UNIT-IV: PHYSICAL EDUCATION AND SPORTS FOR CHILDREN WITH SPECIAL NEEDS

Chapter Content

Concept of Disability & Disorder

- Types of Disability, its causes & nature (cognitive disability, intellectual disability, physical disability)
- Types of Disorder, its cause & nature (ADHD, SPD, ASD, ODD, OCD)
- Disability Etiquettes
- Advantage of Physical Activities for children with special needs
- Strategies to make Physical Activities assessable for children with special need.

Learning Outcomes

In this chapter you will learn to

- describe the concept of Disability and Disorder.
- outline types of disability and describe its causes and nature.
- outline types of disorder and describe its causes and nature.
- explain various disability etiquettes
- list advantage of physical activities for children with special needs
- explain Strategies to make physical activities accessible for children with special needs

Discussion

Several terms and phrases related to special needs may create some amount of confusion, perhaps misunderstanding. Look at the already know, want to know and ultimately learn (KWL) Chart given below. Complete the first two columns. Fill in the last column after completing your research by reading, or watching relevant videos.

Word	What I Know	What I Want to Know	What I Learned
Differently abled			
Disability			
Hidden disability			
Temporary disability			
Impairment			
Disorder			
Integration			
Adaptation			
Inclusion			

Case Study

The Commonwealth Games in Manchester, England in 2002, marked an extremely important change in the way disabled competitors were treated in athletics tournaments. For the first time, medals won by disabled competitors were counted towards their countries' final totals. Disabled competitors joined the procession of national teams, they lived together in the athletes' village, and their events were staged in the same stadiums at peak times alongside star names.

Read the following transcript of a radio interview with Desmond Green, a former athlete on the changes in the Manchester Commonwealth Games.

Presenter: Do you think these changes are a welcome step forward?

Desmond Green: Much, much more than that. They are a revolution in sport. After yesterday we can't go back, though for certain the traditionalists will complain. No, it's a marvellous turning point. Calling someone a 'disabled athlete' will no longer be considered one of those second best, embarrassing expressions: it will stand for status of a sort that will appeal to the public.

Presenter: Surely, what the public want to see is first past the post, the world's fastest – that sort of thing… **Green:** Ah, that's precisely what traditionalists will say! But it isn't like that. These decisions have turned sport upside down because, from now on, we shall acknowledge what individuals can do. Take Natalie du Toit. Since losing her leg in a road accident, she's trained relentlessly. Now she's in Manchester representing South Africa as a swimmer. What an achievement against the odds! That's the sort of story readers want. They're tired of muscles and speed and running the same old races in the same old ways.

They want real competitors, people who are doing their best under very trying circumstances, just like them. The traditionalists can't handle that. They fear change and want athletics competitions to be the same as always.

Presenter: So you reckon spectators will like this?

Green: Of course. They've seen it in marathon events. You see, they want more than excellence. To see a magnificent performance by someone in a sporting wheelchair is moving and uplifting. You identify strongly with them, which is emotional. You could say that these changes give us a new version of an old sport, something fresh and exciting to talk about. But the real importance is that it inspires the spectators. How many of us who are burdened by unhappiness and depression will see the Games and ask ourselves why we can't overcome our difficulties and go and do something positive ourselves?

Presenter: I suppose you're also saying that these changes in the ways disabled athletes are treated mark a change in our attitudes towards them.

Green: Absolutely. They're taking a real part. No one can patronise them with second-class events that 'someone let us have because we are cripples', tagged on for the sake of

political correctness. No patronising, that's the point. They're there in their own right. You know, 'political correctness' is necessary because it protects people – but it's marvellous when you can throw it out of the window and start again.

Presenter: You feel very strongly about disability, don't you, Desmond?

Green: I do. There are many forms, and you and I could easily find ourselves classified in some way. When we talk about a minority, we forget how many real people there are out there and the important part they play in society. These games will help people to turn disability into normality. I've seen blind people skiing, and we both know about the work done by societies for horse-riding for the disabled. We all want to be accepted as normal, and this will help.

Presenter: Will the Games change disabled people's attitudes too?

Green: Anything that gives them the confidence they deserve is important. They will hear interviews with athletes and they'll say, 'Why can't we do something like that?'

Presenter: I can see why you mistrust traditionalists.

Green: They live in ivory towers, in the past. They talk about the pursuit of excellence and how athletes must be ruthless. They deride the participation of the disabled because they say that athletics is not suitable for them. But no organisation can protect itself from change. If it does, it withers away. These changes are important because they show that athletics is alive and that will gain public support and interest.

Presenter: Some disabled athletes argue that not enough has been done.

Green: There's a long way to go, but what has been done is radical. It'll take some time to digest. Then we can all think what we should add. It's not beyond us to invent other ways of celebrating the excellence of personal achievement.

Q. Why is the format of the Manchester Commonwealth Games being referred to as revolutionary?

Q. What does the term 'political correctness' mean? What is being referred to as political correctness?

Q. Based on your reading of the transcript, and the subsequent changes that have taken place in the sports activities related to athletes with special needs, write a paragraph in about 200 words expressing your views on the issue of the equal participation of able-bodied and disabled athletes.

4.1.1 Disability

Disability is an integral part of human life. Almost everyone of us has faced some kind of temporary or permanent impairment at some point in life that may have led us to experience difficulties in functioning. In other words, in addition to needs in common with other children, some children may have needs that are special needs. From early times,

humanity has faced the moral and political issue of how best to include and support people with disabilities.

Thus, the understanding of the concept of Children With Special Needs (CWSN) is essential. CWSN are children who have some difficulties which may in some way impede their ability to function adequately in the family, community or school. Because of these difficulties they find it challenging to attain their full potential. The difficulties they experience may be physical, cognitive, linguistic, social, emotional or psychological. They may, therefore, require special and extra inputs to overcome their challenges.

The term Disability is a very vast one and encompasses all kinds of physical impairments, activity limitations, and participation restrictions. Around 15% of the global population – over a billion people – lives with some form of disability, of whom 2–4% experience significant difficulties in functioning. This number is expected to double to 2 billion by 2050. Many of these people require assistive technologies such as low-vision devices, wheelchairs or hearing aids.

3rd December is celebrated as World Disability Day.

4.1.2 Concept of Disability

Disability is understood as a condition that produces a long-term impairment that affects activities of daily living, such as eating, walking, and maintaining personal hygiene. Disability may be

- congenital, or present from birth,
- occurring during a person's life time,
- invisible disability (not noticeable easily) and
- temporary disability (recovery is possible).

Do you know

Barriers include communicational, cultural, economic, environmental, institutional, political, social, attitudinal or structural factors which hamper the full and effective participation of persons with disabilities in society. For instance, 'stereotyping' might be an attitudinal barrier, wherein people assume that the quality of life of a person with disability is poor or that they are unhealthy because of their impairments, and so such a person must live a dull life without seeking happiness. Lack of availability of books/ materials in Braille for a visually impaired person can be a communicational barrier. Social barriers are related to the conditions in which people are born, grow, live, learn, work and age – or social determinants of health – that can contribute to decreased functioning among people with disabilities. For instance, persons with disabilities are more likely to be unemployed than others.

Institutional barriers include many laws, policies, strategies or practices that discriminate against people with disabilities. This may not be intentional but there are practices which do not accommodate persons with disabilities denying them equal rights in many circumstances.

These conditions, or impairments, may be cognitive, developmental, intellectual, mental, physical, sensory, or a combination of multiple factors.

The **Convention on the Rights of Persons with Disabilities** and its **Optional Protocol** was adopted on 13 December 2006 at the United Nations Headquarters in New York. The Convention follows decades of work by the United Nations to change attitudes and approaches to persons with disabilities. The Convention is intended as a human rights instrument with an explicit, social development dimension. It adopts a broad categorization of persons with disabilities and reaffirms that ***all persons with all types of disabilities must enjoy all human rights and fundamental freedoms***. To give the effect to the United Nations Convention on the Rights of Persons with Disabilities an act names the **Rights of Persons with Disabilities Act 2016** (RPWD Act 2016) was passed by Indian Parliament on 27th December 2016.

4.1.3 Definition of Disability

According to the **Rights of Persons with Disabilities Act, 2016**[1]

"**Person with disability**" refers to a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others.

"**Person with benchmark disability**" is a person with disability or affected by - Blindness, Low-vision, Hearing Impairment (deaf and hard of hearing), Dwarfism or a leprosy cured person-(Disabilities defined in measurable terms) or a person with not less than 40% of the following disabilities as certified by a certifying authority - Locomotor Disability, Intellectual Disability, Mental Illness, Autism Spectrum Disorder, Cerebral Palsy, Muscular Dystrophy, Chronic Neurological conditions, Specific Learning Disabilities, Multiple Sclerosis, Speech and Language disability, Thalassemia, Hemophilia, Sickle Cell disease, Multiple Disabilities, Acid Attack victim, Parkinson's disease. (Disabilities not defined in measurable terms in the Act).

According to **World Health Organization** – *Disabilities is an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus, disability is a complex phenomenon,*

reflecting an interaction between features of a person's body and features of the society in which he or she lives.

Do you know?

Impairments are problems in body function or alterations in body structure – for example, paralysis or blindness.

Activity limitations are difficulties in executing activities – for example, walking or eating.

Participation restrictions are problems with involvement in any area of life – for example, facing discrimination in employment or transportation

The International Classification of Functioning, Disability, and Health (ICF)[2] lists 9 broad domains of functioning which can be affected:

- Learning and applying knowledge
- General tasks and demands
- Communication
- Basic physical mobility, Domestic life, and Self-care (for example, activities of daily living)
- Interpersonal interactions and relationships
- Community, social and civic life, including employment
- Other major life areas

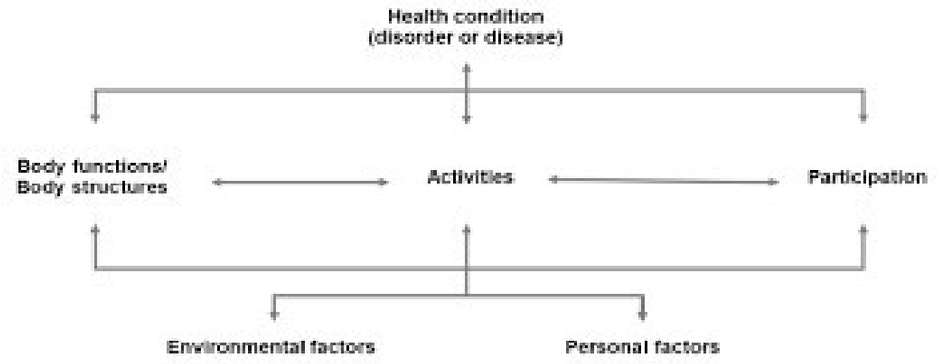
The ICF states that a variety of conceptual models have been proposed to understand and explain disability and functioning, which it seeks to integrate. Major conceptual models of disability have been proposed by ICF.

The medical model views disability as a feature of the person, directly caused by disease, trauma or other health condition, which requires medical care provided in the form of individual treatment by professionals. Disability, on this model, calls for medical or other treatment or intervention, to 'correct' the problem with the individual.

The social model of disability sees disability as a socially created problem and not at all an attribute of an individual. On the social model, disability demands a political response, since the problem is created by an unaccommodating physical environment brought about by attitudes and other features of the social environment.

Biopsychosocial model is one that synthesizes what is true in the medical and social models, without making the mistake each makes in reducing the whole, complex notion of disability to one of its aspects. ICF is based on this model, an integration of medical and social. ICF provides, by this synthesis, a coherent view of different perspectives of health: biological, individual and social.

The following diagram is one representation of the model of disability that is the basis for ICF.



As the diagram indicates, in ICF disability and functioning are viewed as outcomes of interactions between health conditions (diseases, disorders and injuries) and contextual factors. Among contextual factors are external environmental factors (for example, social attitudes, architectural characteristics, legal and social structures, as well as climate, terrain and so forth); and internal personal factors, which include gender, age, coping styles, social background, education, profession, past and current experience, overall behaviour pattern, character and other factors that influence how disability is experienced by the individual. The diagram identifies the three levels of human functioning classified by ICF: functioning at the level of body or body part, the whole person, and the whole person in a social context. Disability therefore involves dysfunction at one or more of these same levels: impairments, activity limitations and participation restrictions.

The formal definitions of these components of ICF are provided below.

Body Functions are physiological functions of body systems (including psychological functions).

Body Structures are anatomical parts of the body such as organs, limbs and their components. **Impairments** are problems in body function or structure such as a significant deviation or loss. **Activity** is the execution of a task or action by an individual.

Participation is involvement in a life situation.

Activity Limitations are difficulties an individual may have in executing activities.

Participation Restrictions are problems an individual may experience in involvement in life situations. For example, a hearing-disabled individual without a sign language interpreter, a wheelchair user in a building without an accessible bathroom or elevator, a visually-challenged person using a computer without screen-reading software.

Environmental Factors make up the physical, social and attitudinal environment in which people live and conduct their lives.

4.1.4 Concept of Disorder

Disorder is a functional abnormality or disturbance. The Oxford English Dictionary defines a disorder as ***an illness that disrupts normal physical or mental function***. Going by this definition, disorder could be defined as a set of problems, which result in causing significant difficulty, distress, impairment and/or suffering in a person's daily life, or a dysfunction which negatively affects the structure or function of an organism physiologically and psychologically.

Do you know>

Emotional and Behavioural Disorders (EBD) is a broad category which is used commonly in educational settings, to group a range of more specific perceived difficulties of children and adolescents.

A child exhibiting one or more of the following characteristics to a marked degree for a long duration of time that adversely affects their education:

1. Difficulty to learn that cannot be explained by intellectual, sensory, or health factors.
2. Difficulty to build or maintain satisfactory interpersonal relationships with peers and teachers.
3. Inappropriate types of behaviour or feelings under normal circumstances.
4. A general pervasive mood of unhappiness or depression.
5. A tendency to develop physical symptoms or fears associated with personal or school problems.

A disorder must be "a manifestation of a behavioural, psychological, or biological dysfunction in the person" (American Psychiatric Association, 1987). It is also required that a disorder must be associated with "present distress (a painful symptom) or disability (impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom."

Looking at disorders in a little more detail, we can say they are physical or mental conditions that disturb the regular or normal functioning and everyday activities of an individual. They can take up a lot of time and complicate the normal functioning of an individual. Due to the nature of disorders being flexible, they may not always be evident in every single situation. Equally what may affect one individual may not be as troublesome to another individual in the same situation. Therefore, a disorder is a very flexible and individual term.

4.1.5 What is the Right Term?

It is a matter of confusion for many as to what is the right term – Disability/Disorder/ Children with Special Needs/*Divyangjan*. As per the Disability Act, "Person with Disability" or

Divyangjan are the acceptable terms. Disorders are used frequently in medical terminology whereas Children with Special Needs (CWSN) is more frequent in educational set up.

I. Tick the correct option

1. A Disability present at the time of birth is also known as
   (a) invisible disability
   (b) cognitive disability
   (c) congenital Disability
   (d) temporary Disability
2. Which one is Congenital disability?
   (a) Down syndrome
   (b) Cerebral palsy
   (c) Polio
   (d) Both A and B
3. Name the category of disability which can be difficult for others to recognize/ acknowledge.
   (a) Physical Disabilities
   (b) Hidden Disabilities
   (c) Cognitive Disabilities
   (d) Intellectual Disabilities
4. Which is Hidden disability?
   (a) Dyslexia
   (b) Autism Spectrum Disorder
   (c) ADHD
   (d) Down Syndrome

II. Answer the following questions briefly.

1. Write in detail about Disability.
2. How are the terms Disability and Disorder associated with each other?
3. Define Impairment and Disability.

III. Answer the following question in 150—200 words.

1. Discuss the need of sports for children with special needs.

4.2.1 Types of Disability

Prior to 1995, we were familiar with only four types of disabilities; Orthopaedic Handicap, Visual Handicap, Hearing Handicap and Mental Handicap. In 1995, **Persons with Disability Act** came into force and term handicap was replaced with terms disability and impairment. This act recognized three more disabilities; Low Vision, Leprosy Cured and Mental Illness. In the year 2016, a new Act was enforced -**Right of Persons with Disability Act** (RPwD Act). This act recognizes 21 disabilities.

4.2.2 Physical Disability

A physical disability is the long-term loss or impairment of part of an individual's body function, resulting in a limitation of physical functioning, mobility, dexterity or stamina. Due to the functional loss the individual experiences the inability to perform normal movements of the body, such as walking and mobility, sitting and standing, use of hands and arms, muscle control, etc. These disabilities include

1. **Locomotor Disabilities** – A person's inability to execute distinctive activities associated with movement of self and objects resulting from affliction of musculoskeletal or nervous system or both including.
2. **Leprosy cured person** means a person who has been cured of leprosy but is suffering from:
   i. loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye- lid but with no manifest deformity;
   ii. manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity;
   iii. extreme physical deformity as well as advanced age which prevents him/her from undertaking any gainful occupation, and the expression "leprosy cured" shall be construed accordingly;

3. **Cerebral Palsy** refers to a Group of non-progressive neurological condition affecting body movements and muscle coordination, caused by damage to one or more specific areas of the brain, usually occurring before, during or shortly after birth;
4. **Dwarfism** means a medical or genetic condition resulting in an adult height of 4 feet 10 inches (147 centimetres) or less;

5. **Muscular Dystrophy** means a group of hereditary genetic muscle disease that weakens the muscles that move the human body and persons with multiple dystrophy have incorrect and missing information in their genes, which prevents them from making the proteins they need for healthy muscles. It is characterised by progressive skeletal muscle weakness, defects in muscle proteins, and the death of muscle cells and tissue;

6. **Acid attack victim** refers to a person disfigured due to violent assaults by throwing of acid or similar corrosive substance.

7. **Visual impairment** (blindness) means a condition where a person has any of the following conditions, after best correction

   i. total absence of sight; or

   ii. visual acuity less than 3/60 or less than 10/200 (Snellen) in the better eye with best possible correction; or

   iii. limitation of the field of vision subtending an angle of less than 10 degree.

8. **Visual impairment** (Low-vision) means a condition where a person has any of the following conditions, namely:

   i. Visual acuity not exceeding 6/18 or less than 20/60 upto 3/60 or upto 10/200 (Snellen) in the better eye with best possible corrections; or

   ii. limitation of the field of vision subtending an angle of less than 40 degree up to 10 degree.

Hearing Impairment - Hearing impairment is the inability of an individual to hear sounds adequately. This may be due to improper development, damage or disease to any part of the hearing mechanism. Hearing is a prerequisite for the development of normal speech and language. A child learns to speak by hearing the speech of others in the family and in his surroundings. Deafness at birth or in early childhood has disastrous effects on the child's overall development. These effects vary depending upon the age of onset, nature and degree of hearing impairment. Deafness is an invisible impairment. Keen observation is necessary in order to identify a deaf child/individual.

9. **Hearing impairment** (Deaf) means persons having 70 DB hearing loss in speech frequencies in both ears;

10. **Hearing impairment** (Hard of hearing) means person having 60 DB to 70 DB hearing loss in speech frequencies in both ears;

11. **Speech and language disability** means a permanent disability arising out of conditions such as laryngectomy or aphasia affecting one or more components of speech and language due to organic or neurological causes.

4.2.3 Intellectual Disability

An individual with intellectual disability has limitations in two areas.

Intellectual functioning, which refers to a person's ability to learn, reason, make decisions, and solve problems.

Adaptive behaviours, or skills necessary for day-to-day life, such as being able to communicate effectively, interact with others, and take care of oneself.

1. **Intellectual disability,** a condition characterised by significant limitation both in intellectual functioning (reasoning, learning, problem solving) and in adaptive behaviour which covers a range of every day, social and practical skills.
2. **Specific learning disabilities** means a heterogeneous group of conditions wherein there is a deficit in processing language, spoken or written, that may manifest itself as a difficulty to comprehend, speak, read, write, spell, or to do mathematical calculations and includes such conditions as perceptual disabilities, dyslexia, dysgraphia, dyscalculia, dyspraxia and developmental aphasia.
3. **Autism spectrum disorder** means a neuro-developmental condition typically appearing in the first three years of life that significantly affects a person's ability to communicate, understand relationships and relate to others, and is frequently associated with unusual or stereotypical rituals or behaviours.

4.2.4 Mental Behaviour

1. **Mental illness** means a substantial disorder of thinking, mood, perception, orientation or memory that grossly impairs judgment, behaviour, capacity to recognise reality or ability to meet the ordinary demands of life, but does not include retardation which is a condition of arrested or incomplete development of mind of a person, specially characterised by sub normality of intelligence.

4.2.5 Chronic Neurological Conditions

1. **Multiple sclerosis** means an inflammatory, nervous system disease in which the myelin sheaths around the axons of nerve cells of the brain and spinal cord are damaged, leading to demyelination and affecting the ability of nerve cells in the brain and spinal cord to communicate with each other.
2. **Parkinson's disease** means a progressive disease of the nervous system marked by tremor, muscular rigidity, and slow, imprecise movement, chiefly affecting middle-aged and elderly people associated with degeneration of the basal ganglia of the brain and a deficiency of the neurotransmitter dopamine.

4.2.6 Blood Disorders

1. **Haemophilia** means an inheritable disease, usually affecting only male but transmitted by women to their male children, characterised by loss or impairment of the normal clotting ability of blood so that a minor wound may result in fatal bleeding;
2. **Thalassemia** means a group of inherited disorders characterised by reduced or absent amounts of haemoglobin.
3. **Sickle cell disease** means a haemolytic disorder characterised by chronic anaemia, painful events, and various complications due to associated tissue and organ damage; "haemolytic" refers to the destruction of the cell membrane of red blood cells resulting in the release of haemoglobin.

4.2.7 Multiple Disabilities

1. **Multiple Disabilities** (more than one of the above specified disabilities) including deaf blindness which means a condition in which a person may have combination of hearing and visual impairments causing severe communication, developmental, and educational problems.

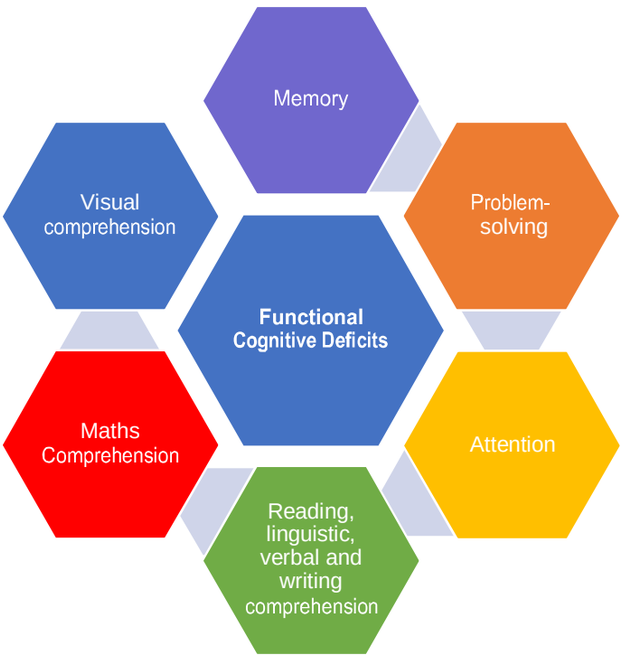
4.2.8 Nature of Disabilities

Students with disabilities face various difficulties in their personal, academic and sports related aspects. Broadly these may be described into three major domains. These difficulties may be caused by:

1. Learning Disabilities
2. Intellectual Disabilities
3. Physical Disabilities

4.2.9 Learning Difficulties

A person with cognitive disabilities has trouble remembering, learning new things, concentrating, or making decisions that affect her/his everyday life. Cognitive disability ranges from mild to severe. A person with a mild cognitive disability people may be able to do her/his everyday activities. Severe levels of disability can lead to her/his losing the ability to understand the meaning or importance of something and the ability to talk or write, resulting in the inability to live independently. Some of the main categories of functional cognitive disabilities include the following deficits or difficulties.



Memory - Memory refers to the ability of a user to recall what they have learned over time. A common model for explaining memory involves the concepts of working (i.e., immediate) memory, short-term memory, and long-term memory. Some individuals with cognitive disabilities have difficulties with one, two, or all three of these memory types.

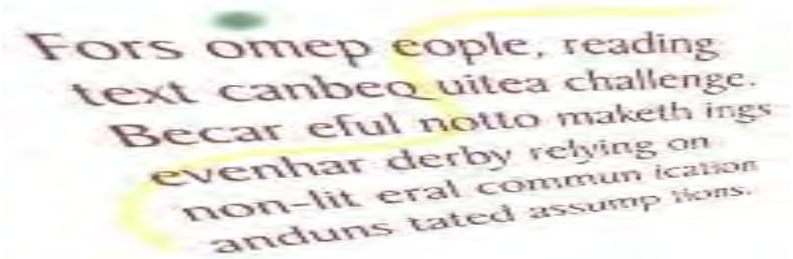
Problem Solving - Some individuals with cognitive disabilities have a difficult time solving problems as they arise. In many instances, their resilience can be low, and the resulting frustration is such that they choose to give up and not persist to solve the problem.

Attention -There are many individuals that have difficulty with focusing their attention to the task at hand. Distractions such as any specific sound, colour, design frequently shift the attention.

On a positive note, some people with attention deficits are highly creative and very productive in short bursts, with an abundance of energy and enthusiasm. On a less positive note, it can be difficult for people with ADHD to stick to a task for a long period of time.

Reading, Linguistic, Verbal and Writing Comprehension – Difficulties related to reading, speaking, understanding and writing are another challenge. Reading disorder, also known as Dyslexia, is characterized by trouble with reading despite normal intelligence. These difficulties may be mild or severe. Problems may include difficulties in spelling words, reading quickly, writing words, "sounding out" words in the head, pronouncing words when reading aloud and understanding what one reads. In fact, many of the brightest minds of

recent generations such as Albert Einstein, Thomas Edison and Henry Ford have suffered from some sort of language or text comprehension difficulty.



Non-literal text, such as sarcasm, parody, idiom, metaphor, slang, can be a problem for some readers to understand.

The following are the six types of Reading difficulties.

i. **Phonological** - trouble in breaking speech into individual sounds

ii. **Surface Dyslexia** - taking longer to process language when they move beyond the decoding stage

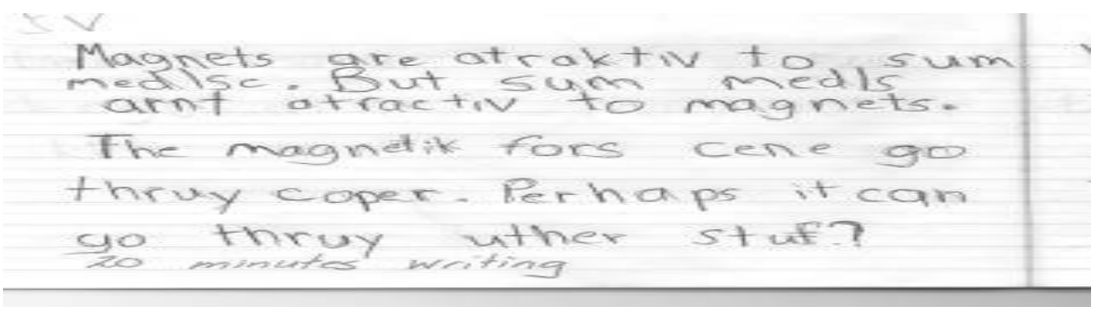
iii. **Visual Dyslexia** - trouble reading and remembering what has been seen on a page because the brain doesn't receive the full picture of what the eyes are seeing.

iv. **Primary Dyslexia** - refers to dyslexia when it is a result of a genetically inherited condition. The individual has difficulties in processing sounds, letters and numbers, which negatively impact her/his abilities in spelling, reading and math.

v. **Secondary Dyslexia –** neurological impairment caused due to infections, or poor nutrition in the womb, leading to brain development issues which result in dyslexia.

vi. **Trauma Dyslexia** - brain injury from trauma or disease can sometimes lead to difficulties with language processing, which result in dyslexia.

Difficulty in Writing, also known as Dysgraphia, is a learning disability that affects a person's handwriting ability and fine motor skills. Problems may include illegible handwriting, inconsistent spacing, poor spatial planning on paper, poor spelling, and difficulty composing writing as well as thinking and writing at the same time.



There are three type of dysgraphia:

i. **Dyslexic Dysgraphia** – Their written text is unreadable; are there spelling issues. However, the individuals can copy, draw and colour.

ii. **Motor Dysgraphia–** It is caused by weakness of fine motor skills. An individual with motor dysgraphia can copy, draw, colour within normal range, but has difficulty in all types of written work, manipulating a pencil, tying shoes etc.

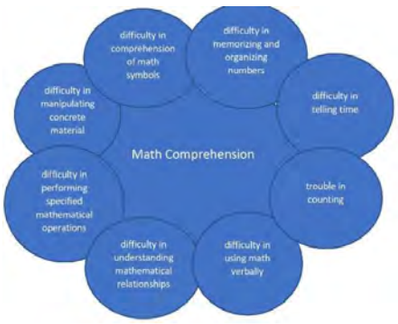
iii. **Spatial Dysgraphia** -A person with spatial dysgraphia has a defect in the understanding of space caused by brain having a difficult with evaluating what the eyes are seeing and how objects are positioned relative to each other. Handwriting is unreadable with unevenly spaced and sized letter.

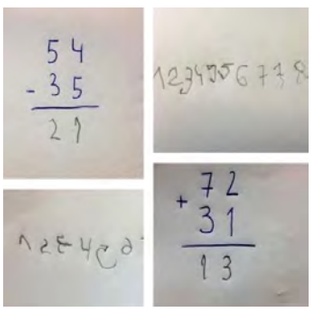
Visual comprehension - In many ways, this is the opposite of the problem experienced by people with reading and verbal processing difficulties. Individuals with visual comprehension difficulties may recognize the fact that there are objects, but may not be able to identify the objects. For example, they may not realize that a photograph of a person is a representation of a person, though they can plainly see the photograph itself (as an object). For these people, a moving, talking person in a video may be easier to identify and process mentally than a static image of a person in a photograph.

Video and multimedia, accompanied with narration, may be the best way to communicate with these individuals. For example, it will be difficult for some person with cognitive disability difficult to comprehend or recognize this sports personality in the given picture or what she is doing.

Math Comprehension – Also known as Discalculia, is a difficulty in learning or comprehending arithmetic, such as difficulty in understanding numbers, learning how to manipulate numbers, performing mathematical calculations and learning facts in mathematics. It includes

- difficulty in comprehension of math symbols,
- difficulty in memorizing and organizing numbers,
- difficulty in telling time,
- trouble in counting
- difficulty in using math verbally
- difficulty in understanding mathematical relationships
- difficulty in performing specified mathematical operation
- difficulty in manipulating concrete material.





4.2.10 Intellectual Disabilities

Intellectual disability is a condition of significantly subaverage general intellectual functioning that impacts adaptive behaviours. Different domains of adaptive behaviour may be affected in this condition. These domains determine how well an individual copes with everyday tasks.

i. **Conceptual** – Language, Reading, Writing, Math, Reasoning, Knowledge, Memory

ii. **Social** - Empathy, Social judgement, Interpersonal communication skill, Make and retain friendships

iii. **Practical** - Self-management, Personal care, Job responsibilities, Money management, Recreation, Organizing school and work tasks

On the basis of IQ, children with intellectual disabilities can be classified as mild, moderate, severe and profound. Study the following summary of the common attributes.

CATEGORY	IQ	COMMON ATTRIBUTES
Mild	50–55 to 70–75	Constitutes the largest proportion (about 85%) of persons with intellectual disabilities. They typically develop communication and social skills from ages 0–5 years, have minimal impairment in sensorimotor areas, and often are not distinguishable from children without intellectual disabilities until a later age.
Moderate	35–40 to 50–55	Constitutes about 10% of those with intellectual disabilities. These individuals typically acquire communication skills during early childhood. They benefit from vocational training and, with proper supervision, can attend to personal care. They also benefit from training in social and occupational skills, but struggle to progress beyond a second-grade level in academic tasks. During adolescence, their difficulties in recognizing social norms may interfere with peer relationships.
Severe	20–25 to 35–40	Constitutes 3% to 4% of those with intellectual disabilities. These individuals typically acquire little or no communicative speech during early childhood but during their school-age years may learn to talk and acquire basic self-care skills. They benefit to a limited extent from instruction in basic content such as the alphabet. In adulthood, they may be able to perform simple tasks if closely supervised.
Profound	below 20–25	Constitutes 1% to 2% of those with intellectual disabilities. These individuals exhibit considerable impairments in sensorimotor functioning during early childhood. Optimal development requires highly structured environments with constant individualized support and supervision. Their motor skills, self-care, and communication skills may improve if proper training is provided. They may learn to perform simple tasks under close supervision.

Down Syndrome – Down Syndrome is a condition which is considered as subtype of intellectual disability. Also known as trisomy 21, it is a genetic disorder caused by the

presence of all or part of a third copy of chromosome 21. It is usually associated with physical growth delays, mild to moderate intellectual disability, and characteristic facial features. The average IQ of a young adult with Down syndrome is 50, equivalent to the mental ability of an 8- or 9-year-old child, but this can vary widely. At birth, babies with Down Syndrome usually have certain characteristic signs, including:

Picture Source[3]

- flat facial features,
- small head and ears
- short neck
- bulging tongue
- eyes that slant upward
- atypically shaped ears
- poor muscle tone

People with Down syndrome usually have some degree of developmental disability, but it's often mild to moderate. Mental and social development delays may mean that the child could have:

- impulsive behaviour
- poor judgment
- short attention span
- slow learning capabilities

Autism Spectrum disorder - Autism spectrum disorder (ASD) is an umbrella term for a group of developmental disorders that are neurological in origin and cause social, communication and behavioural challenges. ASD is mainly characterized by impaired social interaction and

communication and the presence of repetitive behaviours or restricted interests. Children with ASD may also have their sensory sensitivity affected i.e, they may be under or over sensitive to certain senses (For example, loud noises, certain fabrics etc).

Symptoms are typically recognized between one and two years of age. Long-term problems may include difficulties in performing daily tasks, creating and keeping relationships, and maintaining a job.

Symptoms of ASD include

Developmental Delay in Initial Years

i. failure to show interest, not responding to name

ii. delayed imaginative play

iii. regression in variety of domain as communication, social cognitive and self - help skills.

Problems with Social Interaction

i. largely prefer not to play or interact with others

ii. display lack of awareness or understanding of other people's thoughts or feelings

iii. display attention seeking behaviour

iv. maintain poor eye contact: a child with autism may fail to make eye contact when called by name.

v. inability to read facial expressions: they often don't know how to recognize emotions from others' facial expressions, or they may not respond with the appropriate facial expressions

vi. display unusual speech pattern; at least half of children with autism speak in a flat, monotone or they may not recognize the need to control the volume of their voice in different social settings. For example, they may speak loudly in libraries or movie theatres.

Difficulty in Communication

i. repetitive or rigid language, and restricted interests in conversation. (For example, a child might repeat words or insist on always talking about the same subject.)

ii. impairments in pragmatic communication skills, such as difficulty initiating a conversation or failure to consider the interests of the listener to sustain a conversation.

iii. language impairment. (children may develop language skills at an uneven pace acquiring some aspects of communication, while never fully developing others, or may remain completely nonverbal throughout their lives.)

iv. Behaviour Problems

v. stereotyped behaviours such as rocking, hand flapping, finger flicking, head banging, or repeating phrases or sounds, especially when the child gets stressed, anxious or upset.

vi. resistance to change, and preference for routines and rituals that they must follow, like eating certain foods in a specific order, or taking the same path to school every day. The child may have a meltdown if there is any change or disruption to his routine.

vii. restricted interests and excessive interest in a thing or topic while ignoring everything else. (For example, children might try to learn everything about a single topic, such as the weather or sports, and talk about it constantly.)

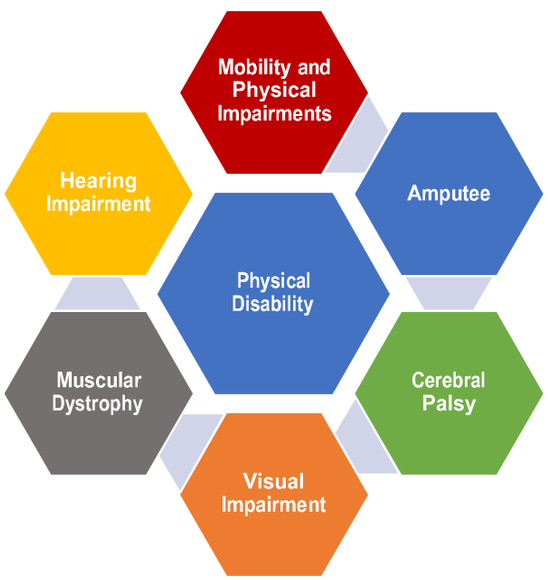
viii. oversensitivity to loud sounds, bright lights, strong smells, or being touched.

Self-injury

i. self-injurious behaviours (SIB) including head-banging, self-cutting, self-biting, and hair- pulling. These behaviours may even result in serious injury. Higher rates of self-injury are also noted in socially isolated individuals with autism.

4.2.11 Physical Disabilities

There are different types of Physical Disabilities. Paralympics Committee divides athletes in groups by the degree of activity limitation related to the impairment and/or specific to the tasks in the sport.



Mobility and Physical Impairments – Physical impairment may affect upper limbs only and the this is commonly called 'Upper limb disability' or lower limbs may be impaired and the

condition is termed as Lower limb disability. Manual Dexterity of the person may also be affected due to physical impairment. This refers to the ability to make coordinated hand and finger movements to grasp and manipulate objects. Manual dexterity includes muscular, skeletal, and neurological functions to produce small, precise movements.

Extension Activity

Design some physical activities for students with physical or intellectual disabilities. Some of these students are sensitive to sound, others have difficulties with coordination. Create some fun games that these students could play. As you go through this process, you may need to research the features of the disability and adapt equipment, or the structure of the activity, to support the students. Reflect on what you have learned in this process. How has your understanding of sport for diverse ranges of ability changed?

Amputation - It is the removal of a limb by trauma, medical illness, or surgery. As a surgical measure, it is used to control pain or a disease process in the affected limb, such as malignancy or gangrene. The amputated person is called an amputee.

Cerebral Palsy- The word *cerebral* means ***having to do with the brain***. The word *palsy* means ***weakness or problems with body movement***. **Cerebral Palsy** (CP) is caused by damage to the parts of the brain that control movement, balance, and posture. CP is a group of permanent movement disorders that appear in early childhood. Signs and symptoms vary among people and over time. Although, most often, the problems occur during pregnancy, they may also occur during childbirth or shortly after birth. Symptoms include poor coordination, stiff muscles, weak muscles, and tremors. There may be problems in sensation, vision, hearing, swallowing, and speaking. Often, babies with cerebral palsy do not roll over, sit, crawl or walk as early as other children of their age. Other symptoms include seizures and problems with thinking or reasoning, which occur in about one third of people with CP.

Picture Source[4]

Physical problems related to Cerebral Palsy include

- Delays in reaching motor skill milestones, such as rolling over, sitting up alone, or crawling
- Variations in muscle tone, such as being too floppy or too stiff
- Delays in speech development and difficulty speaking
- Spasticity, or stiff muscles and exaggerated reflexes
- Lack of muscle coordination
- Tremors or involuntary movements
- Excessive drooling and problems with swallowing
- Difficulty in walking
- Favouring one side of the body, such as reaching with one hand
- Neurological problems, such as seizures,

Types of Cerebral Palsy – Depending upon the type of muscle tone, cerebral palsy can be classified into four types.

Types of Cerebral Palsy			
Spasticity	Athetosis	Ataxia	Mixed Type

Spasticity refers to muscle stiffness or increased muscle tension. Muscular stiffness may be mild, moderate or severe. In severe spasticity muscles are very tight and hypertonic.

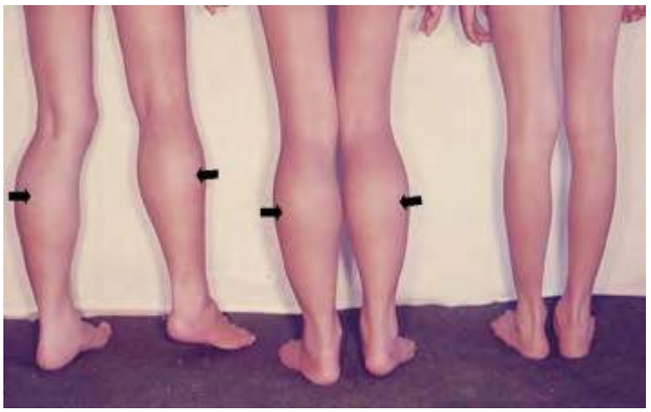
Athetosis means uncontrolled movement. The person shows jerky or slow wriggly movement of the legs, arms, hands or face. The muscle tone keeps fluctuating from stiff to floppy.

Ataxia means unsteady, shaky movements. Low muscle tone (Hypotonia) and poor coordination of movements are the characteristics of ataxic type of cerebral palsy.

Mixed type of cerebral palsy reflects damage in more than one area of brain. If a child has both spastic and athetoid cerebral palsy, then some of the muscles have stiffness and others have involuntary movement.

Muscular Dystrophy- is a group of muscle diseases that results in increasing weakening and breakdown of skeletal muscles over time. The disorders differ depending upon the muscles that are primarily affected, the degree of weakness, how fast they worsen, and when symptoms begin. Many people eventually become unable to walk. Some types are also associated with problems in other organs. Muscular Dystrophy may even be fatal. Muscular dystrophy is caused by mutations on the X chromosome. Each version of muscular

dystrophy is due to a different set of mutations, but all prevent the body from producing dystrophin. Dystrophin is a protein essential for building and repairing muscles. At present, there is no way to prevent or reverse muscular dystrophy, but different kinds of therapy and drug treatment can improve a person's quality of life and delay the progression of symptoms.



Picture Source[5]

Early symptoms of Muscular Dystrophy include:

- a waddling gait
- pain and stiffness in the muscles
- difficulty with running and jumping
- walking on toes
- difficulty sitting up or standing
- learning disabilities, such as developing speech later than usual
- frequent falls

As time goes on, the following become more likely:

- inability to walk
- a shortening of muscles and tendons, further limiting movement breathing problems can become so severe that assisted breathing is necessary
- curvature of the spine can be affected if muscles are not strong enough to support its structure
- the muscles of the heart can be weakened, leading to cardiac problems
- difficulty swallowing, with a risk of aspiration pneumonia. A feeding tube is sometimes necessary.

Visual Disability - Visual impairment is often defined as a best corrected visual acuity of worse than either 20/40 or 20/60. The term blindness is used for complete or nearly complete vision loss. Visual impairment may cause difficulties with normal daily activities such as driving, reading, socializing, and walking. A significant limitation of visual capability resulting from either disease, trauma or congenital or degenerative condition that cannot be corrected by conventional means such as refractive correction, medication, or surgery.

Hearing Disability - Hearing loss, also known as hearing impairment, is a partial or total inability to hear. A person with hearing impairment has little to no hearing. Hearing loss may occur in one or both ears. In children, hearing problems can affect the ability to learn spoken language and in adults it can create difficulties with social interaction and at work. Hearing loss can be temporary or permanent.

4.2.12 Causes of Disabilities and Disorder

Causes of disabilities can be broadly classified into three categories; pre-natal causes, perinatal causes and post-natal causes.

- **Pre-natal causes** involve events, accidents, illness, infection to mother during pregnancy that affect the baby. Conditions like high blood pressure or diabetes of the mother during pregnancy can cause disability in the child.
- **Perinatal causes** are the conditions occurring during the delivery of the child that affect the new-born. Delayed labour pain, low birth weight or neonatal infections may cause a disability.
- **Post-natal causes** include post birth conditions like, illness, infection, poor environment, accidents, psychological factors etc.

The causes may be further sub-divided as

1. **Biological Causes** – Some disabilities are due to the disorder of genes, infectious disease disturbance in glands functioning, illness. Down syndrome, Muscular dystrophy, polio, Developmental disorder are example of various biological issues.
2. **Psychological Causes** – Mental health problems such as depression, bipolar disorder may lead to a spectrum of mental disorders or conditions that influence our emotions, cognitions, and/or behaviours. As a matter of fact, the causes of mental health problems are very difficult to diagnose. They tend to be some of the most misunderstood disabilities.
3. **Delay in Early Screening and Poor management of Disability** - How a child plays, learns, speaks, moves, and behaves all offer important clues about a child's development. A delay in any of these developmental milestones could be a sign of

developmental challenges. Early intervention services, like those services that help a child learn to speak, walk, or interact with others, can really make a difference and enhance a child's learning and development. Early screening and identification are critically important steps towards giving young children with disabilities a strong start in life.

4. **Lifestyle** – The mother's lifestyle during pregnancy has a vital effect on the child's growth and development. If a mother smokes during pregnancy, it has an adverse effect on foetal growth and development. Intake of alcohol and indulgence in substance abuse during pregnancy are the most common causes of developmental disabilities, including cognitive disability, learning disabilities, ADHD and behavioural challenges. Once the child is diagnosed with a learning disorder, she/he must be kept meaningfully occupied. The child's eating, sleeping, and exercise habits are very important. In addition to healthy physical habits, children may be frustrated by the challenges presented by their learning disability and, so, should be encouraged to have healthy emotional habits too.

5. **Accidents and War** – One can be the victim of an accident at the workplace, road accident, chemical accident, nuclear accident, or get exposed to radiation etc. This may lead to disability. Dangerous working environment and poor safety precautions are the conditions where one may get disabilities in the long run. Exposure to biological warfare, nuclear radiation, and suffering physical or psychological trauma of a bomb explosion are other reasons of wartime disabilities.

6. **Poor Approach to Healthcare** – Many disabilities can be prevented easily if there is proper access to healthcare facilities during difficult labour and birth. Proper immunization also helps in preventing many disabilities. In remote areas people do not get proper health facilities and it sometimes results in disabilities and disorders.

7. **Lack of Education and Awareness** – Lack of awareness about certain precautions during or post pregnancy may lead to disability. Awareness about nutrition and exercise helps to prevent disabilities or disorders. Due to lack of awareness people start believing in many kind of superstitions and get misguided.

8. **Exposure to Chemicals** – Pesticides and insecticides and other harmful chemicals if mixed in edible items and may give rise to disabilities in people and birth defects in babies. These substances may cause disorder in the functioning of the human body system and may lead to disabilities.

9. **Illness** – Illnesses like cancer, diabetes, heart disease cause a number of long term disabilities such as arthritis, musculoskeletal disorder etc are a significant cause of disability.

I. Tick the correct option

1. In which category would you place a person with intellectual disability if he has a IQ level between 50-55?
   (a) Mild
   (b) Moderate
   (c) Severe
   (d) Profound
2. A genetic disorder is found in an intellectual disability which is known as?
   (a) Autism
   (b) Cerebral palsy
   (c) Down-syndrome
   (d) None
3. World Disability Day is celebrated on
   (a) 2nd April
   (b) 21st June
   (c) 29th August
   (d) 3rd December

II. Answer the following questions briefly

1. Write a short note on cognitive disabilities
2. What are the characteristics of cerebral palsy?
3. What are the difficulties faced by person with visual impairment?

III. Answer the following question in 150—200 words

1. What are the causes of intellectual disability?

4.3.1 Types of Disorder

Mental disorders - A mental disorder, also called a mental illness or psychiatric disorder, is a behavioural or mental pattern that causes significant distress or impairment of personal functioning. Such features may be persistent, relapsing and remitting, or occur as a single episode. Many disorders have been described, with signs and symptoms that vary widely between specific disorders. Such disorders may be diagnosed by a mental health

professional. Some commonly occurring disorders include ADHD, ASD, Depression, Dementia, Bipolar, Schizophrenia

Genetic disorders - A genetic disorder is a health problem caused by one or more abnormalities in the genome. It can be caused by a mutation in a single gene (monogenic) or multiple genes (polygenic) or by a chromosomal abnormality. Down Syndrome, Muscular Dystrophy, Alzheimer, Dwarfism are some common genetic disorders.

Sensory Disorders - Sensory processing is the normal neurological function that all people experience when their brain processes sensory information from the environment around them. It is a condition in which the brain has trouble receiving and responding to information that comes in through the senses. When a person has a sensory processing disorder, she/he usually has no difficulties receiving the information itself, but their brain cannot effectively process certain sensory information. The disorders cause inappropriate responses, reactions, or both to sensory information. Some people become oversensitive to sensory input. Others may become under- sensitive to sensory input. For example, children with a sensory processing disorder may find certain places or people overwhelming. Others may lack sensations, causing them to play rough and constantly touch objects.

Emotional and Behavioural Disorders - refer to a disability classification used in educational settings that allows educational institutions to provide special education and related services to students who have displayed poor social and/or academic progress. Emotional and Behavioural Disorders includes such emotional and behavioural disorders wherein children exhibit one or more of these five characteristics:

- An inability to learn that cannot be explained by intellectual, sensory, or health factors.
- An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
- Inappropriate types of behavior or feelings under normal circumstances.
- A general pervasive mood of unhappiness or depression.
- A tendency to develop physical symptoms or fears associated with personal or school problems.

These students need individualized behaviour supports such as a Behaviour Intervention Plan. For example, Anxiety disorder, ODD, OCD

4.3.2 Attention Deficit Hyperactive Disorder (ADHD)

Attention Deficit Hyperactive Disorder is a neurodevelopmental type. It is characterized by symptoms such as inattentiveness, hyperactivity and impulsiveness or acting without regard to consequences, in a manner which is not age-appropriate. Some individuals with ADHD

also display difficulty regulating emotions or problems with executive function. For a diagnosis, the symptoms should appear before a person is twelve years old, be present for more than six months, and cause problems in at least two settings (such as school, home, or recreational activities). Although it causes impairment, many people with ADHD can have sustained attention for tasks they find interesting or rewarding (known as hyper focus). The symptoms of ADHD usually improve with age, but many adults who were diagnosed with the condition at a young age continue to experience problems such as sleep and anxiety disorders.

Common symptoms of ADHD include

- hyperactivity and impulsiveness
- having a short attention span and being unable to stick to tasks that are tedious or time- consuming
- inability to control emotions or outbursts
- constantly fidgeting and being unable to concentrate on tasks
- excessive talking
- acting without thinking with little or no sense of danger.

4.3.3 Sensory Processing Disorder

Sensory processing disorder is a condition in which the brain has trouble receiving and responding to information that comes in through the senses. The condition used to be called sensory integration dysfunction. Sensory processing problems are usually identified in children, but they can also affect adults.

Symptoms may vary according to the disorder's type and subtype present. SPD can affect one sense or multiple senses

Signs of over-responsivity include

- dislike of textures such as those found in fabrics, foods, grooming products or other materials found in daily living, to which most people would not react,
- serious discomfort, sickness or threat induced by normal sounds, lights, movements, smells, tastes, or even inner sensations such as heartbeat.

Signs of under-responsivity include

- sluggishness and lack of responsiveness
- sensory cravings including fidgeting, impulsiveness, and/or seeking or making loud, disturbing noises
- sensorimotor problems, including slow and uncoordinated movements or poor handwriting.

Sensory discrimination problems include

- problem in recognising / interpreting differences or similarities in the qualities of stimuli
- problem in processing sensations from touch, muscles and joints [proprioception] and head movements [vestibular or inner ear sensations].

Common Signs are

- Bumps or pushes others
- Grasps objects too tightly or uses too much force
- Frequently drops things or knocks things over
- Mouths, licks, chews or sucks on non-food items
- Craves movement For example, likes to spin self around
- Afraid of heights / swings / slides
- Has poor balance

Extension Activity

Nicknamed "Water Baby" for being a natural in water, Yash Singh became the first and youngest Indian to win a medal at the Special Olympics World Summer Games 2015 in Los Angeles. He won a Bronze in the 25-metre backstroke swimming event.

Born on November 14, 2001, Yash Singh embarked on his sporting journey as a 9-year-old boy, participating in school-level competitions. At 11 years, he won a Bronze medal at SO Bharat Delhi Aquatics State Championship in 2013 and thoroughly impressed the judges by his speed. It was a turning point in his life. Being a differently abled athlete did not deter his passion for swimming. He trained and practiced with great zeal and enthusiasm, and followed a strict regime of diet and training, putting in more hours than his peers.

Yash's journey was not an easy path, but he crossed all hurdles to prove to the world that he is no less than his peers and can even be better. Being a visual learner, he takes time in grasping and learning new skills. He always inspires people around him. Being the only differently abled athlete competing in both mainstream and Special Olympics competitions has boosted his confidence and participating at national and international competitions has presented Yash with myriad social and cultural experiences which have enhanced his holistic development.

Sports taught Yash to be independent, never to give up and empowered him to become self-reliant. He could learn and move forward because of the immense support provided by his school, Step by Step School, his coaches and last but not the least his fellow swimmers.

Since 2016, Yash is in Canada. Being on the High School Swim team and Special Olympics and winning at various competitions at different levels gave him confidence and respect

from his fellow team members. He trains regularly at a Swim club and is guided by National and Olympic level coaches including former world record holder Annamay Pierce, Anna Lydall and few other specialists to improve his technique and performance. He has a rigorous training schedule, which includes 1-2 hours of swimming each day, 3-4 days of dryland training, power yoga and playing basketball for overall fitness. He is on a high protein and low carb diet. His regular day begins at 5:30 am with dryland exercises, followed by school, then swimming and ends at around 11 pm.

Yash also played on his school's Cricket and Bowling Team. In 2017, his school cricket team was awarded the Mayor's School Cricket Excellence Award. He also participated in the Track and Field events.

Sports has played an important role in his healthy growth and overall development. He has grown into a well-rounded young man with strong character, self-discipline and high values. He greatly benefitted from the conducive and inclusive environment provided by his school, here and in India. He now wants to explore avenues to learn new skills. His first step in this direction started with being a Volunteer at a Community library and he has not looked back since then. The dedication and sincerity of his work has earned kudos from his colleagues.

Presently, Yash has graduated with majors in Hospitality and Tourism. Apart from representing his country at international competitions, Yash wants to pursue a career in the Hospitality industry and lead a successful and an independent life. He is an inspirational role model for inclusion.

In his words, "Pursuing swimming helps me to achieve my dreams by focussing on my strengths."

Read the profile of one of an Indian athlete to win a Bronze Medal in the Special Olympics World Summer Games 2015 in Los Angeles.. Get into groups and discuss his/her achievements.

What do you think motivated him/her? Are there any messages in his/her story that inspire you?

4.3.4 Oppositional Defiant Disorder

Oppositional Defiant Disorder (ODD) is a behaviour disorder mostly diagnosed in childhood. Children with ODD are uncooperative, defiant, and hostile toward peers, parents, teachers, and other authority figures. They are more troubling to others than they are to themselves. Children with anxiety issues and ADHD are more likely to have ODD.

ODD can vary in severity:

- **Mild**. Symptoms occur only in one setting, such as only at home, school, work or with peers.

- **Moderate**. Some symptoms occur in at least two settings.
- **Severe**. Some symptoms occur in three or more settings.

Symptoms of ODD

Angry and irritable mood.

- often and easily loses temper
- is frequently touchy and easily annoyed by others
- is often angry and resentful

Argumentative and defiant behaviour.

- often argues with adults or people in authority
- often actively defies or refuses to comply with adults' requests or rules
- often deliberately annoys or upsets people
- often blames others for his or her mistakes or misbehaviour

Vindictiveness.

- is often spiteful or vindictive
- has shown spiteful or vindictive behaviour at least twice in the past six months

Children and teenagers with oppositional defiant disorder may have trouble at home with parents and siblings, in school with teachers, and at work with supervisors and other authority figures.

Children with ODD may struggle to make and keep friends and relationships. ODD may lead to problems such as:

- poor school and work performance
- antisocial behaviour
- impulse control problems
- substance use disorder
- suicide

4.3.5 Obsessive Compulsive Disorder

Obsessive Compulsive Disorder (OCD) is a anxiety disorder where people feel the need to check things repeatedly, perform certain routines repeatedly (called "rituals"), or have certain thoughts repeatedly (called "obsessions"). They are unable to control either the thoughts or the activities for more than a short period of time. Common activities include hand washing, counting of objects, and checking to see if a door is locked, putting things in

certain order, checking that they have completed some action, usually checking a certain number of times. Obsessions are repeated, persistent and unwanted thoughts, urges or images that are intrusive and cause distress or anxiety. As a result, the person may try to ignore them or get rid of them by performing a compulsive behaviour or ritual. These obsessions typically intrude when the person is trying to think of or doing other things. OCD usually begins in the teens or young adult years, but it can start in childhood too. Symptoms usually begin gradually and tend to vary in severity throughout life. The types of obsessions and compulsions you experience can also change over time.

Symptoms generally worsen when the person experiences greater stress. OCD, usually considered a lifelong disorder, can have mild to moderate symptoms or be so severe and time- consuming that it becomes disabling.

Obsessions often have themes such as:

- Fear of contamination or dirt
- Doubting and having difficulty tolerating uncertainty
- Needing things orderly and symmetrical
- Aggressive or horrific thoughts about losing control and harming yourself or others
- Unwanted thoughts, including aggression, or sexual or religious subjects As with obsessions, **compulsions** typically have themes, such as:
- Washing and cleaning
- Checking
- Counting
- Orderliness
- Following a strict routine

I. Tick the correct options.

1. What type of disorder is ADHD?
   - (a) Mental Disorder
   - (b) Emotional Disorder
   - (c) Behavioural Disorder
   - (d) Genetic Disorder
2. Putting things in certain order is a sign of
   - (a) OCD

(b) ODD

(c) ASD

(d) SPD

3. A disorder that may also be categorised as an intellectual disability is

(a) Autism

(b) Cerebral palsy

(c) Down Syndrome

(d) ADHD

4. World Autism day is celebrated on

(a) 2nd April

(b) 29th August

(c) 21st June

(d) 3rd December

II. Answer the following questions briefly.

1. Write a short note on Attention Deficit Hyperactive Disorder.
2. List the signs and symptoms of Oppositional Defiant Disorder.
3. What do you know about Sensory Processing Disorder?

III. Answer the following question in 150—200 words

1. What are the characteristics of Autism spectrum disorder?

4.4.1 Disability Etiquette

Disability Etiquette is a set of guidelines dealing specifically with how to approach a person with a disability. Disability etiquette refers to communicating and interacting respectfully and courteously with people who have disabilities.

Positive and Energetic Attitude – One should approach a person with special needs with positive energy and attitude. Approach should be warm and friendly. One should not show sympathy for, or, even in certain cases, fear of the person.

Picture Source[6]

Communication - Communication should be two way – speaking to the person directly, and not to the person accompanying her/him. Establish a rapport with her/him. If necessary, use a communication aid such as a communication book or communication device, if required. Keep your tone low. Communicate with the individual slowly and clearly. Give them time to respond. While writing, or talking to or about a person with a disability, use "people first" language. Refer to her/him as a person with disability and not as "the disabled" or "the handicapped." Avoid referring to people by their disability. For example, do not say, "She is an epileptic." Instead, say, "She has epilepsy." Do not say "wheelchair-bound" or "confined to a wheelchair." Most wheelchair users perceive their wheelchair as liberating, not confining. Do say, "She uses a wheelchair." Do not use negative, demeaning, and outdated terms such as "cripple," "deaf and dumb," or "retarded." Be aware that many people with disabilities do not wish to be referred to euphemistically. So, avoid using terms such as "physically challenged," or "differently abled." Also, avoid referring to an individual with a disability as someone who is "suffering from Cerebral Palsy or Parkinson's."

Social Etiquette – Make surroundings disabled-friendly and comfortable for people with special needs. Do not make assumptions about what they can or cannot do. The impact of a specific disability can vary widely from person to person, so help only if it appears to be needed. Just because someone has a disability, don't assume she needs help. If the setting is accessible, people with disabilities can usually get around fine. Adults with disabilities want

to be treated as independent people. Offer assistance only if the person appears to need it. A person with a disability will oftentimes communicate when she needs help. And if she does want help, ask how before you act. Acknowledge and respect the individual's ability to make decisions and judgments on their own behalf. Never physically or verbally bully them. Never play with their equipment. Ask them before offering any help. Only ask question about their disability if you know the person. Develop a culture of inclusion in surroundings.

Physical Etiquette - The height difference between a person in a wheelchair and an able-bodied person can create an unspoken feeling of superiority and inferiority. To be safe, sit or stand at eye-level with the person who has a disability when it is appropriate and possible. Finding a table to sit at is a great option because it can eliminate any visible differences, such as a wheelchair.

Sitting in a chair (with or without a table) is also better than kneeling, which may cause the person in a wheelchair to feel like a child. Make eye contact; never avoid someone with a disability. Some people with disabilities depend on their arms for balance. Grabbing them, even if your intention is to assist, could knock them off balance. Avoid patting a person on the head or touching his wheelchair, or cane. People with disabilities consider their equipment part of their personal space.

I. Tick the correct option

1. You have a new classmate who has a disability and has an interpreter as She/He has just joined your school. She/He speaks to you. You will
   - i. communicate with the interpreter
   - ii. stare between the interpreter and your classmate
   - iii. speak directly to your classmate
   - iv. look at neither your classmate nor the interpreter.

II. Answer the following questions briefly

1. What is the role of positive and energetic attitude in dealing with person with Disability?
2. How can you make a person with disability feel comfortable?
3. Disability etiquettes has a big role to give a sense of acceptance to person with disability. Explain how?

III. Answer the following question in 150—200 words

1. Explain what ettiquette should one keep in mind while communicating with a person with special needs?

4.5.1 Advantages of Physical Activities for CWSN

It is no secret that physical activities are an important aspect of a healthy lifestyle and can provide significant benefits for children in all developmental stages. Children with special needs have less opportunities to be less physically active and, therefore, are at higher risk for complications associated with inactivity. The benefits of regular physical activity for children with special needs can range from physical, emotional and social. CWSN demonstrate strength gains, increased flexibility, improved bone health, and better endurance and cardiovascular fitness as a result of regular physical activity. In the case of children with movement disabilities, physical activity is important in maintenance of mobility throughout the aging process. With enhanced physical health, children are better able to fight problems such as obesity and the associated health complications that may follow. Physical activity can also improve general mood and wellness. Regular fitness can be linked to improved self-esteem, social awareness, and self- confidence, which aid in empowering the lives of children with special needs.

1. **Physical benefits** – Scientific studies into disability groups have demonstrated that participation in physical activity and sport leads to improved levels of well-being and physical health. Children with intellectual disabilities may have additional physical disabilities resulting in below age-level performance in typical motor skills. Regular involvement in physical education and sport can help them to develop their gross motor and fine motor skills which may improve their overall performance. When encouraged to participate in a regular fitness routine, many CWSN show improvement in everything from their hand-eye coordination and flexibility, to their muscle strength, endurance, and even cardiovascular efficiency. These are all simply the natural benefits of exercise. This development of better motor skills and enhanced physical health helps individuals to fight back against problems such as obesity, and the health complications that follow.

2. **Mode of Recreation and Fun --** CWSN frequently miss out on social activities, recreation and fun. Participation in extracurricular and sports activities can help them overcome this obstacle, providing them with the ability to engage in social interactions, make friends and initiate social skills.

3. **Improved Emotional Health --** Including physical activity in a healthy lifestyle is proven to decrease rates of depression. CWSN often tend to have more emotional problems like depression. Participating in regular exercise can be a life-changing benefit by improving mental health and wellbeing. Physical activity can also improve general mood and wellness, which aid in empowering the lives of children with special needs.

4. **Channelizing the Surplus Energy –** Children with disabilities like ADHD display hyperactivity that, if appropriately directed, can bear positive results regarding cognitive benefits and constructive behaviour.

5. **Psychological benefits** –Regular participation in sports and physical activities is not just beneficial for the body, it is beneficial for the mind, too. Physical activity improves general mood and wellness in CWSN by improving their self-esteem, social awareness, and self- confidence, all of which are factors essential for empowering their lives. On the one hand the physical outlet provided by sports and physical activity reduces anxiety, stress and depression, and on the other, interaction and involvement with other students gives children a sense of accomplishment and confidence. For CWSN, developing a sense of self-esteem is particularly important, as they may often feel isolated and removed from the group.

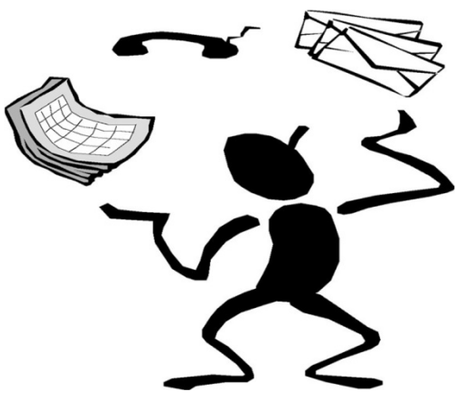
6. **Healthy lifestyle –** CWSN are about twice as likely as other children to be overweight or obese often due to the related greater likelihood of being sedentary. As a result of their disability, their levels of participation in sports and physical activity is much lower than their peers. It is imperative that these children, as much or more, than other students must learn what about the steps to leading a healthy lifestyle, within the context of the abilities and limitations of their respective conditions.

7. **Behavioural Benefits –** The energetic nature of physical education leads to cognitive improvements in CWSN, allowing them to develop skills that they may not develop in a traditional classroom setting. Sports and Games are a structured activity with a set of rules and organisation. They help the chid learn to practice self-regulation and enhance their decision- making skills. In addition, CWSN can learn to focus on specific goals, and work on their verbal communication by interacting with peers on the sports field. Sports and Physical education teach children a range of skills that including teamwork, problem solving abilities, increased attention span, and focus on task-based behaviour. Eventually, these skills can transfer into other classroom settings too, so that CWSN have a greater ability to learn and engage with their peers outside of physical education.

8. **Increased Independence –** Participation in Physical Education and Sports is a mode to transit towards greater independence due to improved daily life skills. For a person with a disability, an increase in physical activity can lead to more independence and freedom. Increased physical strength and energy that come from regular exercise allows persons with disability to do more daily tasks without assistance.

4.6.1 Strategies to Make Physical Activities Accessible for CWSN

Participation in physical activity is beneficial for all children, including those with disabilities. In fact, participation of children with disabilities in sports and recreational activities promotes inclusion, minimizes deconditioning, optimizes physical functioning, and enhances overall well- being. Despite these benefits, children with disabilities are more restricted in their participation, have lower levels of fitness, and have higher levels of obesity than their peers without disabilities. Well-informed decisions regarding each child's participation must consider certain well-devised strategies.



Communication – Advance information about activity, space, resource person or any change in activity should be communicated clearly. A variety of different instructional strategies such as verbal, visual and peer teaching should be used for performing various types of physical activities so that children get opportunity to participate in physical activity. The teacher could use visuals or social story about the activity. Give positive, corrective or specific feedback. As per the ability of the child, specific instruction must be provided in simple words and sentences. The tone should be low and one instruction should be given at a time. If necessary, a communication board or communication book could be used.

Space – For CWSN, space should be approachable for people having physical disability. The area for the physical activity should be limited. Space for activities should be disturbance free (noise, heat, cold, texture of floor, audience etc.) It is always better to start with indoor space. Boundaries should be demarked clearly as starting point, finishing point, sitting area. In case of children who have autism, they must be provided specific area because they may need some time to relax. Once behaviours, discipline, understanding of instructions are clear then one can transit towards outdoor space also. It does not mean that one is not allowed to go to outdoor sports.

Equipment -- A lack of appropriate equipment, coupled with a lack of professionals trained to support physical activity among children and youth with different ability levels, discourages participation. There are a growing number of disabled people who are interested in recreation and sport activities. In recent years several modified devices are on offer for adapted sports. There are many examples of simple and sophisticated equipment,

including computerized devices like wheelchairs for recreation and sport activities. There are sport competitions involving four groups of disabled sportspersons, namely 1) the deaf, 2) people with physical disability, 3) people with intellectual (mental) disability, 4) people supported by specially designed high level engineering equipment. All of them can use many kinds of equipment and facilities.





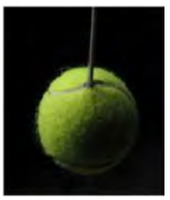







Table 7.4 Equipment Characteristics

Weight	Lighter	⟷	Heavier
Size	Smaller	⟷	Larger
Shape	Regular	⟷	Irregular
Height	Lower	⟷	Higher
Speed	Slower	⟷	Faster
Distance	Closer	⟷	Farther
Sound	Soft	⟷	Noisy
Color	Pale	⟷	Bright
Trajectory	Medium level	⟷	High or low level
Direction	Forward	⟷	Backward and sideways (right and left)
Surface contact	Increased	⟷	Decreased
Surface or texture	Level or smooth	⟷	Rough or uneven
Length	Shorter	⟷	Longer
Resiliency	Less	⟷	More

Graded Activities– During initial stage activities should be simple and the activity should be based on a single action. There should be a gradual move from non-locomotor to locomotor to manipulated activities. For these activities, the level of assistance should be physical, verbal and independent. CWSN need help children in learning a fundamental motor skill. It will need to be practised with the students so they are able to see visualize it through the teacher's body action or one can use

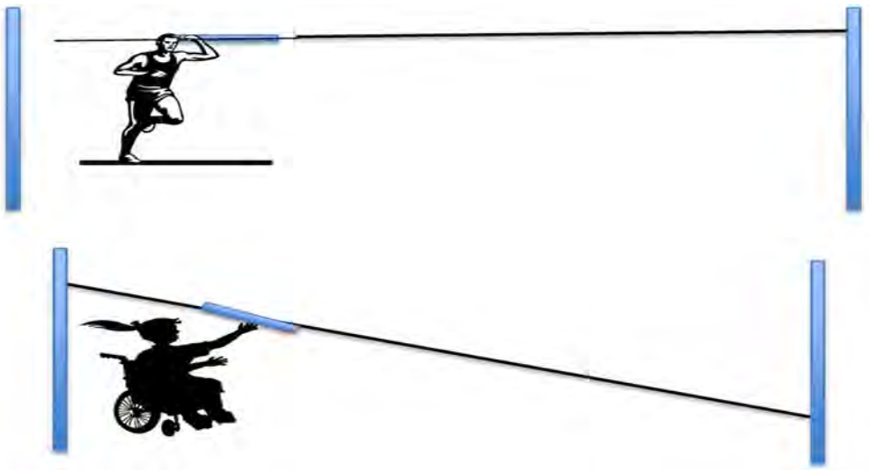
videos. As they watch the video, words or phrases that highlight the important part on which the demonstration is focusing must be used. They could also be asked to demonstrate the skill to ensure the instructions have been understood before commencing practise and they must start practice immediately after viewing a demonstration. The activity must be practised with progressive count, or even performed dramatically with rhymes or songs with voice modulation so they enjoy the activities.

Do you know?

Locomotor skills include running, jumping, hopping, galloping, rolling, leaping and dodging, horizontal jump, slide.

Manipulative skills are throwing, catching, kicking, striking and trapping, dribble, overhand throw, and underhand roll

Stability skills are balance, twisting, turning and bending



Social strategies - Allow the child to choose a sport she/he enjoys. It's easier for children to be motivated when they enjoy the activity. At first, encourage the child with special needs to watch others. Let the child see people having fun as they play. Then, start with individual training, transfer to small group with supervision and reminder. Be a mediator to interact with other members of group. Keep individual check on each person participation and motivate them with reminder whenever they get distraction. End the lesson with positive feedback and each person greet with other before the session and after the sessions.

Psychological strategies – Because of previous exclusion or limited access, children with disabilities need a lot of motivation to participate in physical activity. It's all about the cycle of conditioning: active kids who stay active grow stronger and more physically literate as they age. The cycle of deconditioning works the same way: for children who don't participate, the less they do, the less they're able to do. In fact, "Psychological barriers are the most influential.

Changing attitudes is the key to increasing participation..." These barriers include attitudes, opinions and perceptions preventing participation in sport.

- Personal attitudes of persons with disability
- Attitudes of non-disabled people

All individuals benefit from regular physical activity and children with special needs especially gain from these physical, mental and social benefits of being active. Once children see improvements in muscle strength, coordination, and flexibility and experience better balance, motor skills and body awareness, they will have positive changes towards sports. It has been found that children with a disability choose to play sport for a number of reasons including

- to improve and learn new skills,
- to have fun,
- stay fit
- be physically challenged

While children often choose easier tasks to obtain rewards, doing this decreases the child's enjoyment of and intrinsic motivation for the activity. So, the selection of a challenging activity may be a strong influence in children's participation in sport. However, it may be possible that if the challenge becomes too great, the intrinsic motivation to participate may decrease. Because the level of challenge frequently increases more quickly for the disabled it is likely that this is a strong factor in participation. Therefore, it is better to let the child initially participate with her/his own disability group. Coaches are also often afraid to 'push' individuals with a disability too far and doing 'harm' to the individuals. In contrast to intrinsic motivation, extrinsic motivation involves motivators from the environment (e.g. friends, parents and coaches).

Certainly amongst children it can be expected that a huge part of their reasoning for participation in sport is to make friends. Children with strong peer relationships are more self-motivated in sport and, in addition, enjoy themselves more. It has also been found that a greater competence in sport coincided with stronger peer relationships. A PE teacher in UK revealed that her pupils "actively encourage and support the pupils with disabilities" in sport and that those pupils "grow in confidence as a result of their involvement". Disability in sport is, evidently, becoming more accepted than it ever has been.

I. Answer the following questions briefly.

1. How wll you communicate with a classmate suffering from cognitive disability?
2. In what ways does participation in sports and games benefit a person with disability?

II. Answer the following question in 150-200 words.

1. How will you motivate a classmate with disability to take part in games and sports?

Art Inclusion

Working in groups, design a booklet for your school library on Disability Etiquette.

1. Think of the etiquettes you feel need to be included.
2. Draw Graphics to accompany the etiquettes.
3. Laminate the pages and get your book spiral-bound.

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