

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

 OCT 2023

DEPARTMENT: SPORTS SCIENCE

BACHELOR OF SCIENCE HONOURS DEGREE IN SPORTS SCIENCE AND
MANAGEMENT

SSM 115: PHYSICAL ACTIVITY AND WELLNESS PROMOTION (1)

DURATION: 3 HOURS

TOTAL MARKS: 100

INSTRUCTIONS TO CANDIDATES

Answer any **four** (4) questions, each question carries equal Marks.

Question 1

a. Define the following terms, giving relevant examples

i. Physical activity

[3 Marks]

ii. Wellness

[3 Marks]

iii. Behaviour change

[3 Marks]

b. Clarify any eight (8) healthy life style habits one should engage in.

[16 Marks]

Question 2

Describe the following eating disorders:

i. Anorexia nervosa

[13 Marks]

ii. Bulimia nervosa

[12 Marks]

Question 3

a. As a Sports Scientist, outline the recommendations you would give to people who are in covid-19 self-quarantine to stay physically active.

[10 Marks]

b. Explain how one can take care of their physical and mental health during corona virus pandemic

[15 Marks]

Question 4

Explain how physical activity impact on one's wellness.

[25 Marks]

Question 5

a. Outline any five (5) symptoms of diabetes.

[4 Marks]

b. Explain the following terms

i. Type 1 Diabetes Mellitus

[5 Marks]

ii. Type 2 Diabetes Mellitus

[5 Marks]

iii. Gestational Diabetes

[5 Marks]

c. Explain any three (3) effects of physical activity or exercise on diabetes.

[6 Marks]

Question 6

Denis is a 33-year old male who weighs 90kgs. He is so eager to reduce his weight even-though he engages in regular activity of 1 ½ hours running at 10km/h (METs: 9.8) 2 days a week, 20 minutes of general gardening at (METs: 3.8) once a week and 30 minutes of resistance training (METs: 3.5). Denis needs your help with weight loss.

TASK

a. Define the following terms

i. calories

[2 Marks]

ii. MET

[2 Marks]

b. Use the given data to determine the number of calories per minute Denis uses during the above activities:

[12 Marks]

c. How long would it be necessary for Denis to perform the three activities to burn the equivalent of 1 pound (0.45kg) of fat if: One pound (0.45kg) of fat contains approximately 3,500 calories of energy).

[9 Marks]

END OF PAPER