

## SYLLABUS

### **Certified Functional Strength Training Specialist (CFSTS)**

**Brief Description:** Functional training is a term used to describe exercises that help you perform activities in everyday life more easily. Seven basic movements the human body can perform are Pull, Push, Squat, Lunge, Hinge, Rotation and Gait and all other exercises are merely variations of these seven movement. This certification helps teach clients to perform those movements efficiently and create the ability to design scientific functional training programme for their client

**Minimum age:** 18 Years and above

**Personal Attributes:** The job requires individuals to have good communication skills, time management skills and ability to understand the body language of the trainees. The job requires individual to possess key qualities such as self-discipline, confidence, maturity, patience, compassion, active listening, time management, empathy, language proficiency.

**Duration of course:** Not less than 25 hours

Course Fees	Rs 12000/- (Twelve Thousand)
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**Job Role:** Strength and conditioning trainer, Gym trainer, Fitness Trainer, Fitness trainer role in all sports and game.

**Requirement / Eligibility:** For admission in the course it is suggested/desired that the candidate should have passed 10<sup>th</sup> standard/ Secondary School Certification from a recognized board or equivalent.

**Opportunities:** Health club, Hotels, Sporting club, Sports academy

### **FUNCTIONAL STRENGTH TRAINING**

#### **A) Meaning of FST : FST means Functional strength training :**

Functional training - purposeful training of MOVEMENTS, not only for muscles. Functional Training is goal-specific training, not sport-specific. "FUNCTION" means Purpose, Goal, Objective. "FUNCTIONAL" has several meanings.

Designed for or capable of a particular function or use. For body awareness.

**B) FST is NOT sports specific training, goal of FST:** FST is NOT sports specific training. It is sports general training

**C) FST and daily life activity:** This type of exercises programming through body balance, unstable surface, asymmetrical resistance, full ROM. FST involves multi-joint movements involving multiple muscle groups.

**D) FST helps teach client how to handle own bodyweight:** With maximum possible bio-mechanical efficiency under few circumstances like uneven surface training , lack of mobility or in full range of motion , variable resistance , etc.

#### **E) Locomotion Chain and example**

Muscles do not contract (concentric contraction) or elongate (eccentric contraction) in isolation but work as a large interconnected system, Produce movement, Slow down then stop movement, Reverse movement. Movement at any joint is result of two phases

Phase 1: all muscles lengthen / act eccentrically to decelerate joint flexion.

Phase 2: milliseconds later, the same muscles shorten / act concentrically to produce extension at the joints

#### **F) Open and Closed Chain movement and exercises:**

Open Chain: Mostly single joint movements.

Closed Chain: To exercise the muscle as it will be used in real life, the foot must be in contact with a surface so that the Chain is closed.

#### **G) Non-functional and Functional movement:**

Functional Strength Training is good for learn how to handle body weight as resistance in different body positions, Instability and imbalance controlled and gradually increased to train body to regain, Multi-joint, multi-planar movements, etc.

Non-functional and Functional movements have some difference also. Functions vary from joint to joint; Primary function of certain muscles / groups is Stabilization, Stabilization improved through simple exercises in small ROM etc.

**H) General Fitness Assessment:** Body fat percentage, Body balance, Cardio vascular endurance, Limit strength, Flexibility test, Additional test.

**I) Fitness Assessment - Functional Strength:** before starting any routine have to start with a assessment - Functional Upper Body Strength, Functional Lower Body Strength, Core Functional Strength.

**J) Fitness Goals – types of fitness:** every training programme have a specific goal. Based on that training programme should be prepare - Limit Strength , Starting Strength, Explosive Strength, Static Balance, Dynamic balance, Agility, Flexibility, Strength Endurance, Local Muscular Endurance, Speed Endurance, Cardiovascular Endurance, Muscle Mass, (Low) body fat, Freedom from stress, Freedom from illness, Figure / shape of body.

**K) Designing FST program:** key factors of programing - client goals, endurance, strength, 16 fitness goals, duration of (Macro cycle / Meso cycles / Micro cycles)

**L) FST elements:** Stability (Swiss) Balls, Medicine Balls, Foam rollers, Resistance Bands, BOSU (“both sides up”). Wobble Boards and Balance Discs are equally effective, Agility Ladders, Hurdles, Cones, Steps or plyometric boxes, etc.

**M) Developing Core Functional Strength:** Strengthen core – (abs, back, glutes and obliques) is an important goal of FST program.

**N) Developing Power with Plyometric:** all sports have its own requirement and specific movement.

Starting speed, Acceleration, Directional change, Vertical Jumps, Horizontal Jumps are few of them.

**O) Developing lower body strength & balance:**

**P) Glossary of Exercises:**