Sample Mark Scheme
1. State **two** groups of people who the Health and Safety at Work Act is in place to protect. (2 marks)

**Answer**

One mark for each of the following up to a maximum of two marks:

- staff
- public
- patients.

2. Explain why the dimensions of a large box of dental equipment should be considered when preparing to move and handle it. (3 marks)

**Answer**

Explanation may include the following points up to a maximum of three marks:

The dimensions of the box might limit visibility causing accidents (1 mark), may require additional support/assistance/equipment with manoeuvring (1 mark), may need to clear obstacles out of the way when moving to prevent damage (1 mark), may have to ensure there is space/suitable set down point at the end of the journey (1 mark), the box could obstruct accessibility (1 mark).

3. State **two** categories of hazardous waste that may be found in a dental practice. (2 marks)

**Answer**

One mark for each of the following up to a maximum of two marks:

- sharps
- clinical waste
- special waste
- gypsum waste.
4. Describe how micro-organisms can be transmitted from person to person within a dental setting through each of the following:
   a) sneezes
   b) contact with surfaces.

**Answer**

One mark for each description up to a maximum of two marks for each factor:

- **a)** Sneezes contain fluid/spit (1 mark) which from an infected person contains micro-organisms/germs (1 mark), these can survive outside the body (1 mark) giving time for transfer to another if breathed in/ingested (1 mark)

- **b)** Micro-organisms can survive on contaminated surfaces (1 mark) these can then transfer through contact to hands/skin (1 mark) which if not washed, can quickly be transferred (1 mark) e.g. through dental instruments/hands to open grazes in the patient’s mouth (1 mark for relevant example)

5. a) List three instruments used in a dental examination. 
   b) Describe the use of each of the instruments identified in 5a).

**Answer**

- **a)** One mark for each of the following points up to a maximum of three marks:
  - mirror
  - probe
  - BPE probe.

- **b)** One mark for each of the following points up to a maximum of three marks:
  - mirror – enables vision of soft and hard tissues of the oral cavity/mouth, reflects light (1 mark), retract soft tissues (lips, cheeks, tongue) (1 mark)
  - probe – detects caries (1 mark)
  - BPE probe – to diagnose gingivitis and periodontal disease (1 mark), coding of pocket depths (1 mark).
6. Label points a-i on the diagram of the skull in Figure 1 using the following labels:

<table>
<thead>
<tr>
<th>Angle</th>
<th>Frontal</th>
<th>Mandible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maxilla</td>
<td>Occipital</td>
<td>Parietal</td>
</tr>
<tr>
<td>Ramus</td>
<td>Temporal</td>
<td>Zygomatic arch</td>
</tr>
</tbody>
</table>

(9 marks)

Figure 1

Answer

One mark to be given for each correct answer against the matching letter to a maximum of nine marks.

a. Parietal.
b. Temporal.
c. Occipital.
d. Ramus.
e. Angle.
f. Mandible.
g. Maxilla.
h. Zygomatic arch.
i. Frontal.
William is 15 years old. He attends his NHS appointment for impressions for an orthodontic assessment so a fixed appliance can be fitted.

Discuss a variety of considerations the dental nurse should take into account for the treatment. (9 marks)

**Indicative content**
- Legal requirements – consent
- Ways to obtain consent – contact parents, re-schedule appointment
- How to prepare for the impression, type of material to use for the impression, assist during the procedure
- Prepare instruments and materials for the dentist to use
- Disinfection of the impression and surgery post-treatment
- Sending the impression to the laboratory.

**Band 0: 0 marks**
No mars awarded

**Band 1: 1-3 marks**
Basic response with minimal considerations listed and little or no justification for decisions. Limited breadth of knowledge and depth of understanding on the treatment instruments, materials, processes and procedures. Candidate provides a basic analysis of consent with very limited reference to legal implications and explanation. Discussion is not well developed or balanced.

To access higher marks in the band, the response will contain some relevant considerations with limited reasoning.

**Band 2: 4-6 marks**
Response includes a variety of considerations explained with some justification for decisions. Response includes adequate breadth of knowledge and some depth of understanding on the treatment instruments, materials, processes and procedures. Candidate provides a reasonable analysis of consent with some detail on the legal implications. Discussion is clear and detailed in some areas, but not all.

To access higher marks in the band, the response will be structured well with detailed consideration that are supported with justifications.

**Band 3: 7-9 marks**
Comprehensive response with a variety of considerations mostly explained with justification for decisions. Response includes detailed breadth of knowledge and depth of understanding on the treatment instruments, materials, processes and procedures. Candidate provides a well-developed analysis of consent with reference to legislation/GDC Standard. Discussion is well developed and balanced.

To access higher marks in the band, the response will include considerations and decisions that are fully justified and laid out in a structured and logical way.