the client in the case study.
**Band 2 (6-10 marks)**

Treatment plan proposed is mostly relevant and accurate. Treatments proposed are in a logical sequence, but timing not always accurate. A range of treatment options were considered but not always meeting the client’s objectives. Tentative links between the choices made and the client’s needs, but lacks confidence in justifying their choices. Advice and recommendations provided on treatments suggested, but lacking future consideration and justification. Conclusion drawn, but does not fully support the treatment plan.

To access the higher marks within the band, the candidate has shown greater ability to make links between the choices made and the client’s needs. Conclusion made is balanced and supported.

**Band 3 (11-15 marks)**

Thorough and comprehensive plan, which is logically sequenced and considers the time available for each part of the treatment plan. Treatment plan and advice provided was accurate and considered the client’s needs and characteristics. A wide range of treatment options considered as part of the treatment plan, with detailed and accurate justification for the choices and recommendations made. Candidate makes clear links between effects and benefits of treatments and advice provided, with the objectives of the client and the specific issues identified in the case study. The candidate has come to a well balanced conclusion, which is fully substantiated.

To access the higher marks within the band, the candidate has given reasons both for and against treatment options considered and any limitations. The candidate has discussed, in detail, further treatments and products which will enhance the overall effectiveness of the treatment plan through link selling.

| Test spec reference: Ex Resp | Total marks: 15 |