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## TESTS AND MEASUREMENTS

Read the conversation between the student and teacher.

*Student-* Good Morning Sir.

*Teacher-* Good Morning Rohan.

*Student-* What is going on Sir?

*Teacher-* I am measuring student's height and weight

*Student-* Sir, why do we want to measure height and weight?

*Teacher-* It's a part of routine check-up, and its comes under test and measurements.

*Student-* Oh, can you tell me more what is test and measurement?

*Teacher-* Test and Measurement is the means by which we can find different abilities and student's current physical condition.

Dear learner, in this lesson we are going to discuss the meaning of test and measurement, what is its need and importance as well as testing procedure of physical fitness components.



### OBJECTIVES

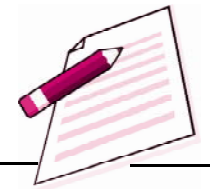
After studying this chapter you will be able to:

- explain the meaning of test and measurement;
- explain the need & Importance of test and measurement and
- do the measurement of components of physical fitness.



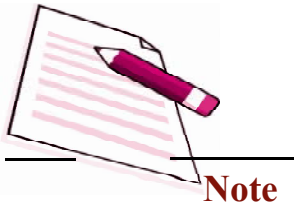
### 15.1 MEANING OF TEST AND MEASUREMENT

Test and measurement have a very important role in the field of physical education. Test and Measurement are the means by which we can explore the needs, abilities, qualifications and many other important information of students. The effect of training and coaching can be determined by the test and



**Note**





measurement. The progress made by the player can be measured and accordingly future plan may be designed. Finally, we can say that it is not possible to achieve the desired goals unless you know the progress. Therefore, knowledge about test and measurement is essential.

**Test**

A test is a tool having a set of questions and an examination. It is used to measure a particular characteristic of an individual or a group of individuals. It is something which provides information regarding individual’s ability, knowledge, performance and achievement



**DO YOU KNOW?**

According to Barrow and McGee:

“A test is a specific tool or procedure or a technique used to obtain response from the individuals in order to gain information which provides the basis to make judgment or evaluation regarding some characteristics such as fitness, skill, knowledge and values.”

A test is a tool which is used to evaluate the physical fitness, skill and performance of a sports person. For example, we use for measuring height- Stadiometer, measuring weight- Weighing Machine, and body temperature- Thermometer

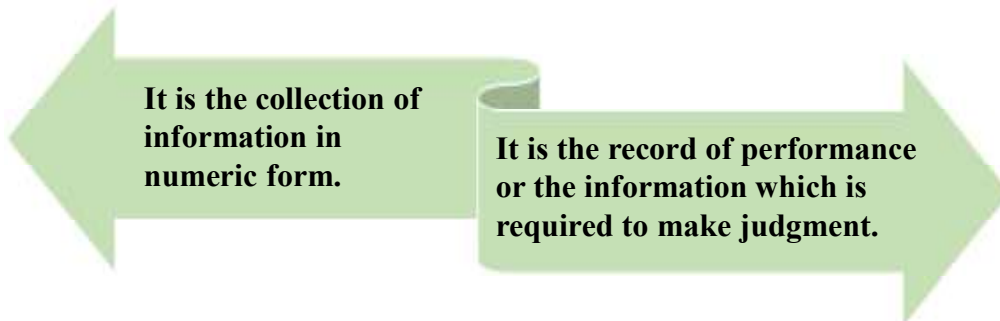


“Test is a specific tool. Procedure or method used to elicit a response from the student in order to gain information as a basis for appraisal of the quantity or quality of elements such as fitness, skill, knowledge and values.”


**MEASUREMENT**


Measurement refers to the process of administration of a test to obtain a quantitative data. It can also be said that measurement aids evaluation process in which various tools and techniques are used in the collection of data.





**Note**

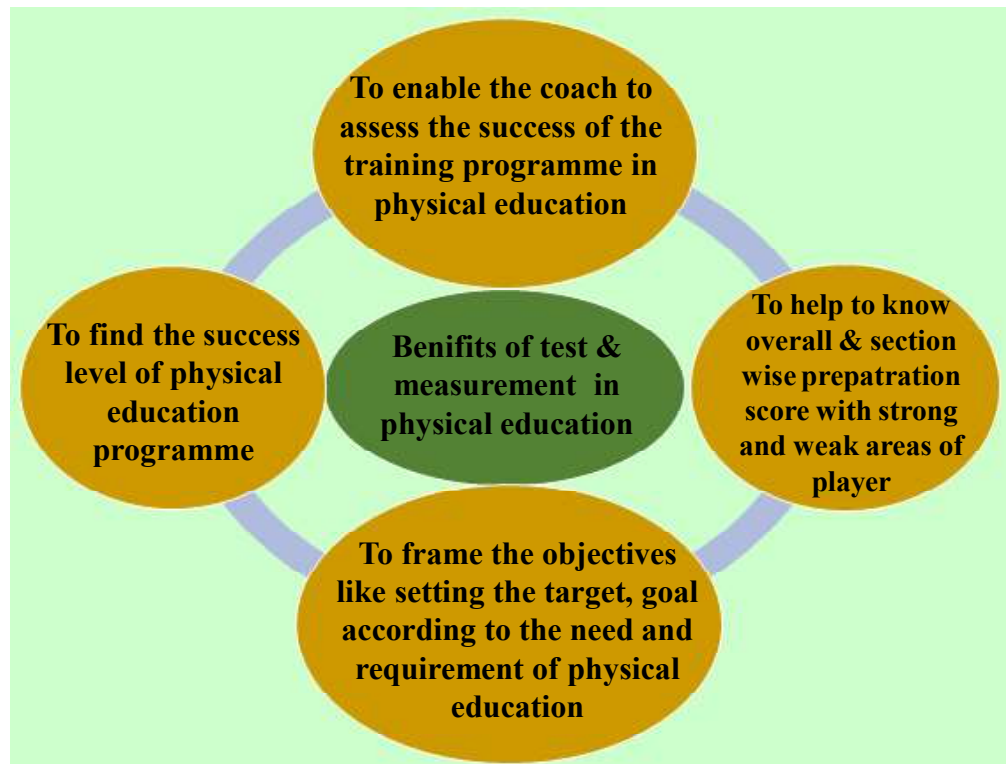
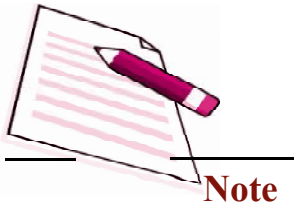
 <b>DO YOU KNOW?</b>	<p>According to R.N.Patel;</p> <p>“Measurement is an act or process that involves the assignment of numeric values to whatever is being tested. So it involves the quantity of something.”</p>
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<p>“Measurement is a process by which levels of performance, fitness, knowledge, personality and skill are determined with the help of various standard tests.”</p>	
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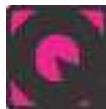
## 15.2 NEED AND IMPORTANCE OF TEST AND MEASUREMENT

- Every Individual has a different quality, capacity, strength and weakness. It helps to select appropriate learning situation according to them.
- To predict potentials and future performance
- To conduct a research and, prepare new norms and standards
- To evaluate the teacher, coach and trainer and their teaching programme and training method.
- To evaluate the learner from time to time and find his or her progress, weakness and current fitness status so that a learner can be placed in to the appropriate training group
- For the purpose of guidance and counselling of an athlete and motivate him to do better





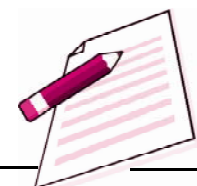
- It helps in classification or gradation of learner and makes it easy for teacher/coach in selection of athlete
- To diagnose the learning problem of an individual and discover his need
- To find the success level of physical education programme
- To study the individual’s development



**INTEXT QUESTION 15.1**

- 1) explain the term 'test' as applied in physical education.
- 2) Explain the meaning of measurement.
- 3) Fill in the Blanks with appropriate words.
  - a) A test is a ..... which is used to evaluate the skill, performance and reliability of task completed by a sports person.”
  - b) Measurement is..... of performance or the information which is required to make judgment.
  - c) To study the individual’s development..... of test & measurement.
  - d) .....is the collection of information of numeric form.





**Note**

4) Match the following statement of column A with the facts given in column B in a meaningful manner.

1) To evaluate the teacher, coach and trainer and their teaching programme/ training method.	A) R.N.Patel
2) “Measurement is an act or process that involves the assignment of numeric values to whatever is being tested. So it involves the quantity of something.”	B) Test and Measurement
3) The effect of training and coaching can be determined by	C) Need and Importance of Test & Measurement

### 15.3 COMPONENTS OF PHYSICAL FITNESS

Physical fitness comprises of 5 components which are as follows:

- 1) Strength
- 2) Endurance
- 3) Flexibility
- 4) Speed
- 5) Coordinative abilities.

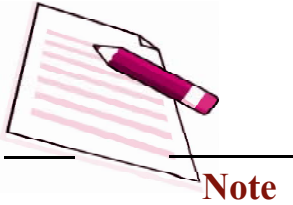
**Note:** You will learn definition of the above mentioned components in details in lesson No 3 Physical Fitness and Wellness and Lesson No 4 Sports Training. The practical manual will describe the assessment procedures.



#### WHAT HAVE YOU LEARNT

- Test and measurement have a very important role in the field of physical education.
- Through measurement we can explore the ability, qualification and important information of students.
- Physical fitness components can be measured by using specific tests.
- Measurement is a process of assigning numeric values to the component which is being tested.





- Component of physical fitness are muscular strength, muscular endurance, flexibility, cardio-vascular endurance.



**TERMINAL QUESTIONS**

- 1) Explain the need and importance of test and measurement.
- 2) Explain the components of physical fitness.



**ANSWERS TO INTEXT QUESTIONS**

**15.1**

1. Test may be called as a tool, which is used to measure a particular characteristic of an individual or a group of individuals. It is something which provides information regarding individual's ability, knowledge, performance and achievement
2. Measurement is a process by which level of performance, fitness, knowledge, personality and skill are measured with the help of various standard tests.
3. Fill in the Blanks  
**a-Tool, b-Record, c- Need & Importance, d-Measurement.**
4. Match the following statement of column  
1-C, 2-A, 3-B

