# PHYSICAL AND HEALTH EDUCATION OVERVIEW
# GRADES XI AND XII

**Delhi Board of School Education (DBSE)**

**Directorate of Education, Government of National Capital Territory of Delhi**

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## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| ASoSE | Ambedkar School of Specialised Education |
| DBSE | Delhi Board of School Education |
| TA | Term-end Assessment |
| IA | Internal Assessment |
| IB | International Baccalaureate |
| IGCSE | International General Certificate of Secondary Education |
| KP | Knowledge Partners |
| MYP | Middle Years Programme |

# 1. Introduction

## 1.1. Importance of Physical Education

Quality Physical and Health Education promotes the physical growth and development of children and youth while contributing to their general health and wellbeing. It is based on a planned sequence of experiences in a wide variety of activities beginning with basic movement skills and progressing towards other forms of movement. Ultimately, it will help young people keep themselves physically fit and enjoy many forms of physical activity during their school years and encourage them to continue these activities through their lives. Students can experience success in different ways in Physical and Health Education. For some, the pursuit of excellence and the achievement of sporting goals will be the focus. For some, organizing, leading and facilitating others to be physically active will be the measure of success. For others, including regular physical activity as part of a healthy lifestyle will represent a successful outcome.

## 1.2. Aims of Physical Education

Physical education is an essential and integral part of the total education program and makes significant contributions toward the achievement of desirable education and health outcomes through the medium of physical activity. In this context, the subject aims to address the following content areas in grades XI and XII:

1. Awareness of Physical Education as a career and inclusion opportunities for CWSN
2. The ways to learn about and the practice of healthy living
3. Educational and Practical fusion of leadership skills
4. The benefits of exercise on body systems and programs or activities that maintain and promote functioning of systems
5. Role of PHE for an effective and meaningful life
6. Knowledge of application of scientific principles in efficiency of human movement
7. Explore progress of learning and the methods of their evaluation
8. Apply positive aspects of their profile to the real world

## 1.3. Objectives of Physical Education

By the end of the grade XII, students will achieve the following objectives which relate directly to the assessment criteria in these grades.

**A: Knowledge and understanding**

Students will be able to

- Identify facts, concepts, terminologies of Physical Education
- Identify methodologies and techniques of Physical Education
- Identify the communication way of scientific information of Physical Education.

**B: Applying**

Students will be able to

- Use knowledge and understanding of facts, concepts, and terminologies of Physical Education in familiar and unfamiliar situations.
- Use knowledge and understanding of methodologies and techniques of Physical Education in familiar and unfamiliar situations.
- Use knowledge and understanding communication methods for scientific information of Physical Education in familiar and unfamiliar situations.

**C: Evaluating**

Students will be able to

- Formulate hypothesis, design research questions, and use prediction in matters related to Physical Education.
- Justify methodologies and techniques used in Physical Education.
- Distinguish primary and secondary data for collecting information related to the aspects of Physical Education.
- Explain the aspects of physical education using scientific methods

**D: Investigating**

Students will be able to demonstrate the appropriate research, experimental and personal skills necessary to carry out insightful and ethical investigations while conducting the practical work in the Physical Education domain.

# 2. Physical Education as a subject

## 2.1. Content areas in Physical Education

### 2.1.1 DIMENSIONS OF PHYSICAL EDUCATION

Senior school students will know about the various programs and career options or opportunities available when pursuing Physical Education as a subject. Students will also understand the importance of adaptive physical education, which will act as a platform for the inclusion of CWSN students in regular physical activities.

### 2.1.2 SPORTS TRAINING

By training we mean an organized and systematic instructional process which aims at improving an individuals' ability to play their assigned roles effectively and meaningfully. The main aim of this chapter is to develop the performance capacity of students, so that they achieve the highest possible performance not only in sports but in all aspects of life. Practicing a skill isn't about perfection, as in sports and in real life. The benefits of training are not just to increase your efficacy, but to reset your instincts to respond in the right way. The concept of training will help the students apply their understanding of how and when to spend their energy and know when it's time to say "no".

### 2.1.3 KINESIOLOGY AND BIOMECHANICS

This chapter will study the role of exercise, physical movement and sports in the development of human health and happiness. This chapter utilises sciences like biomechanics, anatomy, physiology and psychology to better understand how the human body responds to physical activity. With a deeper understanding of this aspect, students will improve their efficiency with respect to movement and performance. This chapter will provide adequate knowledge to students regarding the application of Kinesiology and Biomechanics in real life.

### 2.1.4 TEST MEASUREMENT AND EVALUATION (TME)

Test, Measurement and Evaluation are the devices that are needed to collect details about the needs, abilities and attitudes of individuals. Knowledge of this chapter will help students explain their progress of learning and how their final learning outcomes are assessed. The knowledge of TME at this age is helpful for students in terms of innovation, finding solutions to inquiry, knowing and upgradation of self and status assessment.

### 2.1.5 SPORTS PSYCHOLOGY

This is the study of thoughts and behaviours and how they influence one's performance. It helps to improve performance and increase motivation. This chapter utilizes sports and training to help individuals enhance their lives and well-being, as it involves the connection between one's mind and body while performing an activity. The interaction between one's thoughts, body movements, sensations, and total involvement in a task creates a unique experience that is not only for athletes. This connection can occur when one does anything they are passionate about. This chapter will help students apply positive aspects of their profile to the real world and overcome negative aspects.

### 2.1.6 NUTRITION AND HEALTH EDUCATION

This chapter seeks to empower students with knowledge and skills to make healthy food and lifestyle choices. The contents of this chapter provide evidence-based support about preventive health to promote normal growth and development, by exploring the role of the right nutrition in an individuals'

life, the impact of various substances, and how to course correct and reduce the risk of lifestyle related diseases in adulthood by shaping adequate dietary and lifestyle behaviours.

### 2.1.7 SPORTS MANAGEMENT

Management is an important aspect of one's life, as he/she must manage so many things in their own lives. This chapter helps students develop their management and leadership skills, which will enable them to organize various events in the future; with a particular focus on learning an educational and practical fusion of leadership skills. Management helps students reflect on their acquired planning, critical thinking, problem solving, communication, organization skills in real-life situations.

### 2.1.8 EXERCISE PHYSIOLOGY

This chapter identifies important effects of exercise on the body's systems, tissues, and cells, which helps students use the knowledge to further understand how the body functions and to develop activities and programs that establish, maintain, and promote physical fitness. Knowing how your body responds to short-term sessions of physical activity and how it adapts to repeated sessions of physical activity over time, can have a profound impact on your health and help you reach a higher level of fitness and/or health long-term.

## 3. Curriculum overview for grades XI and XII

An academic year at DBSE consists of two terms. The grade XI and XII curriculum is clustered into 4 chapters. These chapters are delivered in two terms of an academic year. Chapter names, content, duration and learning resources are provided in the subsequent sections.

### 3.1. Grade XI curriculum overview

Table 1: Chapter names, content, duration and the learning resources in grade XI

| Grade XI | | | |
|---|---|---|---|
| **Term 1** | | | |
| **Chapter** | **Content** | **Duration** | **Resources** |
| Dimensions of Physical Education | • Physical Education Programs and Professions<br>• Inclusive Physical Education<br>• Organization promoting adaptive sports | 7 weeks | • Essential of physical education by Dr. Ajmer Singh<br>• Student manual |
| Nutrition and health education | • Identification of Heath Markers<br>• Planning for Physical Activity<br>• Assessment and Planning of Diet and Nutrition based on Individual Differences | 7 weeks | • Holistic Personality Development by Dr. D.K. Kansal<br>• Student manual |
| **Term 2** | | | |
| Sports management | • Management in Sports<br>• Administration of tournament<br>• Leadership in Sports | 7 weeks | • Management Concept in Physical Education and Sports by Kamlesh M.L.<br>• Student manual |
| Exercise physiology | • Effects of Exercise on different body systems of a sports person<br>• Adverse effects of over-exercise on sports person<br>• Assessment of selected physiological variable | 7 weeks | • Exercise Physiology by Dr. Sandhya Tiwari<br>• Student manual. |

## 3.2. Grade XII curriculum overview

Table 2: Chapter names, content, duration and the learning resources in grade XII

| Grade XII | | | |
|---|---|---|---|
| **Term 1** | | | |
| **Chapter** | **Content** | **Duration** | **Resources** |
| Sports Training | • Importance of Sports Training<br>• Path of Adaptation in Training<br>• Bio-Motor Abilities and their developing methods in Sports<br>• Designing of Sports Training Plan | 7 weeks | • Science of Sports Training by Dr. Hardayal Singh<br>• Student manual. |
| Kinesiology and biomechanics | • Introduction of Biomechanics<br>• Conceptual Understanding of movement<br>• Centre of Gravity in Sports<br>• Structure of Motor Action | 7 weeks | • Biomechanics and Kinesiology of Human Motion by Dr Dhananjoy Shaw<br>• Student manual |
| **Term 2** | | | |
| Test measurement and evaluation | • An approach towards test construction in sports<br>• Computation of a test<br>• Integrated approach of evaluation | 7 weeks | • Essential of physical education by Dr. Ajmer Singh<br>• Student manual |
| Sport psychology | • Prepare psychological profile of sports person<br>• PST<br>• Exercise Adherence | 7 weeks | • Psychology in Physical Education and Sport. Dr. M.L. Kamlesh<br>• Student manual |

## 4. Assessment Overview

Criterion based assessments enable students to self-monitor and build self-belief as they can see the evidence of the progress they are making over time. Students can track their progress using level descriptors, they can clearly understand how their work can be improved over time.

The four core criteria assessed in Physical Education are:

1. Criterion A – Knowing and understanding
2. Criterion B – Applying
3. Criterion C – Evaluating
4. Criterion D – Investigating

The assessment tasks and methods used in internal assessment are criterion related, student-centric and provide feedback for further enhancement of learning. There are two types of assessments used for reporting student performance.

- Internal assessments (IA) (20%)
- Term-end assessments (TA) (80%)

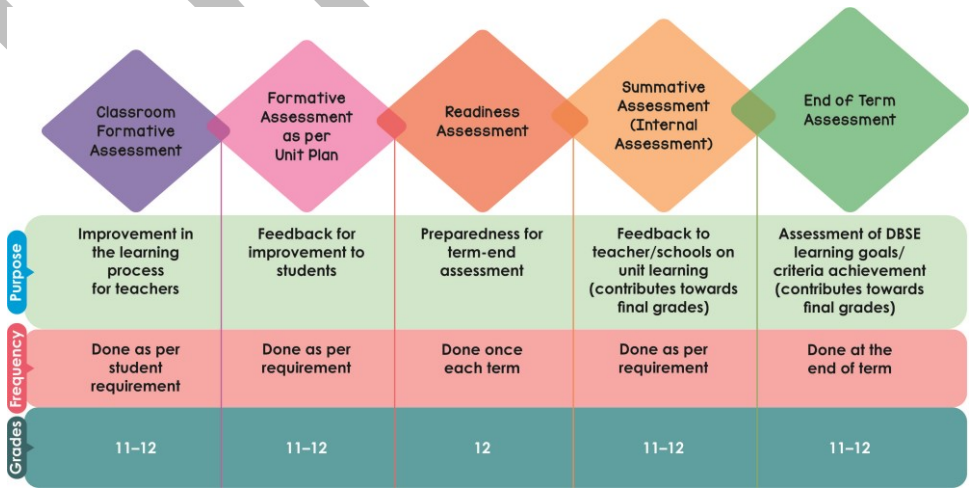
The assessment tasks and methods used in internal assessments provide opportunities for students to show their academic achievements in multiple ways and provide feedback for further enhancement of learning. External assessment tasks are based on curriculum objectives defined for Physical Education.

DBSE assessments used for reporting for grades 11 & 12 can be school-led and/or board-led. School-led assessments are based on an item pool provided by DBSE and Board-led assessments are developed and administered by DBSE. In grade 12, DBSE monitor internal assessments and readiness assessments. Term-end assessments are conducted by DBSE.

### 4.1. Assessment structure

Global best practices suggest a multifaceted assessment structure. That is, students should be assessed in multiple ways and at multiple times without increasing the workload of teachers or students, to the extent possible. A schematic representation of the DBSE assessment structure is presented below:

Figure 1: Assessments in DBSE



## 4.2. Assessment calendar

The assessment calendar for internal and external assessments for academic year 2022- 23 grade 9 assessments is given below.

Table 3: Grade XI assessment calendar

| Chapter | Duration | | Assessment | Criteria Assessed | Assessment Strategies |
|---|---|---|---|---|---|
| 1 | 04 July 2022 | 13 Aug 2022 | IA 1 Summative | A. Knowing and Understanding<br>B. Applying<br>D. Investigating | • Student Portfolio<br>• Viva, and<br>• Performance or Demonstration of task/skill. |
| 2 | 16 Aug 2022 | 24 Sep 2022 | IA 2 Summative | A. Knowing and Understanding<br>B. Applying<br>C. Evaluating<br>D. Investigating | |
| **10 – 24 October 2022** | | | **Term-end 1** | **All 4 Criteria** | **Competency based assessment** |
| 4 | 01 Nov 2022 | 24 Dec 2022 | IA 3 Summative | A. Knowing and Understanding<br>B. Applying<br>C. Evaluating<br>D. Investigating | • Student Portfolio<br>• Viva, and<br>• Performance or Demonstration of task/skill. |
| 5 | 26 Dec 2022 | 20 Feb 2022 | IA 4 Summative | A. Knowing and Understanding<br>B. Evaluating<br>D. Investigating | |
| **1 - 20 March 2023** | | | **Term-end 2** | **All 4 Criteria** | **Competency based assessment** |

Table 4: Grade XII assessment calendar

| Chapter | Duration | | Assessment | Criteria Assessed | Assessment Strategies |
|---|---|---|---|---|---|
| | 04 Apr 2022 | 16 July 2022 | IA 1 – Summative | All 4 Criteria | • Student Portfolio<br>• Viva, and<br>• Performance or Demonstration of task/skill. |
| | 18 July 2022 | 10 Sept 2022 | IA 2 – Summative | All 4 Criteria | |
| | | | Readiness Assessment | All 4 Criteria | Competency based assessment |
| **10 – 24 October 2022** | | | **Term-end 1** | **All 4 Criteria** | **Competency based assessment** |
| | 01 Nov 2022 | 10 Dec 2022 | IA 3 – Summative | All 4 Criteria | • Student Portfolio<br>• Viva, and<br>• Performance or Demonstration of task/skill. |
| | 12 Dec 2022 | 4 Feb 2022 | IA 4 – Summative | All 4 Criteria | |
| | | | Readiness Assessment | All 4 Criteria | Competency based assessment |
| **1 - 20 March 2023** | | | **Term-end 2** | **All 4 Criteria** | **Competency based assessment** |

## 4.3. Assessment levels and grades

The Assessment Criteria directly relate to the Objectives of the Physical Education curriculum and carry equal weightage. The student achievement levels will be reported as a number grade as described in the grade descriptions.

The grade descriptions are based on assessment criteria levels. The level descriptors of an assessment criterion depict clear progression of improvement of skills and competencies for a learning period.

All the assessment tasks used to report students' achievements are based on task specific, hierarchical, and qualitatively defined rubrics. The categories used in rubrics represent increasing quality or sophistication of response to a task. They provide a basis for evaluating and recording students' responses to an assessment task. A rubric makes assessment expectations transparent.

In order to show the degree of competence in each criterion, fine grained descriptions of various levels are used. These descriptions indicate the progression of achievement in each criterion. IB Physical Education criteria levels and grade descriptions are given in the following tables

Table 5: Objective A: Knowing and Understanding

| Achievement Level | Level Descriptor |
|---|---|
| **0** | **Very Little Knowledge about subject** |
| **1-2** | **Student is able to**<br>a- **Identify** Facts, concepts, terminologies of Physical Education<br>b- **Identify** methodologies and techniques of Physical Education<br>c- **Identify** the communication way of scientific information of Physical Education. |
| **3-4** | **Student is able to**<br>a- **Describe** Facts, concepts, terminologies of Physical Education<br>b- **Describe** methodologies and techniques of Physical Education<br>c- **Describe** the communication way of scientific information of Physical Education. |
| **5-6** | **Student is able to**<br>a- **Classify** Facts, concepts, terminologies of Physical Education<br>b- **Classify** methodologies and techniques of Physical Education<br>c- **Classify** the communication way of scientific information of Physical Education. |
| **7-8** | **Student is able to**<br>a- **Demonstrate** Facts, concepts, terminologies of Physical Education<br>b- **Demonstrate** methodologies and techniques<br>c- **Demonstrate** the communication way of scientific information of Physical Education. |

Table 6: Objective B: Applying

| Achievement Level | Level Descriptor |
|---|---|
| **0** | **Very Little Knowledge about subject** |
| **1-2** | **Student is able to:**<br>a- **Use** knowledge and understanding of Facts, concepts, and terminologies of Physical Education in familiar and unfamiliar situations.<br>b- **Use** knowledge and understanding of methodologies and techniques of Physical Education in familiar and unfamiliar situations.<br>c- **Use** knowledge and understanding communication methods for scientific information of Physical Education in familiar and unfamiliar situations. |
| **3-4** | **Student is able to:**<br>a- **Describe** knowledge and understanding of Facts, concepts, and terminologies of Physical Education in familiar and unfamiliar situations.<br>b- **Describe** knowledge and understanding of methodologies and techniques of Physical Education in familiar and unfamiliar situations.<br>c- **Describe** knowledge and understanding communication methods for scientific information of Physical Education in familiar and unfamiliar situations. |
| **5-6** | **Student is able to:**<br>a- **Classify** knowledge and understanding of Facts, concepts, and terminologies of Physical Education in familiar and unfamiliar situations.<br>b- **Classify** knowledge and understanding of methodologies and techniques of Physical Education in familiar and unfamiliar situations.<br>c- **Apply** knowledge and understanding communication methods for scientific information of Physical Education in familiar situations. |
| **7-8** | **Student is able to:**<br>a- **Apply** knowledge and understanding of Facts, concepts, and terminologies of Physical Education in familiar and unfamiliar situations.<br>b- **Apply** knowledge and understanding of methodologies and techniques of Physical Education in familiar and unfamiliar situations.<br>c- **Apply** knowledge and understanding communication methods for scientific information of Physical Education in familiar and unfamiliar situations. |

Table 7: Objective C: Evaluating

| Achievement Level | Level Descriptor |
|---|---|
| **0** | **Very Little Knowledge about subject** |
| **1-2** | **Student is able to:**<br>a- **Define** hypothesis, research questions, and prediction in Physical Education.<br>b- **Relate** methodologies and techniques of Physical Education.<br>c- **Identify** primary and secondary data for collecting information in Physical Education.<br>d- **Relate** scientific explanations in Physical Education. |
| **3-4** | **Student is able to:**<br>a- **Outline** hypothesis, research questions, and prediction in Physical Education.<br>b- **Choose** methodologies and techniques of Physical Education.<br>c- **Explain understanding** of primary and secondary data for collecting information in Physical Education.<br>d- **Choose** scientific explanations in Physical Education. |
| **5-6** | **Student is able to:**<br>a- **Construct** partially hypothesis, research questions, and prediction in Physical Education.<br>b- **Compare** methodologies and techniques of Physical Education.<br>c- **Choose** primary and secondary data for collecting information in Physical Education.<br>d- **Categories** scientific explanations in Physical Education. |
| **7-8** | **Student is able to:**<br>a- **Formulate** hypothesis, research questions, and prediction in Physical Education.<br>b- **Justify** methodologies and techniques of Physical Education.<br>c- **Distinguish** primary and secondary data for collecting information in Physical Education.<br>d- **Explain** scientific explanations in Physical Education. |

Table 8: Objective D: Investigating

| Achievement Level | Level Descriptor |
|---|---|
| **0** | **Very Little Knowledge about subject** |
| **1-2** | **Student is able to:**<br>**Recall some** appropriate research, experimental and personal skills necessary to carry out insightful and ethical investigations in Practical of Physical Education. |
| **3-4** | **Student is able to:**<br>**Recall** the appropriate research, experimental and personal skills necessary to carry out insightful and ethical investigations in Practical of Physical Education. |
| **5-6** | **Student is able to:**<br>**Outline** the appropriate research, experimental and personal skills necessary to carry out insightful and ethical investigations in Practical of Physical Education. |
| **7-8** | **Student is able to:**<br>**Demonstrate** the appropriate research, experimental and personal skills necessary to carry out insightful and ethical investigations in Practical of Physical Education. |

Table 9: Description of Grade points

| Grade | Grade Description |
|---|---|
| 7 | Displays comprehensive subject knowledge and a thorough command of concepts and principles. Selects and applies relevant information, concepts and principles in a wide variety of contexts. Analyses and evaluates quantitative and qualitative data thoroughly. Constructs detailed explanations of complex phenomena and makes appropriate predictions. Evidences great proficiency in solving problems, including those that are challenging or unfamiliar. Communicates logically and concisely using appropriate terminology and conventions. Shows insight or originality. Approaches investigations in an ethical manner, paying full attention to environmental impact and safety where applicable. Investigations demonstrate insight and independence to design and complete innovative practical work with highly competent investigative and analytical techniques, and with innovative and effective conclusions to resolve authentic problems. |
| 6 | Displays very broad subject knowledge and a thorough understanding of concepts and principles. Selects and applies relevant information, concepts and principles in most contexts. Analyses and evaluates quantitative and qualitative data with a high level of competence. Constructs explanations of complex phenomena and makes appropriate predictions. Solves basic or routine problems and evidences competency in solving those that are challenging or unfamiliar. Communicates effectively using appropriate terminology and conventions. Shows occasional insight or originality. Approaches to investigations in an ethical manner, paying significant attention to environmental impact and safety where applicable. Investigations demonstrate some innovative thinking and independence to design and complete practical work with competent investigative and analytical techniques, and with highly competent and reasonable conclusions to resolve authentic problems. |
| 5 | Displays broad subject knowledge and shows sound understanding of most concepts and principles and applies them in some contexts. Analyses and evaluates quantitative and qualitative data competently. Constructs explanations of simple phenomena. Solves most basic or familiar problems and some new or difficult quantitative and/or qualitative problems. Communicates clearly with little or no irrelevant material. Approaches investigations in an ethical manner, paying attention to environmental impact and safety where applicable. Investigations demonstrate appropriate investigative and analytical techniques with relevant and pertinent conclusions to resolving authentic problems. |
| 4 | Displays reasonable subject knowledge (though possibly with some gaps) and shows adequate understanding of most basic concepts and principles, but with limited ability to apply them. Demonstrates some analysis or evaluation of quantitative or qualitative data. Solves some basic or routine problems but shows limited ability to solve challenging or unfamiliar problems. Communicates adequately, although responses may lack clarity and include some repetitive or irrelevant material. Generally, approaches investigations in an ethical manner, with some attention to environmental impact and safety where applicable. Investigations demonstrate an ability to complete routine practical work with some appropriate investigative and analytical techniques, and with some conclusions relevant to the problem under study. |

| | |
|---|---|
| 3 | Displays limited subject knowledge and shows a partial understanding of basic concepts and principles, and weak ability to apply them. Shows some ability to manipulate data and solve basic or routine problems. Communicates with a lack of clarity and some repetitive or irrelevant material. Sometimes approaches investigations in an ethical manner, with some attention to environmental impact and safety where applicable. Investigations demonstrate an ability to complete a basic investigation with simple analytical techniques, and with some partial conclusions of some relevance to study. |
| 2 | Displays little subject knowledge and shows weak understanding of basic concepts and principles, and little evidence of application. Exhibits minimal ability to manipulate data and little or no ability to solve problems. Offers responses which are often incomplete or irrelevant. Occasionally approaches investigations in an ethical manner but shows very limited awareness of environmental impact and safety. Investigations demonstrate an ability to undertake basic investigative work requiring considerable guidance and instruction and attempts at conclusions that are largely incorrect/irrelevant. |
| 1 | Fragmentary subject knowledge and shows very little understanding of any concepts or principles. Rarely demonstrates personal skills, perseverance or responsibility in investigative activities. Rarely approaches investigations in an ethical manner or shows an awareness of environmental impact and safety. Investigations demonstrate an ability to undertake very basic practical work with complete dependence on supervised instruction, with attempts at conclusions are either absent or completely incorrect/irrelevant. |