

## SEMESTER-VII

### BSc-PE-DSE-8 (4)-504: ERGOGENIC AIDS AND DOPING IN SPORTS AND FITNESS

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
<b>BSc-PE-DSE-8 (4)-503: ERGOGENIC AIDS AND DOPING IN SPORTS AND FITNESS</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>Class XII pass</b>	<b>Nil</b>

**Learning Objective:** To acquaint students with the knowledge of Ergogenic Aids and Doping in the field of Physical Education and Sports application performance and will gain knowledge about the use and abuse of these aids.

#### **Learning Outcomes:**

After completing the course, the students will be able to:

- 1 Understand Ergogenic Aids, their Classification, its' uses in sports and Effects on Performance and Health
- 2 Understand sports supplements, Use and abuse of supplements, performance effects and health risks
- 3 Identify commonly used Steroid Supplements, Banned Anabolic Steroids, Methods of Taking Steroids and Health Risks of Steroid Abuse
- 4 Learn about Amphetamines and side- effects of Amphetamines
- 5 Introduced to Doping and Classification of Doping
- 6 Learn the history of Doping and Aim behind Doping
- 7 Identify Banned Substances and Methods of Doping, IOC, FIMS,WADA,NADOs, RADOs

#### **THEORY SYLLABUS (45 HOURS)**

##### **UNIT-I INTRODUCTION (9 Hours)**

- 1.1 Introduction to Ergogenic Aids
- 1.2 Classification of Ergogenic Aids
- 1.3 Commonly used ergogenic aids in sports- Effects on Performance and Health
- 1.4 Banned or Regulated Ergogenic Aids

##### **UNIT II SPORTS SUPPLEMENTS (8 HOURS)**

- 2.1 Use and abuse of Vitamins, Amino Acids, Minerals, Herbs, and other Botanicals as supplements- Safe doses/Tolerable upper limits, effects on health and performance
- 2.2 Protein Supplements, Glucosamine, Ribose, Creatine, Glutamine- Safe doses/Tolerable upper limits, performance effects and health risks
- 2.3 Weight gain and Weight loss supplements- Use and abuse
- 2.3 Strategy to Evaluate Supplement Health Claims

### **UNIT-III STEROID SUPPLEMENTS (10 HOURS)**

- 3.1 Commonly used Steroid Supplements
- 3.2 Banned Anabolic Steroids
- 3.3 Methods of Taking Steroids and Health Risk of Steroid Abuse
- 3.4 Amphetamines and side- effects of Amphetamines

### **UNIT-DOPING (11 HOURS)**

- 4.1 Introduction to Doping and Classification of Doping
- 4.2 History of Doping and Aim behind Doping
- 4.3 Banned Substances and Methods of Doping
- 4.4 IOC, FIMS, WADA, NADOs, RADOs

#### **Suggested Readings**

- Jain, Rachna(2002), Sports Medicine, New Delhi: Khel Sahitya Kendra,.
- Beotra, Alka. (2011) Drug Education Handbook on Drug Abuse in Sports, 8th edition.
- The National Anti-Doping Agency (NADA) Anti-Doping Rules, 2021 Bare Act----Latest 2024 EDITION by Universal's

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