

SYLLABUS OF GENERIC ELECTIVE PAPERS (GE)
SEM- 8 (GE-16)

STRENGTH AND CONDITIONING

Sl. No.	Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
			Lecture	Tutorial	Practical/Practice		
16	SEM- 8 (GE-16) STRENGTH AND CONDITIONING	04	3	0	1	XII Pass	NIL

LEARNING OBJECTIVES: Students will be introduced to the concept of Strength and conditioning. They will be able to interpret the development of different factors associated with fitness training with special reference to strength and conditioning.

COURSE OUTCOMES:

- Students will be able to understand the concept of Warm-up and Cooling down
- They will be able to utilize according to requirement of different sports activities and according to individual requirements.
- They will be able to prepare basics for designing a fitness plan
- Students will be able to identify a proper blend of exercise and yogic practices for developing strength and conditioning.

SYLLABUS

No. of Credits: 04 (Lecture-03, Practical-1)

Theory: 45 hours, Practical: 30 hours.

UNIT-I: INTRODUCTION TO STRENGTH AND CONDITIONING

(11 hrs lectures)

- 1.1 Meaning and Concept of Strength and Conditioning
- 1.2 Aim and Objectives of Strength and Conditioning
- 1.3 General Principles of Strength and Conditioning

UNIT-II: TRAINING LOAD AND ADAPTATION

(11 hrs lectures)

- 2.1 Definition and Concept of Load
- 2.2 Types of Training Load
- 2.3 Principles of Training Load

UNIT-III: STRENGTH TRAINING METHODS

(11 hrs lectures)

- 3.1 Introduction Muscular Contraction
- 3.2 Development of Strength Using Own Body Weight and External Resistance
- 3.3 Core Strength and Functional Training

UNIT-IV: PROGRAMME DESIGN AND IMPLEMENTATION

(12 hrs lectures)

4.1 Exercise Selection in a Strength Training Program

4.2 Concept of Training Load

4.3 Methods of Training

PRACTICAL WORK

(30 hours)

1. Design a Warming-Up Exercise Program
2. Design a Cooling/Limbering Down Exercise Program
3. Demonstrate Exercises for Core Stability and Balance

SUGGESTED READINGS:

1. Matveyev, L. (1981) Fundamentals of Sports Training, Moscow, Progress Publishers: 6–85, 166–1854
2. Bompa Tudor, O.: Theory and methodology of training: The key to athletic Performance, 1990.
3. Harre, D.: Principles of Sports Training. Sports verlag, Berlin, 1988.
4. Kansal, D.K.: Test and measurement in sports and physical education, DVS Publication, New Delhi, 1996.
5. Matweyev, L.P.: Fundamentals of Sports training, Publication Moscow, 1984.
6. Michael Kent: The Oxford dictionary of sports sciences and medicine Oxford University Press, Inc., New York, 1994.
7. Scholisch, M.: Circuit Training, Sportvertag, Berlin, 1988
8. Singh, H.: Science of Sports Training. DVS Publication, New Delhi, 1991
9. Singh, H.: Sports Training: General Theory and methods, NIS, Patiala, 1984
10. John SK (2014). 'Health Fitness and Wellness' ISBN No: 978 93 8218665 6 Prestige Books International, Delhi.
11. Beachle, T.R.: Earle, R.W.: Essentials of strength training and conditioning, NSCA Publication, 2000.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.