UNIVERSITY OF JOHANNESBURG

SUPPLEMENTARY EXAMINATION

PROGRAMME	:	**HUMAN MOVEMENT STUDIES**
MODULE NAME	:	**MEASUREMENT AND EVALUATION**
MODULE CODE	:	**HMS2BB1 & MBK1B02**
DATE	:	**DECEMBER 2014**
DURATION	:	**1 HOUR**
TOTAL MARKS	:	**50**

EXAMINER	:	**PROF L LATEGAN**
MODERATOR	:	**MR AJJ LOMBARD**
NUMBER OF PAGES	:	**THIS PAPER CONSISTS OF 3 PAGES**

INSTRUCTIONS TO CANDIDATES:

MAKE SURE THAT YOU HAVE THE COMPLETE PAPER.

ANSWER ALL THE QUESTIONS.

QUESTION 1 [3]

Explain the different terms: "TESTING", "OBJECTIVITY" and "EVALUATION" and illustrate each answer with an applicable example.

QUESTION 2 [5]

List ten (10) factors to consider when planning to conduct fitness testing.

QUESTION 3 [6]

A female long distance runner underwent a body composition evaluation. The following results were recorded: Age: 29; Height: 160 cm; Weight: 55 kg; Fat percentage: 15%.

3.1 Calculate and interpret her body mass index. [2]
3.2 Calculate her ideal competition weight at a fat% of 11%. [2]
3.3 She already trains 4 hours per day; how do you suggest she reaches her ideal weight? [2]

QUESTION 4 [14]

4.1 Explain the following terms:
i. ROM [1]
ii. BMI [1]
iii. VO_{2max} [2]

4.2 Explain in detail how you would perform the T-test test. [5]

4.3 A 50-year old male weighing 88 kg completes the 1.6 km walk in 14 minutes and 15 seconds. His heart rate at the end of the walk is 142 bpm. Calculate his VO_{2max} if: [4]

$VO_{2max} = 132.853 - (0.0769 \times BW) - ((0.3877 \times age) + (6.315 \times gender) - (3.2469 \times time) - (0.1565 \times HR)$

4.4 Is he aerobically fit or not? [1]

QUESTION 5 [5]

List the 10 main fitness components and give an applicable test for each component.

QUESTION 6

[3]

Identify three (3) different types of sports where good proprioception is required to win (it is not merely enough to list 5 different athletics events for example).

QUESTION 7

[14]

Use the table below to do the following:

5.1 Calculate the mean. [2]

5.2 Construct a Normal Distribution Graph if the variance is 9%. [5]

5.3 Construct a histogram. [7]

Fat percentage (%) scores for female athletes:

20	22	12	10	15
25	12	20	20	20
23	13	15	8	15
15	14	19	12	19
17	17	29	16	18
19	20	18	17	27
15	20	17	12	16
20	15	16	14	15
29	20	13	16	14
21	25	10	15	12
10	23	12	20	13
14	12	23	15	18
15	13	17	23	19
16	28	30	33	32
15	16	15	15	29

TOTAL: 50