



**PROGRAM** : BACCALAUREUS TECHNOLOGIAE  
*PODIATRY*

**SUBJECT** : **PODIATRIC MEDICINE I THEORY**

**CODE** : HPMA 111

**DATE** : DECEMBER 2014

**DURATION** : 180 MINUTES

**WEIGHT** : 50:50

**TOTAL MARKS** : 173

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**EXAMINER** : MS. F. CASSIM

**MODERATOR** : MR. S. NTULI

**NUMBER OF PAGES** : 4 PAGES

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**INSTRUCTIONS**

1. PLEASE ANSWER ALL QUESTIONS
2. WRITE NEATLY AND LEGIBLY.
3. LEAVE A LINE SPACE BETWEEN QUESTIONS
4. NUMBER QUESTIONS CLEARLY
5. MARKS WILL BE ALLOCATED FOR LOGICAL EXPOSITION OF ANSWERS
6. PLEASE HAND BOTH YOUR QUESTION PAPER AND ANSWER SHEET TO THE INVIGILATOR

## SECTION A

**Read the case study below and answer the questions which follow:**

*Mrs Jones is a 67 year old patient who presents to the Podiatry Clinic. She complains of cramping pain in her calf muscles when she walks. The right leg is much worse than the left. On history taking you elicit that the pain has been present for 4 months and has gotten progressively worse. Mrs Jones suffers from hypertension and smokes 15 cigarettes a day. She has smoked since the age of 15. On observing Mrs Jones legs you notice that there is oedema (swelling) of the ankles. The colour of her skin appears dusky red and the skin appears very thin and paper-like. Mrs Jones indicated that if she gets cuts or sores on her legs that they take very long to heal.*

- 1.1 What system are you most likely to primarily assess? 3
- 1.2 Give reasons for your answer in 1.1 above. 5
2. Given the function of the system identified in 1.1 above, explain in your own words why you think Mrs Jones is experiencing calf pain. 5
3. Which clinical tests are you most likely to perform in order to assess this system? 6
4. If there was a potential problem with the system you identified in 1.1 above what are you likely to find on clinical examination. 6

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## SECTION B

**Read the case study below and answer the questions which follow:**

*A 14 year old patient visits the Podiatry Clinic complaining of painful ankles. He is currently in high school and participates actively in soccer and athletics. The patient regularly injures himself as he trips and falls over his ankles. The clinician in charge requests that you complete a thorough orthopaedic assessment, biomechanical evaluation and gait analysis. On gait analysis you note that the patient pronates excessively.*

- 1.1 In your own words define what you understand by the term “biomechanics.” 4
- 2 Differentiate between the terms “pronation” and “supination.” 6
- 3 Name the various phases of the gait cycle. 5
4. What is the importance of conducting a thorough orthopaedic assessment? 5

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|--|----|
| 1. What is your likely diagnosis of this patient's condition?      | 3  |
| 2. Describe the various clinical presentations of this condition.  | 12 |
| 3. What are the common risk factors associated with this condition | 6  |
| 4. What are the potential complications of this condition          | 5  |
| 5. Describe the management of this condition                       | 8  |
| 6. Explain how this condition can be prevented.                    | 6  |

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**SECTION F**

**Read the case study below and answer the questions which follow:**

*Mrs. Bond is a retired female who is her husband's main caregiver. She complained of a painful hyperkeratotic lesion and a heloma durum that has been present on the plantar aspect of the 1<sup>st</sup> and 5<sup>th</sup> metatarsal heads for a period of 6 years. The patient has high blood pressure, high cholesterol, and osteoarthritis affecting both knees.*

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|---|----|
| 1 Differentiate between the different types of heloma which may present | 10 |
| 2 Describe the pathogenesis of hyperkeratotic lesions.                  | 8  |
| 3 Describe your management plan for Mrs. Bond's problem.                | 10 |

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**28**

**TOTAL MARKS: 173**