
SUBJECT: PHYSICAL EDUCATION

LEVEL: FORM ONE

AREA: PHYSICAL FITNESS AND WELLNESS

TOPIC: COMPONENTS OF FITNESS

– HEALTH RELATED FITNESS COMPONENTS TESTING



KEY POINTS: FITNESS TESTING

- We must develop our health-related fitness components, if we want our body to remain in good health:- **endurance, strength, flexibility and body composition.**
- Fitness testing is the best way to assess our level of fitness.
- The result from each fitness test can be interpreted using a rating scale.
- The information obtained can be used to determine our training needs.

FITNESS TESTING



A fitness test is an activity or series of exercises that help to determine your overall health and physical status.

Fitness testing is the starting point for designing an appropriate exercise programme.

TESTING - BODY COMPOSITION

Test : Body Mass Index (BMI)

BMI is calculated by dividing a person's weight in kilogrammes (kg) by height in metres squared.

For example:

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)} \times \text{Height (m)}}$$

For a person whose weight is **56 kg** and height **1.5m**.

$$\text{BMI} = \frac{56}{1.5 \times 1.5} = 24.8$$

24.8 = normal weight

BMI Scale	
Underweight	Less than 18.5
Normal weight	18.5 – 24.9
Overweight	25 to 29.9
Obese	30 or greater

TESTING FLEXIBILITY

- The **Sit and Reach Test** is used to measure the flexibility of the lower back and hamstring muscles.
- **Description:**
 - Sit flat on the floor with both feet outstretched and knees straight. Place both feet flat against the Sit and Reach box.
 - Bend at the waist and reach towards your toes with both hands and hold for 3 seconds.
- Compare your score using the rating scale on the right.

Rating Scale	11-15 Male	11-15 female
Super	> 27 cm	> 30 cm
Excellent	17-27	21-30
Good	6-16	11-20
Average	0-5	1-10
Fair	-8 to -1	-7 to 0
Poor	-19 to -9	-14 to -8
Very Poor	<-20 cm	< -15 cm

TESTING STRENGTH

Test – One Repetition Max

- The **One Repetition Max Test** measures the greatest load which can be lifted, pushed or pulled once without injury.
- **Description:** Warm up. Then, choose a weight to lift that is achievable. After a rest period of 2-3 minutes gradually increase weight.
- Continue to rest and increase the weight until you can only repeat one lift which is your maximum.



TESTING ENDURANCE

Test: Cooper Test

- Run as far as you can around a marked area for 12 minutes.
- Record the total distance covered and compare score using the rating scale.

Rating Scale	Male 13-14 Years	Female 13 -14 Years
Excellent	2700	2000
Good	2400	1900
Fair	2200	1600
Poor	2100	1500

Activity 1: Complete questions 1 and 2.

1. Calculate the following:

a) Your Body Mass Index using the BMI formula.

b) The weight in kilogrammes (kg) of a person whose BMI is 32.

2. What does a BMI of 35 mean?

Activity 2:

Sally is a 15 year old athlete at BG High School. The results of her fitness tests are shown in Table I .

Complete Table I by rating her level of fitness for each component. Comment on what each score suggests.

Table 1

Fitness Component	Test	Score	Rating	Comment
Endurance	Cooper Test	1 400 m		
Flexibility	Sit and Reach	14		
Body Composition	Body Mass Index	28		