# UNIVERSITY OF BOLTON FACULTY OF HEALTH AND WELLBEING

### **BSc (HONS) DENTAL TECHNOLOGY**

### **SEMESTER TWO EXAMINATION 2018/2019**

## DENTAL TECHNOLOGY TECHNIQUES FOR ORTHODONTICS

**MODULE NO: DNT5105** 

Date: Tuesday 21 May 2019 Time: 10.00 am – 12.00 noon

<u>INSTRUCTIONS TO CANDIDATES:</u> There are <u>10</u> questions.

Answer <u>ALL 7</u> questions in Section A and <u>2</u> questions only from Section B.

Marks for parts of questions are shown

in brackets.

There are a total of 75 marks available.

The pass mark is 40%.

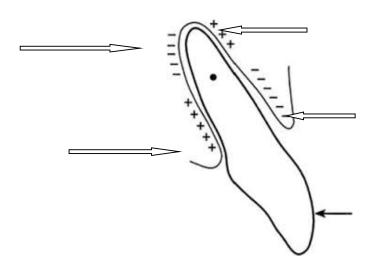
### **ANSWER ALL QUESTIONS IN SECTION A**

| 1. | When positioning a spring on a removable orthodontic appliance ider factors that will influence this.  | ntify the 3 marks |
|----|--|-------------------|
| 2. | Briefly explain what you understand by the term "The retention phase orthodontic treatment".   | e of<br>3 marks   |
| 3. | Succinctly discuss the advantages of the Adams clasp over other typ fixation.  | es of             |
|    |  | 5 marks           |
| 4. | What does the term IOTN stand for?   | 1 mark            |
| 5. | A patient presents with an upper right lateral incisor (UR2) in cross be Summarise a removable orthodontic appliance that could be prescrib correct this malocclusion. Your answer should include component pawhere relevant their size. | ed to             |
| 6. | When constructing a removable orthodontic appliance where should fixative/retentive components ideally be situated?  | the<br>3 marks    |

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7. The use of active components within a removable orthodontic appliance will facilitate tipping of a tooth. This will result in areas of tension and compression in the alveolar bone. With the aid of a labelled diagram describe this situation.

9 marks



Total marks for Section A - 31 marks

Please turn the page

#### **SECTION B - ANSWER 2 QUESTIONS ONLY**

a) Briefly discuss the treatment aims of The Clark Twin Block appliance.

(8 marks)

b) The Clark Twin Block is constructed using a number of component parts. Describe these components, their size and function and any possible alternatives to them.

(14 marks)

**Total 22 marks** 

9.

a) There are 3 commonly prescribed removable orthodontic appliances used for retention following active treatment. Name these and briefly describe them. Your answer should include their component parts and where relevant their component size.

(8 marks)

b) Orthodontic retainers have both advantages and disadvantages. Discuss what you understand by this statement.

(14 marks)

**Total 22 marks** 

Please turn the page

10.



http://c2-preview.prosites.com/228376/wy/images/HayesNance.jpg

a) Identify the fixed orthodontic appliance in the picture above and briefly explain what it is used for.

(3 marks)

- b) Soldering is used in a number of dental appliances in order to join 2 or more components together.
  - Summarise what you consider to be the main principles involved in soldering.

(14 marks)

c) Flux and anti-flux are used in the soldering process. What function do they perform?

(5 marks)

**Total 22 marks** 

**Total marks for Section B – 44 marks** 

**END OF QUESTIONS**