

Semester V

Paper-13: PHYSICAL ACTIVITY & SPORTS TECHNOLOGY

Max. Marks =150

(42 Hours)**UNIT-I :- Introduction**

Physical Activity, Meaning, definition, Type of Physical Activity and Role of Physical Activity in various domains of personality development. Essential level of Physical Activity, Balanced Physical Activity, Daily energy output, measuring tools for assessing Physical Activity. **(Book-1, Chapter- 2, 3& 4)**

8 Hours**UNIT-II :- Behaviour Change Technology for Active Life Style.**

Active versus Hypokinetic Life Style, Wellness Behaviour, Help Philosophy for holistic personality development, method of Behaviour change, six stages of Behaviour change, algorithm to find Behaviour change, algorithm to find Behaviour change stage. **(Book-2, Chapter -4)**

8 Hours**UNIT-III :-Physical Activity Technology**

Physical Activity and Exercise, parts of exercise session Principles of exercise, method of sequencing exercise. Physical Activity Technology for Physical Personality Development cardio-respiratory, muscular, flexibility development skills. **(Book -2, Chapter -8)**

8 Hours**UNIT-IV: - Physical Activity Measurement**

Introduction to monitoring Physical Activity, Measuring Physical Activity with Pedometer, daily / weekly Journal, Activity gram and sixteen objective tools. **(Book- 3, Chapter-41)**

9 Hours**UNIT-V:-Physical Activity and Sports for All.**

Concept of Sports for all, Role of sports for all, Sports Science, Exercise Science, Exercise Prescription for Prevention of inactive diseases, promotion of Health and Fitness and Sports excellence. **(Refer Book- 3)**

9 Hours

Note: Question Paper will be divided into two parts A and B. The Examiner is required to set 5 questions for Part-A and 5 questions for Part-B taking one question for each part from each of the five units of the syllabus. The questions of Part-A shall carry 5 marks each and questions for Part-B shall carry 20 marks each.

The student is required to attempt any 3 questions from Part-A and any 3 questions from Part-B.

Practical(28 Hours)

1. Demonstrate, moderate and vigorous Physical Activities.
2. Demonstrate sequencing of exercise training session.
3. Demonstrate the Acronym 'FITT.'
4. Demonstrate the Acronym 'Go SIR'.
5. Demonstrate the role of Physical Activity Lifestyle in the acronym 'HELP'.
6. Find out the Activity Behaviour stage of three subjects with Behaviour change algorithm .
7. Calculate target Training Heart rate for a subject and measure pre –exercise and after-exercise pulse rate.
8. Prescribe and demonstrate exercises for prevention of disease to an inactive subject.
9. Prescribe and demonstrate exercise for promoting Physical fitness.

Essential Readings:

Book-1:- Corbin C.et.al. (2006). Concept of Fitness & Wellness. MC Graw Hill. New York.

Book-2:- Kansal D.K. (2013). Holistic Personality Development. SSS Publications. New Delhi.

Book-3:- Howley E.T & B.D. Franks (2003). Health Fitness Instructor's Handbook. Human Kinetics. USA.

Reference Books :

Goldberg, L. & DL. Elleot (2000) The Healing Power of Exercise National Health & Wellness Club, Minnetonka, U.S.A.
Robbins, G., D. Powers and S. Burgers (2008). A Wellness way of Life McGraw Thill Co.,Inc, New York, U.S.A

Theory: 100 (75 + 25 Internal Assessment.)**Practicals = 50 Marks**