PHYSICAL FITNESS

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INTRODUCTION

Good health is an essential aspect of human life. Health is wealth, If health is lost something is lost, we cannot pursue our daily routine without good Health. it may do wonders One can acquire good health through physical Activity and Exercise. Fitness is the cornerstone of good health. The best way of living a good life is by maintaining good health and fitness. Physical Activity and Exercise are the two eyes, to keep our body in good health and do our daily routine effectively and efficiently.

PHYSICAL ACTIVITY AND EXERCISE

Physical Activity is nothing but a movement that carries out by skeletal muscle that requires more energy than resting. Walking, running, dancing, swimming, yoga, and gardening are a few physical activities Physical activity gives fitness to the heart and lungs. Any form of movement of the body that uses energy is known as physical activity. For health benefits, physical activity should be moderate or vigorous. Physical activity is necessary for healthy growth and development.

Exercise is a planned, structured, and repetitive movement to improve physical fitness that improves heart and lung power. People do exercises for many different reasons, generally speaking, exercise is to exert energy to keep our body hale and healthy, exercise is a structured program for achievement and fitness. Exercise is specific to strengthening muscles, optimizing cardiovascular fitness, controlling body weight, to achieving in sports and games. Regular physical activity and exercise are important for all age groups. The younger generation, the children and adults who were sitting in front of the television and the internet invite the causes

of the rise in obesity, Lack of physical activity and exercise develops heart disease, type II diabetes asthma, social discrimination, osteoporosis, colon cancer, etc. People of all ages, sizes, and shapes have the ability to perform physical activity accordingly, which brings long-term health benefits; physically active people have greater health benefits which improves their quality lifestyle.

BENEFITS OF PHYSICAL ACTIVITY AND EXERCISE

If there is a commitment, exercise in combination with a balanced diet can help to provide an overall sense of well-being and can even help to prevent all problems. Chronic illness, disability, and premature death. Some of the benefits of increased physical activity are:

Improved Health

- •Increased efficiency of heart and lungs.
- • Reduced cholesterol levels.
- •Increased muscle strength.
- • Reduced blood pressure.
- •Reduced risk of major illnesses such as diabetes and heart disease.
- •Weight loss.

Improved sense of well-being

- •More energy.
- •Less stress.
- •Improved quality of sleep.
- •Improved ability to cope with stress.
- •Increased mental sharpness.

Improved Appearance

- •Weight loss.
- •Toned muscles.
- •Improved posture.

Enhanced social life

- •Improved self-image.
- •Increased opportunities to make new friends.
- • Increased opportunities to share an activity with friends or family members.

Increased stamina

- •Increased productivity.
- •Increased physical capabilities injuries.
- •Less frequent.
- •Improved immunity to minor illnesses.

PHYSICAL FITNESS

Today’s modern lifestyle offers unfitness. With the latest technologies and spend daily two to four hours in front of the television resulting in a nationwide problem of unfitness. Emotional stress, occupational pressures, and worldly frustrations are the causative factors for the pathogenic portion and the stable increase in the lack of awareness of fitness among the super-

educated populations. Modern-day men are excessively tired, excessively weighted, excessively fed, and excessively smart resulting in being less nourished, less exercised, and less parred. Present-day exhaustion and tiredness have decreased the quality of life of modern man.

MEANING OF PHYSICAL FITNESS

A fit individual is competent to live the life to maximum level. Fitness not only refers to being physically fit, but it also denotes the individual being mentally strong, sociologically sound, emotionally balanced, and spiritually resilient. It has many dimensions. The individual to be functionally optimum should have a relaxed mind to eliminate stress by exercising habitually and eating right.

DEFINITION OF PHYSICAL FITNESS:

Fitness implies, "a physiological or functional capacity that allows for an improved quality of life". "Being able to live most and serve best." "A holistic definition of fitness is described by Greg Glassman in the Cross Fit journal as an increased work capacity across broad times and modal domains; mastery of several attributes of fitness including strength, endurance, power, speed, balance, and coordination, and being able to improve the amount of work done in a given time with any of these domains". The President's Council of Physical Fitness and Sports defines Physical Fitness as follows: "the ability to carry out daily tasks with vigour and alertness without undue fatigue and with ample energy to enjoy leisure time pursuits and to meet the unforeseen emergencies. It further indicates physical fitness is an individual matter in performing everyday tasks will determine the kind and degree of physical fitness that is necessary. A person who can meet the demands of the day without difficulty and with relative care would be higher on the scale towards the maximum level. According to Bucher (1958), Physical fitness is "the ability of an individual to live a full and balanced life. It involves physical, mental, emotional, social, and spiritual factors and the capacity for their wholesome expression.

IMPORTANCE OF BEING FIT

The individuals who are physically fit also will be healthier and try to maintain their ideal weight, not be prone to cardiac and other related problems, always be in a relaxed state of mind, face any type of challenges in life, and not be disturbed by any sort of unforeseen emergencies.

- To be physically fit is life's greatest challenge needs to change the total lifestyle.
- The fundamental thing is to include routine exercise, and conditioning and the need is to eat healthier.

DIMENSIONS OF TOTAL FITNESS

There are six dimensions of physical fitness

1. **Physical Dimension:** It deals with the practical operation of the human body. This includes cardiovascular endurance, body composition, flexibility, and muscular strength/endurance.

2. **Mental/Intellectual Dimension:** This includes the use of mind power. An Active mind endorses overall fitness.

3. **Emotional Dimension:** It is the ability to have a positive outlook. Emotionally strong is the ability to control or to cope with any type of feelings like happiness, sadness, frustration, failures, etc.

4**. Social Dimension:** The ability to get along with others as well as accept people with their possible strengths and weaknesses.

5. **Spiritual Dimension:** It is the way of life living as purposeful and pleasurable with faith in God or any supreme power. Having faith in the ultimate soul or having strong faith in the inner self is known as spiritual fitness.

6. **Nutritional Dimension:** It is the ability to have the right knowledge of good and nutritious food that has a direct relation to an individual's total fitness.

FACTORS AFFECTING FITNESS

Many factors affect the total fitness of an individual. Heredity, Environment, behaviour, diet, exercise, physical disability, etc…

- **Heredity:** Always heredity sets a limit to an individual's potential. In that way, heredity plays a main role starting from moulding the physique to intelligence. Our physique, intelligence, appearance, health, fitness, and performance have a direct impact on heredity.
- **Environment:** Many studies proved the influence of the environment on one's potential and well-being. The neighbourhood and locality have a strong influence on an

individual’s capacity because the available facilities and peer influence play a major role in shaping one’s behaviour and personality.

- **Behaviour:** Behaviour has a direct impact on the total fitness of an individual. It is the individual’s right to be fit or not. Few individuals may have a basic thought to take up good nutrition and regular exercise. Some of them ignore the importance of dieting and exercising regularly. Thus, unwise behavioural habits like smoking, alcoholism, improper eating, sleeping habits, etc. will influence an individual’s fitness.
- **Diet:** The improper knowledge of taking nutritious diets among children, youth, and adults is the most critical issue nowadays.
- **Improper and wrong Exercising habits:** Health-related issues among the general public is that the lack of awareness of the benefits of regular exercise and doing or involving in wrong exercise habits also have a direct impact on the total fitness of the individual.
- **Physical Disability:** Physical disability is also one of the causes for not involving in regular physical activity which has a direct impact on the fitness of the individual

BENEFITS OF FITNESS:

Physical fitness has numerous benefits including muscle strength, muscular endurance, brain activity, preventing obesity, and lowering the risk of major body problems. It also improves one's lifespan, living a healthier life and improving sleeping. Physical activity helps to reduce one's stress, anxiety, and depression and also improves overall life. A half hour or so of physical activity daily can yield benefits.

Stronger bones.

Children need to exercise to avoid losing bone density through inactivity. The years of childhood are the optimum time for building bones. Weak bones can lead to Osteoporosis later on.

Reduced risk of becoming overweight or obese.

When children do not exercise, unused calories are stored as fat. physical activity uses up those calories. so that fat is reduced, properly distributing fat in children's bodies.

Reduced risk of Type 2 diabetes.

Children whose physical activity is limited often develop glucose intolerance and insulin resistance, eventually leading to Type 2 diabetes.

Lower blood pressure.

Exercise makes blood vessel walls more flexible, reducing blood pressure. For best results, they must combine aerobic exercise with activity to increase strength and flexibility

A healthier heart.

A lack of exercise adds stress to the heart and puts children at greater risk of cardiovascular disease in the future. Physical activity makes their hearts able to pump blood more efficiently.

Reduced risk of cancer.

Statistics show that those who exercise regularly have a decreased risk of many types of cancer, including cancer of the breast, colon, liver, and kidneys.

Better emotional health.

An increase in the release of endorphins, and serotonin in the brain during exercise helps children feel a greater sense of well-being and optimism, helping to combat depression. In addition, exercise helps give them a positive self-image.

More energy.

Exercise improves circulation, giving children a much-needed boost of energy, concentration, and focus. it also helps them balance their energy so that they do not become as tired throughout the day.

Stronger muscles.

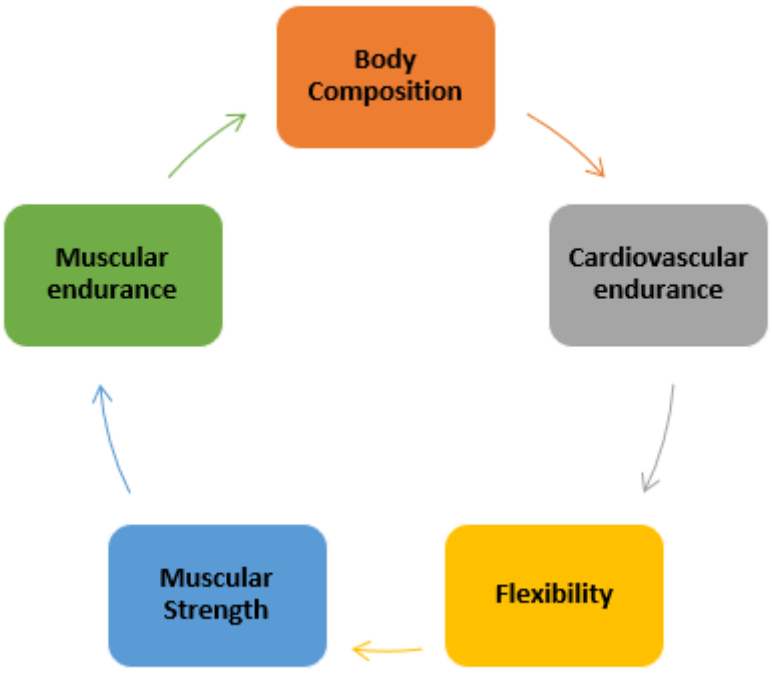
Playing jump rope, crossing the monkey bars, playing tag, or even dancing involves using their muscles, which means kids are making them stronger. Increased muscle strength also protects against injury.

Stronger lungs.

Exercise means kids are taking in more Oxygen and expelling more carbon dioxide, increasing lung capacity. Increased oxygen also helps their heart and brain.

HEALTH-RELATED PHYSICAL FITNESS COMPONENTS

Regular physical activity promotes physical fitness. Physical fitness is the condition of the body that results from regular physical activity. The physical fitness components are divided into two types health-related fitness and motor-related fitness. Health-related fitness relates to the general health of which components are very basic to maintain a disease-free life throughout the lifetime. Motor performance fitness is more practical and specific which relates to the specific development of components related to the game or sport. The five factors of fitness contribute to physical fitness are



BODY COMPOSITION

Body composition refers to the absolute and relative amounts of the structural components of the body – fat, fluid, muscle, and bone. Body composition generally focuses on body fat. For example, a person who weighs 100 pounds, of which 20 pounds is fat, is said to have a body fat composition of 20 percent. People who are in a healthy range of body fatness are more likely to avoid illness and even have lower death rates than those outside the healthy range. The extreme ranges are the most dangerous; too little body fat, like too much, can cause health problems. The test to measure Body Composition is

EVALUATING BODY COMPOSITION

Body fat and lean body weight can be measured quite accurately in the laboratory. However, because of the elaborate equipment, complex procedures, and substantial time required to test each individual, these methods are not widely used. As a result, researchers have developed other means for estimating body fat that is closely related to laboratory techniques. A simple method using a skinfold caliper is quite suitable for determining lean body weight and fat weight. For young men, the fat thickness at the subscapular and thigh sites has proven to be a good gauge of overall body fatness. For young women, the triceps and supra iliac sites are the best predictors. You may want to measure skinfolds at all six sites to assess your relative fatness.

The anatomical landmarks for the six skinfold sites areas are as follows:

1. Triceps the back of the upper arm midway between the shoulder and elbow joints.
2. Subscapular: the bottom point of the shoulder blade (scapula).
3. Midaxillary: the middle of the side on the level with the lower end of the sternum.
4. Suprailiac: just above the top of the hip bone at the middle of the side of the body.
5. Abdomen: approximately two centimeters (one inch) to the side of your navel.
6. Thigh: the middle front side of the thigh midway between the hip and knee joints.

Procedure:

- To perform the test you need someone to measure you through a skinfold caliper for taking measurements. Skinfolds are measured on the right side of the body.
- Grasp the skinfold between the thumb and forefinger. The skinfold should include two thicknesses of skin and subcutaneous fat, but not muscle. Each fold is taken in the

vertical plane while the subject is standing, except for the subscapular and suprailiac which are picked up on a slight slant running laterally with the natural fold of the skin.

- Apply the caliper approximately one centimeter (1/4 to 1/2 inch) below the fingers holding the skinfolds, at a depth equal to the thickness of the fold.
- Repeat steps 2 and 3 before going on to the next site. Whenever there is a difference greater than 0.5 millimeters between the two measurements, a third measurement is necessary. The average of the two closest readings represents the value for the site being measured.

Body fat Percentages for women and men fall under a few different categories.

Women		Men	
Category	Percentage	Category	Percentage
Essential Fat	10 – 13%	Essential Fat	2 – 5 %
Athletes	14 - 20%	Athletes	6 - 13 %
Fitness	21 – 24%	Fitness	14 – 17 %
Acceptable	25 – 31%	Acceptable	18 - 24
Obesity	> 32%	Obesity	> 25 %

For ideal body fat percentages based on age, Beth Israel Lahey Health Winchester Hospital gives the following guidelines for a healthy body fat percentage for women and men.

Women		Men	
Age	Percentage	Age	Percentage
20 – 39	21 – 32 %	20 – 39	8 – 19 %
40 - 59	23 – 33 %	40 - 59	11 – 21 %
60 - 79	24 – 35 %	60 - 79	13 – 24 %

CARDIO-RESPIRATORY ENDURANCE

Cardiovascular endurance is the body's ability to keep up with exercises like running, jogging, swimming, cycling, and anything that forces the cardiovascular system (lungs, heart, blood vessels) to work for extended periods of time. It is the ability of the body to take in, transport, and utilize oxygen. It involves the capacity of the heart and lungs to exchange and deliver oxygen to working muscles during sustained motion.

The cardiovascular system in the human body is made up of the heart and blood vessels, which are divided into arteries, veins, and capillaries. The heart is responsible for pumping blood throughout the blood vessels and is divided into four chambers, two of which are responsible for moving poorly oxygenated blood and two of which move highly oxygenated blood. Once the capillaries have delivered their oxygen, they also absorb excess carbon dioxide into the blood and then deliver it to the veins, which then supply the blood back to the heart. The respiratory system is primarily comprised of the airways, the lungs, and the structures (such as

muscles) that help move air in and out of the lungs. The airway, which begins with the nose and mouth, continues down through the throat into the bronchi, which are small airways that eventually feed into the lungs, which are lined with cells called alveoli. When the size of the lungs changes, so does the pressure inside, leading to air either coming in (inhalation) or being forced out (exhalation). The more efficient the cardiovascular and respiratory systems the longer the individual will be able to sustain work since the muscles will be well supplied with their fuel and oxygen. The test to measure Cardiovascular Endurance is

THE STEP TEST

Another useful procedure for assessing cardiorespiratory fitness is the step test, a heart-rate recovery measure. Stepping on and off a bench for a 3-to-5-minute time period at a selected pace, the heart- rate during recovery from a standardized step test is a simple way to evaluate the heart's response to exercise. The faster your heart rate recovers after the standardized exercise bout, the higher your fitness rating.

PROCEDURE

- A locker room bench (generally 18 inches high) is recommended for both men and women.
- Work with a partner (tester). When the tester gives the signal "Begin," the watch is started and start stepping onto the bench-first the left foot up, then the right foot up; then the left foot down, right foot down. This complete step represents four counts. (It is permissible to change the "up" foot during the test.) Step to the following cadence: 120 counts per minute or 30 complete step executions per minute.
- Continue the exercise for 3 minutes. Keep the tempo and be sure to straighten your knees as you step on the bench. After stepping for 3 minutes, sit on a chair or straddle the bench facing your partner.
- One minute after the exercise period stops, the tester counts your pulse beats for 30 seconds. He or she should record the pulse for the following periods during recovery:
  1 to 1.30 minutes
  2 to 2.30 minutes
  3 to 3.30 minutes

In a group situation, the instructor will call out "Begin" and "Stop" for each 30-second period. This measurement provides a double check for accuracy, and the rate should not differ more than two beats from the tester's count during a 30-second period.

Scoring: The sum of the three 30-second pulse measurements is the recovery index.

	WOMEN	MEN
	3-minute step test (recovery index)	3-minute step test (recovery index)
Super	95	97
	107	107
	118	117
Excellent	126	122
	130	127
	135	132
Good	141	137
	147	142
	153	147
Average	138	152
	164	157
	170	162
Fair	176	167
	181	172
	187	177
Poor	193	182
	199	187
	204	192
Very Poor	210	197
	222	207
	233	217

Name: _____ Age: _____
STEP TEST
Length: _____ min.
Stepping Rate: _____ counts/min.

Recovery Measurements(beats)
1 to $1\frac{1}{2}$ min. _____
2 to $2\frac{1}{2}$ min. _____
3 to $3\frac{1}{2}$ min. _____
Total _____ (recovery index)

Date: _____
Time: _____ Bench Height: _____ in.

This table contains the scores for college-age men and women who performed the test on an 18-inch bench. The scores will give you some indication of the functional ability of heart. Use initial recovery index as starting point. As you continue your physical conditioning program, you can compare your recovery rates for the Step test to check your progress. Basically, you

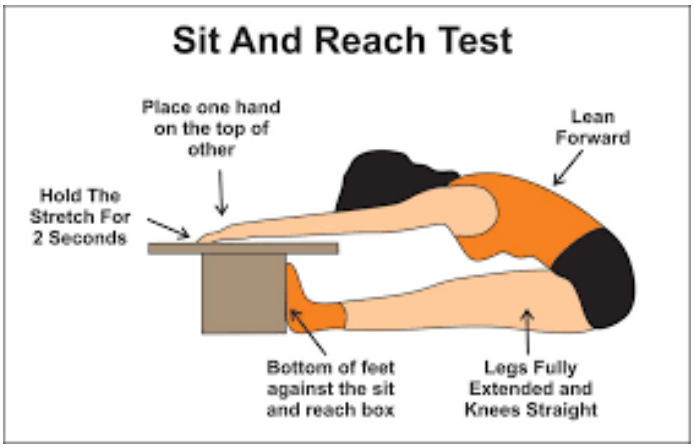
are competing against yourself. Be sure to repeat the test under similar conditions: for example, time of day, temperature, better conditioning, your recovery index (the sum of the recovery measurements) will decrease. This indicates a quicker recovery. Recovery indexes falling below 150 are good scores. Highly trained individuals tend to score below 120, which indicates an excellent response to the cardiorespiratory system.

FLEXIBILITY

Flexibility is the range of motion in a joint or group of joints or the ability to move joints efficiently through a complete range of action. Flexibility training includes stretching exercises to lengthen the muscles and may include activities like yoga or Tai Chi. Flexibility varies between individuals, particularly in terms of differences in muscle length of multi-joint muscles. Flexibility in some joints can be increased to a certain degree by exercise, with stretching as a common exercise component to maintain or improve flexibility. According to the American Council on Exercise (ACE), flexibility is defined as "the range of motion of a given joint or group of joints or the level of tissue extensibility that a muscle group possesses." The test to measure Flexibility is

SIT AND REACH TEST

The sit and reach test is the most common flexibility test. It measures the flexibility of the lower back and hamstrings. It requires a box of about 30cm (12 inches) high and a meter ruler. Sit on the floor with stretched legs without shoes. The feet are placed against the sit and reach the box. Both knees were fully locked and pressed on the floor. Palms facing downwards fully stretched at the elbows, the subject reaches forward near the measuring line as far as possible. The length of both hands should remain at the same level, one hand should not advance than the other. The subject is to maintain the fully extended position for a while and the distance is to be recorded. The whole movement is to be gradually done without the jerk. Scoring: Record the score to the centimeter as the distance reached by the hand. The same test can be modified for children and those who are with small limb lengths.



MUSCULAR ENDURANCE

Muscular endurance is the capacity of a muscle to exert a force repeatedly over a period of time. Also, it refers to the ability of the muscle to hold a fixed or static contraction. It is the ability to use the muscle or the group of muscles many times without tiring. People with good muscular endurance are likely to have better posture and fewer back problems. They are also better able to resist fatigue. The capacity of your legs to carry you beyond a distance of two miles, of your arm to repeatedly swing a tennis racquet, of your hands to grip a golf club firmly and consistently are also examples of muscular endurance. Even activities around the home, such as washing windows, painting, and cleaning the house, all require some degree of prolonged muscular exertion. The test to measure Muscular Endurance is

Push-ups

Purpose: To test the strength and muscular endurance of the flexors of the arm, shoulder girdle, and upper back muscles.

Procedure: Kneel on the floor, with hands about shoulder width apart and positioned beneath your shoulders. Extend your legs back, weight on your toes with your body in a straight line. Your partner places his or her fist on the floor beneath the center of your chest. As you bend at the elbows, you lower your body as a unit until your chest touches the fist. Keeping your back straight, raise yourself to the up position. Repeat this procedure for 1 minute.

Modified Push-ups

Purpose: To test the strength and muscular endurance of the flexors of the arm, shoulder girdle, and upper back muscles.

Procedure: Kneel on the floor, hands shoulder-width apart and positioned slightly ahead of shoulders. Your torso is in a straight line. Slowly bend your elbows and lower your torso as a unit until your chest touches your partner's fist. Then push back up to the straight-arm position. Repeat this procedure until you can no longer continue.

MUSCULAR STRENGTH

It is the capacity of the muscle to exert a force against resistance. Strength training results in some enlargement of muscle fibers and a relative ability to apply force. Strength is fundamental in all sports. A lack of reasonable strength obviously contributes to poor performance in sports. Working with barbells, are the most efficient means for gaining rapid strength. The test to measure Muscular Strength is

Sit-ups (Bent Knee)

Purpose:

To determine the strength of the abdominal muscles and the hip flexors.

Procedure:

Assume a supine position with hands interlocked behind your neck. of Some-instructors prefer that you do the sit-up with arms folded across the chest. When supporting the back of your neck with your hands, be sure to point your elbows forward and lift from your upper body with your abdominal muscles. Don't pull on your neck. Draw your feet back toward the buttocks until they are flat on the floor (knees bent). The angle of your legs to your thighs should be approximately 90 degrees. A partner should kneel on one knee, placing it between your feet while grasping both your ankles. A full sit-up is counted when you have curled your back and raised your trunk until your lower back is at least perpendicular to the floor and then have returned to the starting position. Repeat this procedure as many times as possible within the time limit. The holder counts out loud, emphasizing every fifth sit-up. This assists the performer and also lessens the risk of losing count. The score is the number of sit-ups completed in a 2-minute time period. Resting is permitted, but only on your back with your hands in the proper position.

	Women		Men	
	Sit – ups (two minutes)	Push-ups (one minutes)	Sit – ups (two minutes)	Push-ups (one minutes)
Super	66+	38+	85+	54+
	62	34	79	50
	58	30	73	46
Excellent	56	28	70	44
	54	26	67	42
	52	24	63	40
Good	50	20	61	38
	48	18	59	36
	46	16	56	34
Average	44	14	53	32
	42	12	50	30
	40	10	46	28
Fair	38	8	44	26
	36	6	41	24
	34	4	38	22
Poor	32	2	35	20
	30	0	32	18
	28	0	29	16
Very poor	26	0	26	14
	22	0	20	10
	18	0	17	6

SKILL RELATED PHYSICAL FITNESS COMPONENTS

Is the capacity to execute the abilities used in specific games and sports. There are six skill related fitness components. They are

AGILITY is the ability to change the position of your body quickly and to control your body's movements. People with good agility are likely to be good at activities such as wrestling, diving, and soccer.

BALANCE is the ability to stay in control of body movement to maintain equilibrium in a stationary or moving position via the synchronized actions of bodily functions. There are two forms of balance: Static balance is maintained when the subject is in the stationary position and Dynamic balance is when the subject is in a moving position.

COORDINATION is the ability to move two or more body parts under control, smoothly and efficiently. It is a complicated skill that requires other motor fitness components at a greater level to execute this skill. Alternate Hand Wall Toss Test To evaluate hand-eye coordination. Equipment required: Tennis ball, concrete wall, measuring tape, stopwatch.

Procedure: The subject has to stand facing the wall 2 to 3 mts behind the restraining line. The subject has to throw the ball against the wall with one hand and be caught with the opposite hand. Again, do the same by throwing the ball with the opposite hand and catching with the initial hand. Continue the same for the stipulated time period of 30 seconds.

Scoring: the subject will be scored based on the points obtained for a 30-second period.

Rating Score (in 30 sec)

Excellent > 35

Good 30 - 35

Average 20- 29

Fair 15 - 19

Poor < 15.

REACTION TIME testing measures a person's swiftness to react to a signal. An athlete's ability to react displays how quickly and successfully can make decisions and initiate actions. Reaction time can be improved by explosive exercise and sport-specific practice. Ruler Drop Test.This test is to evaluate the simple reaction time and is also named as Nelson Finger Reaction Test. Equipment required: A wooden ruler 1 meter, an assistant.

Procedure: The subject is to sit in a comfortable position on the chair by resting the hands on the table edge. Hold the index finger and thumb 2 inches apart beyond the desk in the horizontal position. On the ruler, the dark black line will be marked and is known as the concentration zone. The assistant holds the ruler with the zero-centimeter line on the top of the athlete's thumb. The subject is to keep the eyes on the concentration zone. As soon as the ruler drops the subject has to catch the ruler. Scoring: The distance between the top of the subject's thumb and the bottom of the ruler is recorded.

SPEED is the ability to achieve a motor skill as quickly as possible. It is the capacity to move rapidly, which is a vital quality in numerous sports. Reaction time is closely associated with speed. Speed depends on many factors like muscle fiber spectrum, elasticity, neuromuscular

coordination, and explosive power. 30 meter acceleration as one of the tests to evaluate speed. The main objective is to assess how quickly the athlete is accelerating effectively and efficiently from a stationary position. 30 mts Acceleration Test

Equipment required: 30 mts marked distance and a stopwatch.

Procedure: The subject is asked to stand behind the starting line in a ready position. For the signal, the athlete sprints as fast as possible to the finish line and will be timed for the total distance and it is recorded.

Scoring: It is better to take three trials with enough rest in between. And the fastest recorded timing will be taken into consideration. The below presented standard scoring norms may be used to assess the speed for 30 mts acceleration test.

POWER is the ability to apply muscular strength swiftly. It is the tempo of the work performed. On the ground, power is associated with speed and strength. Explosive skills need power fitness, which includes using force with obvious acceleration. Olympic lifting and shot-putting are examples that show a rapid pace of force development.

Equipment required: Stopwatch, Weighing Scales.

Procedure: The test needs the athlete to race up a set of steps to start with a proper warm-up. The starting line is to be marked with cones 6 meters in front of the first step. Place the other cones to one side of the 3rd, 6^{th}, and 9th steps. The vertical distance will be measured from the 3rd to the 9th step (meters). The weight of the athlete to be considered will start from the 6-meter line sprints to the flight of steps taking three steps at a time of landing on the 3rd, 6^{th}, and 9th steps. The time will be recorded for the 3rd step and 9th steps.

Scoring: The normative data for the margariakalamen power test will be used for scoring by using this link.

CONCLUSION

Exercise and fitness are like two eyes. Physical activity and exercise are very much necessary in our day to day life. Just spending thirty minutes of doing exercise every day will improve our health. The active life style will brush our energy levels and increased level of fitness enable us to perform the work without undue fatigue. Fitness takes time and dedication to develop. Most people fail, not because of lack of desire, but, because of lack of commitment Only those who are committed and persistent will reap the rewards.

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