





Certificate in Fitness Trainer

Duration: 240 Hrs / 3 Months

Concept of Health Related Physical Fitness

- Cardio vascular endurance. Aerobic & Anaerobic Capacity. Methods of developing Cardio vascular endurance .
- Muscular Strength . Type of Strength . Methods of Improving Strength.
- Muscular endurance. Meaning of Muscular endurance .
- Flexibility. Meaning of Flexibility. Importance of Flexibility. Development & Maintenance of Flexibility.
- Body Composition (%Fat). Body Mass Index (BMI) Assessment of body composition 3. Controlling % Fat.
- Principles of Fitness Training (FITI) Load Adaptation-Recover:. Factors of load. Load & adaptation. Over load. Recovery III Scheduling (Short term & Long term Training). Micro Cycle. Meso Cycle. Macro Cycle. Total Load & Recovery. Total Sets & Repetitions. Total Exercises.
- Training Methods: . Circuit Training Method. Station Training Method. Plyometric Training Method.
- Terminology of Wt. Training: . Reps. Sets. Load. Cheating.

Sports Medicine

- Nutrition: . Food content . Basic principles. Balance diet 4. Calories & diet. Exercise & diet. Supplement.
- Injury: Preventive Measures Proper Warm Up- Clothing Correct Technique-Sequence of Exercise – Loading procedure- Recovery- Breathing – Fatigue- Safety equipment. Types of Injury- Traumatic-Chronic. First Aid- PRICE.

Fitness Evaluation

 Fitness Test: 1 Repetition Max – 12 Min. Run or Walk Test – 1 Min. Push Ups – 1 Min. Bent knee sit ups-Sit & Rich- Fat measurement/BMI5.

Anatomy and Physiology

• Anatomy: . Skeletal System – Types of bone – Types of Joint- Classification of Joint-Anatomy of Joint. Muscular Systems – Introduction of Muscles – Structure of MusclesTypes of Muscles Contraction – Different Muscles of Body- Insertion of Muscle-Slow twitch muscle fibers- Fast twitch muscle fibers.

- Physiology: Effect of exercise on different Systems (a) Skeletomuscular System: -Function of Bone, Joints & muscles – Myoglobin – ATP-PC- Hypertrophy (b) Circulatory System:-Athletes Heart- Supply of blood to the organs – Blood pressure (systolic/Diastolic). (c) Respiratory system: - Intake- Uptake 6 – VO2 max – Tidal Volume – Lung capacity – Respiratory rate (d) Digestive System.
- Physiological Principles: Muscular Contraction Static- Dynamic- Concentric- Eccentric. Sliding filament theory. Warming up- fatigue- Principles of warming up & cooling down-Fatigue oxygen debt. Performance factors Unit V: Biomechanics & Kinesiology: Biomechanics – Analysis of fundamental movements – Principles of lever/ Leverage. Kinesiology- Meaning- Types of movement- Plane & axial movement- Muscular analysis7.

Concept of Fitness Center

- Introduction of gymnasium : Introduction to the gym equipments- Types of Gym & gym equipments Placement of gym equipments.
- Philosophy: Characteristics of Gym Instructor Need & Scope of Gymnasium Part: II Practical : 100 Marks:
- Warm up Cool down: general Exercise Stretching Exercise .
- Weight training exercise for: . Arms. Shoulder . Chest. Back. Lower Back. Abs. Legs.
- Basic Concept: Sets. Repetition. Rest/Recovery. Breathing. Heart rate. Range of Motion. Cheating.
- Prime Movers. Assisting . Antagonist. Agonist. Synergies.
- Various training methods of Wt Training: . Super Sets. Tri sets. Giant Set 8. Circuit Training.
- Training Programme: Basic Intermediate . Advance. Wt. Loss. Wt. Gain .
- Evaluation. Body Measurement . Fitness testing and Evaluation.