ST MARY’S UNIVERSITY

TWICKENHAM, LONDON

BSc Health, Exercise and Physical Activity Degree Examination students registered for

Level **SIX**

Title: **Anthropometry**

Code: **HEP6009**

Semester: **ONE**

Date: **January 7th 2019**

Time: **1:30 – 3:30PM**

TIME ALLOWED: **TWO** HOURS

This paper is in two sections:

* + **BOTH** sections are **COMPULSORY**
	+ Answer any **FIVE** questions from **SECTION A**
	+ Answer **ONE** question in **SECTION B.**

Answer all questions in the answer booklet provided. Any additional sheets should be attached to your answer booklet. Calculators may be used.

**SECTION A** (Answer **FIVE** questions – worth 10 marks each)

1. A patient is measured and is found to have a triceps skinfold of 13.4 mm. The anthropometrist’s technical error of measurement is 0.5 mm. What is the approximate 95% confidence interval for the true value (show your workings)? Explain TWO ways that the measurement error can be reduced.
2. Compare and contrast total and regional body composition in healthy adult males and females.
3. Discuss the importance of proxemics and haptics when conducting anthropometric profiles.
4. Using appropriate terminology, describe the International Society for the Advancement of Kinanthropometry (ISAK) procedure to locate the triceps skinfold site.
5. The somatotypes of two individuals are reported in the table below. Plot the individuals on the Somatochart provided and state their somatotype category

|  |  |
| --- | --- |
|  | **Somatotype** |
| **Person A** | 5.0 – 3.1 – 2.0 |
| **Person B** | 2.0 – 5.8 – 3.0 |

1. A local health authority has employed a team of anthropometrists to collect skinfold and circumference data on 500 local residents. Discuss strategies the authority could employ to ensure the quality of the data they obtain when using multiple anthropometrists.
2. Evaluate the benefits of TWO circumference measures in assessing an individual’s health status.

**SECTION B** (Answer **ONE** question worth 50 marks) –

1. Hydrostatic weighing, air displacement plethysmography and bioelectrical impedance analysis are techniques used to appraise body composition. With reference to literature, critically discuss which of these techniques you favour and explain your reasons why.

**END OF EXAMINIATON**

REGNUM:

**Somatochart** (please attach this sheet to your answer booklet)

**X = ecto – endo**

**Y = 2 x meso – (endo + ecto)**

