

*Report of Minor Research Project on*

**Challenges Faced and Process Adopted by Students  
with Visual Impairment in Learning Science at  
Secondary School**

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Professor in Education  
Department of Education



**REGIONAL INSTITUTE OF EDUCATION**

**BHUBANESWAR – 751 022**

**(National Council of Educational Research and Training, New Delhi)**

**March, 2019**

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# **Executive Summary**

## **Challenges Faced and Process Adopted by Students with Visual Impairment in Learning Science at Secondary School**

*Prof. Gowramma I P*

Considering the significance of science education in national development, science has been placed as one of the compulsory subjects at school level. Review of research in the area of learning of science by children with visual impairment reveals that the feeling of belongingness to the subject and confidence in the ability to perform is a factor that supports success of students in science career. Studies also direct towards the fact that students with visual impairment perform on par with their peers if given opportunity. The present study is undertaken to find out the scenario of science learning among students with visual impairment at secondary schools with the objective to know their challenges in science classroom and processes to overcome the challenges.

The exploratory study lead to collection of data from students with visual impairment who have completed and those who are studying in special school and inclusive school at secondary level. Data was collected regarding the processes of science learning, the challenges faced and coping strategies adapted by the participating students.

The findings revealed that students with visual impairment like to learn the subject science in their school just like any other student. For learning of science the most preferred way is discussion with parents, peer group and teachers without visual impairment. This supports the importance of inclusive education for students with visual impairment. Technology proves to be a good means to be used by the teachers in order to meet the needs of the students in the classroom. All the participants of special school opined that repetition of lessons; detailed verbal explanations by the teachers help them to understand the science concepts whereas participants of inclusive setting sought of the support of both teachers and peers in clarifying their doubts. The study has further implication that parents, teachers and community to encourage the children to pursue higher education rather than restricting them

by indicating the child's limitations. Students studying in inclusive environment were proved to have better coping strategies and learning in comparison to students staying in boarding school. In spite of few limitations, the study has some major findings and educational implications for students, teachers, parents and professionals.

# Chapter – I

## Introduction

### 1.1 Secondary Education

Secondary education serves as a link between elementary and higher education in the Indian education setup. It is only through secondary education that an individual becomes capable of functioning in a democracy by understanding the complexity of political processes and prepare to contribute to the economic and social progress of the country. 'Report of the Education Commission (1964-66) suggested the 'Secondary Education' for four to five years prior to university education. At present, in India it is four years of secondary education, class 9 and 10 as secondary; 11 and 12 as senior secondary.

#### 1.1.1 Importance of Secondary Education

Secondary education is a critical stage in the educational hierarchy as it prepares the students for higher education and also for the world of work. The vision for secondary education in India is to make quality education available, accessible and affordable to all young students before entering higher education or the world of work. Universalizing Secondary Education implies (CABE Report on USE, 2005) that (i) all children of age group 15-16 years are enrolled in secondary classes (enrolment 100%); (ii) they remain in the system (retention rate, 100 per cent); and (iii) transit to the first grade of the next education cycle (either graduate program or vocational stream). In order to meet the challenge of Universalisation of Secondary Education (USE), there is a need for a paradigm shift in the conceptual design of secondary education. The guiding principles in this regard are; Universal Access, Equality and Social Justice, Relevance and Development and Curricular and Structural Aspects. Universalisation of Secondary Education gives opportunity, to move towards equity.

#### 1.1.2 Aims and Objectives of Secondary Education

Aims and objectives of secondary education that are spelt out in the Secondary Education Commission (1952-53), is very relevant even for today. It speaks about the aims of the secondary education to be

- A. Development of democratic citizenship, that includes inculcation of clear thinking, clearness in speech and writing, art of living with the community, sense of true

patriotism, development of sense of world citizenship among the citizens of the country.

- B.** Improvement of vocational efficiency, which involves creation of new attitude to work, promotion of technical skills and efficiency among the countrymen.
- C.** Development of personality, which would reflect on releasing the source of energy, cultivating rich interests among the people of the nation.
- D.** Development of the leadership qualities in the people of the country.

### **1.1.3 Initiatives at present to realize the aims and objectives**

Several initiatives have been taken by the central government and respective state governments for improvement of the secondary education as well as to achieve USE all over India. These initiatives are: (i) Centrally Sponsored National Scheme of Incentive to Girls for Secondary Education. (ii) National Means Cum-Merit Scholarship Scheme (NMMSS). (iii) Scheme for Construction and Running of Girls' Hostel for Students of Secondary and Higher Secondary Schools. (iv) Information and Communication Technology (ICT) at Schools Scheme. (v) Innovation in Science Pursuits and Inspired Resource (INSPIRE) Award Scheme. (vi) Inclusive Education for Disabled at Secondary Stage (IEDSS). (vii) Vocationalisation of Secondary Education. These schemes were converged under flagship scheme *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) of GOI with an intention of providing quality secondary education to all. The integrated RMSA is a holistic and convergent programme committed to universalize quality education at Secondary Stage with a clear time frame. Good quality education ensures that there is equity and inclusion also in the provisioning of staff, facilities and resources for learning, including using technology as a key enabler in this endeavour. Needless to say, enrolment and retention of students with disability is one of the major thrust areas of this programme specifically with IEDSS.

## **1.2 Inclusive education at Secondary School Level**

Knowing the importance of secondary education, it is a commitment of the nation that every child after the completion of elementary education should get enrolled for secondary education. In spite of the efforts there are an estimated 25 million children out of school in India (MHRD 2003 statistics, cited in World Bank, 2004), many of whom are marginalized by dimensions such as poverty, gender, disability, and caste. In such scenario, inclusive education policy caters the need of marginalized children and promotes the inclusion of all

categories of students in school education. Inclusive Education is a process for increasing participation and reducing exclusion, in a way that effectively responds to the diverse needs of all learners. It takes into account the individual teaching and learning needs of all marginalized and vulnerable children and young people, including street children, girls, children from ethnic minorities, children from economically disadvantaged families, children from nomadic/refugee/displaced families, children with HIV/AIDS and children with disabilities. Inclusive education applies to learners of all ages, both children and adults. Inclusive education is necessary to realise the civil, political and economic rights of all children and young people. Inclusive education is an approach which values diversity as an essential part of the teaching and learning process and which promotes human development. Inclusive education aims to combat the marginalization of individuals and to promote difference. It is based more on evolving inclusive practices that can be adapted to different contexts. Inclusive education is the central means for achieving the goals of 'Education for All', promoting a child-centred approach to teaching and learning throughout the life course. Globally, more than 1 billion people live with a disability (WHO and World Bank Report on Disability, 2011), 20% of the world's poorest people have disabilities and nearly 80% of people with disabilities live in low-income countries. It is estimated that 72 million children are excluded from education globally, and among those, one third are children with disabilities. In India, a 2007 World Bank study found that disability is a stronger correlate to non-enrolment than gender or class. United Nations observes that 10% of the population has disability and there are about 120 million people with disabilities in India. The National policy on Education (NPE), 1986 and the Programme of Action (1992) gives the basic policy framework for education, emphasizing on correcting the existing inequalities. It stress on reducing dropout rates, improving learning achievements and expanding access to students who have not had an easy opportunity to be a part of the general education system.

### **1.2.1 Education of children with Disabilities**

In 2005, the Central Advisory Board of Education (CABE) observed that all children experience special needs at some point of time and it may not arise from disability only, thus the philosophy of inclusion is a gain for all. It further recommended Universalisation of Secondary Education (USE) for girls and those with disabilities on the grounds of equity and social justice. After the implementation of the flagship programme of SSA for elementary level, the centrally sponsored scheme of inclusive education of the disabled at secondary

schools (IEDSS, 2009) was merged under RMSA (2009) to enable students with disabilities to continue secondary education in an inclusive environment. Another significant move at the international level, United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2007), to which India is a signatory, mandated to implement the provisions by harmonizing Indian laws with it. In addition, education of Children with Disabilities is now an integral part of the international discourse, as noted in the Sustainable Development Goals (United Nations 2015a) and the Incheon Declaration (UNESCO, World Education Forum 2015, Ministry of Education, Republic of Korea 2015).

Students with disabilities, whether physical, emotional, or cognitive in nature, respond to the curriculum differently from other students. For example, depending on the disability itself and other factors affecting their ability to succeed academically, students may need modifications such as advance and graphic organizers, instructional scaffolding, additional practice and time to complete assignments, and/or alternative media (e.g., large-print materials, audiotapes, or electronic materials). Without specific modifications, the standard curricular materials can be inadequate for these students, and too frequently they can find themselves blocked from access to essential aspects of the curriculum. Teachers must adjust the materials or their presentation to break down the barriers and assist these students in learning.

To meet the goal of equal access to the curriculum for everyone, to enable each student to engage with his or her lessons in a meaningful way, teachers must be prepared to provide useful alternatives in terms of both curricular materials and instructional delivery. Well-adapted materials without an effective method of teaching are practically useless, but with the proper tools and instructional methods, a good teacher encourages each member of the class to participate directly in the learning experience.

Individuals with physical disabilities often encounter barriers to one of modern society's most important rites of passage. It is that crucial process of obtaining a good education, so natural and uncomplicated for most people—that opens the door to productive employment and full participation in society. Today's barriers are rarely physical or architectural. More often, they involve perceptions and misperceptions of not just disability but also ability. One misperception is that a physical disability somehow disqualifies a person from a career in science, engineering, or mathematics. Well-intentioned but misinformed adults still discourage students with disabilities from pursuing careers in these fields. Often it

occurs indirectly and implicitly, when adults withhold the mentoring and encouragement that can nudge young people toward science careers and sustain their interest. In addition, adults may set artificial limits on what the student with disabilities should attempt. These limits may be based not on reality but on the adults' own low expectations for the student or sincere concerns that the student may fail and not cope well with failure. In reality, students with disabilities benefit from the freedom to establish their own horizons, cope very well with the process, and learn from it. Students with disabilities have individual needs, just like their classmates. Those needs depend on the specific disability. All students, however, learn best when teachers address individual needs.

With the landmark legislation Rights of the persons with disability Act (RPwD Act 2016), it is expected that progress in education through prevention, intervention and remediation will take a turn changing the framework for education of Children with Disabilities. Along with the policy and programmes in the first decade and a half of the millennium there is growing awareness in the recent years for the critical need to envisage positive rights to Persons with Disabilities. Policies and programmes to be experienced by the stakeholders and reach the unreached, the priorities as it stands today are multi-faceted. To strengthen policy recommendations from contemporary scientific research are significant.

There are 21 benchmarked disabilities as recognised by the Act. Under the category of physical disabilities there are four types as locomotor disability, visual impairment, hearing impairment and speech and language disability. Each of the type have list of specific impairments. Under visual impairment two specific conditions are recognised as blindness and low vision.

### **1.3 Visual Impairment**

It is a type of sensory impairment in which the ability of a person to see things decreases to a certain degree that cannot be corrected by glasses, surgery or medication. The major causes of visual impairment are lack of Vitamin A, congenital cataracts, cataracts, glaucoma and host of several other. The International Classification of Diseases has classified vision impairment into two groups – Distance Vision Impairment and Near Vision Impairment.

### 1.3.1 Categories and Characteristics

- **Blindness** - is when there is total absence of sight or when the visual acuity of a person is less than 10/200 (Snellen) in the better eye with best possible correction or limitation of the field of vision subtending an angle of less than 10 degrees even after medical treatment, then that person is termed as legally blind.
- **Low vision** - is when visual acuity up to 10/200 (Snellen), limitation in field of vision subtending an angle of less than 40 degrees to 10 degrees with the best possible correction. This also includes problems like dimness of vision, haziness, foggy vision, extreme near or far sightedness, film over the eye, spots before the eyes, distortion of vision, colour distortion, tunnel vision, visual field defects, abnormal sensitivity towards light, no peripheral vision and night blindness. These cannot be addressed even after medical treatments.

### 1.3.2 Various initiatives taken by the GOI

- In accordance with the recommendations contained in the Report on Blindness, 1944, the Ministry of Education, GOI, has established a unit for the welfare of the handicapped in Delhi in April 1947.
- The Central Social Welfare Board was established by the GOI in 1954 that gave small grants to certain institutions and persons with disabilities including visually impaired children.
- Visually impaired children got special attention in Sarva Shiksha Abhiyan (SSA) for the elementary level and in Rashtriya Madhyamik Shiksha Abhiyan (RMSA) for the secondary level.
- Speaking of the vocational training programmes, 32 institutions for visually impaired people before the partition, and today a wide range of vocational courses like physiotherapy, stenography, etc. is available for the visually impaired people.
- Taking a look over the financial assistance provided by the GOI, in 1961, the GOI has initiated the Scheme of Assistance to voluntary organizations for the handicapped, Scheme of Assistance for Integrated Education in 1974, Scheme of Assistance to Disabled Persons in 1981, Special Employment Exchange in 1954, Vocational Rehabilitation Centres for the Handicapped in 1964.

### **1.3.3 Implication of visual impairment for Education**

The instrumental activities of daily living and the functional independence gets affected in the people with visual impairment (Raina 2004). They face problems in activities which need visual output, for e.g., driving, crossing the road during heavy traffic, natural visible indications of calamities, operations in which both hand and brain coordination is required. Visual impairment increases the risk factor for falling and fractures much more (Boer 2004). Many students with visual impairment also suffer from helplessness in understanding the concepts in the inclusive classroom since the classroom transaction and the facilities are mostly inappropriate for their learning. Although GOI has implemented several schemes for them, 100% success in their implications is yet to achieve, specially in case of the IEDSS scheme that is included under the RMSA for inclusive education at secondary level.

The use of some adaptive equipments by the learners like Braille equipment, portable Brailier, talking calculators and watches and smart phones with special talking applications, screen readers, thermographic pen and paper, digital recorder, scanning and text to speech devices, large print and Braille dictionary and magnifying devices, can be used by the learners which might facilitate their learning. Healthy parental relationship, understanding the self-concept by the visually impaired children leads them to grow into independent individuals by learning how to adjust handle the hurdles of life, specially faced by them because of their impairment. Educational Technology proves to be a good means to be used by the teachers in order to meet the needs of the visually impaired students in the classroom (Tobin, 1997). The teachers can also use tangible symbols for these learners with severe impairment even (Trief, 2019). They can also help these learners through creative modifications and adaptations in the classroom, help others to understand and accept the visually impaired children, identify and reinforce acceptable behavior of the learners and provide opportunity to the visually impaired students to participate in various curricular and co-curricular activities.

## **1.4 Science Education**

According to the position paper national focus group on teaching of science humans have always been curious about the world around them. The inquiring and imaginative human mind has responded to the wonder and awe of nature in different ways. One kind of response from the earliest times has been to observe the physical and biological environment

carefully, look for any meaningful patterns and relations, make and use new tools to interact with nature, and build conceptual models to understand the world. This human endeavour is science. Science is a dynamic, expanding body of knowledge covering ever new domains of experience. Science education includes these experiences and the processes of having the desired experience. Hence science education includes the science content and science process.

#### **1.4.1 Importance**

Considering the significance of science education in national development, science has been placed as one of the compulsory subjects at school level since 1975. The objectives of teaching science have been evolved during the last few decades depending on the overall aims of education. Various Commissions, Committees and Curriculum frameworks had suggested many reforms in Science curriculum, out of which NCF 2005 developed by NCERT is the latest and a transformative one. At secondary stage, Science is considered as an interdisciplinary composite subject. NCF 2005 reiterates the need for involving students in hands on activities. At the same time, analysis of various adolescent issues related to health also to be prioritized. It offers systematic experimentation as a tool to discover/verify theories with scope for learning science through locally relevant resources. Since all phenomena are not directly observable, inference and interpretation are also to be integrated in the curricular process. At this level of schooling, the role of technology in helping learners to visualise and comprehend various natural phenomena cannot be ignored. All these curricular processes are to be followed to make students to understand the product aspects of science as well as acquire the skills that lead to generalization and validation of scientific knowledge. This would help learners to understand science as a social enterprise and can relate scientific knowledge to their immediate and global environment. Imbibing curiosity, creativity and aesthetic sense are not to be ignored in the realm of validation of scientific knowledge. Effective ways of creating scientific temper among learners are to be the major thrust area of any science curriculum at secondary level. In this context, learning Science becomes all the more crucial for Students with Disabilities to lead a productive and comfortable life ahead. This is the responsibility of the system to provide access and opportunity for engaging them in meaningful experiences in science.

### **1.4.2 Science Process Skill**

Science process skill means the use of all the sense organs to experience and learn the science. It includes six basic science process skill observation, communication, classification, measurement, inference and prediction. These basic skills help an individual to learn as well as explore the science. All the six science process skill works in an integrated form to realize the science in its full extent. It is very important for an individual to have a better understanding of all the science process skill. Especially it becomes crucial for the teachers in an inclusive setup to provide enough opportunity to students to inculcate theses science process skill up to their maximum extent.

### **1.4.3 Science Education and students with disabilities**

For many reasons, students with disabilities are not as thoroughly represented in science careers as are their nondisabled peers. Of children ages six to seventeen, approximately 12 percent receive services through special education programs (Plourde and Klemm 2004). However, this percentage does not carry over into the area of science careers. Even individuals with disabilities who earn advanced degrees are less likely to earn them in the hard sciences such as chemistry or engineering. In addition, science professionals with a disability are more likely to be out of the labor force than their nondisabled peers. Of those practicing scientists with a disability, only 7 percent were under the age of forty indicating younger generations of individuals with disabilities are not commonly choosing science as a career path (National Science Foundation 2004). Although many factors have led to an underrepresentation of individuals with disabilities in science careers, a lack of early exposure to quality science experiences is likely one contributing element. However, for a multitude of reasons, many students receiving special education services still do not receive enough science instruction to be considered in line with national standards documents (Melber, 2004). Although the National Science Teachers Association (NSTA, 2004) recognizes challenges associated with teaching science to students with disabilities, it also asserts a commitment “to developing strategies to overcome these barriers . . . ensure that all students have the benefit of a good science education and can achieve scientific literacy”.

Research suggests that a student’s feeling of not belonging to science or perceiving it as not affording altruistic career goals, may strongly hinder both recruitment and retention (Allen, Smith, Muragishi, Thoman, & Brown, 2015; Diekman, Brown, Johnston, & Clark; 2010; Cheryan & Plaut, 2010). Science identity, defined as the authoring of one’s identity in

relation to science (Johnson, Brown, Carlone, & Cuevas; 2011) determines whether a student feels s/he belongs with science or not. For example, students seeing themselves as being interested in science and/or competent in science may lead them to perceive themselves as “science people”. which may be based on years of patterns of participation, attitudes, and expectations about science learning (Archer, Dewitt, & Osborne, 2015; Carlone & Johnson, 2007). Like all aspects of identity, science identity is an ongoing process, which is continually under reconstruction (Gee, 2000). Most critically, if students do not see themselves as “science people,” they are unlikely to pursue science degrees (Diekman *et al.*, 2010; Losh, 2009). Science identity also involves aligning one’s identity with one’s understanding of who scientists are (Diekman *et al.*, 2010). This alignment contributes to a sense of belonging with a prospective career. This is important because belonging plays a key role in career choices (Diekman *et al.*, 2010). Goal congruity theory tells us that career choice is strongly driven by value orientation (Cheryan & Plaut, 2010; Diekman *et al.*, 2010). Notably, many people associate science fields with agency (and, thus, uncommunal) stereotypes. By embracing this stereotype, students effectively preclude their potential interest in science careers (Losh, 2009). Research has shown that these stereotypes disproportionately affect women, people of color, first-generation students, and students of low socio-economic status, who tend to highly value altruistic, or *communal*, career goals, while perceiving STEM as uncommunal (Allen *et al.*, 2015; Brown, Thoman, Smith, & Diekman, 2015; Diekman *et al.*, 2010; Thoman, Brown, Mason, Harmsen, & Smith; 2015). Moreover, cultural communities (e.g., Latino and Native American communities (Thoman *et al.*, 2015) often encourage the pursuit of altruistic goals that benefit one’s community. Consequently, stereotyped perceptions of scientists can prevent individuals who value altruistic career goals from even becoming interested in STEM careers, especially students from underrepresented groups (Brown *et al.*, 2015). In effect, this means that preconceived stereotypes may preclude students from recruitment into STEM majors.

#### **1.4.4 Science Education and students with visual impairment**

Gupta and Singh (1994) observed science teaching in Indian schools for CwVI and concluded that the quality of science teaching for the VI is much below the expected standard in both special and integrated schools. Julka (2005) attempted to understand the problems that students with VI encounter while gaining access to mathematics curricula at the primary level. Using NCERT text books as exemplary material 579 students with VI

from 1 to 5 were administered a questionnaire to rate the various topics as least, average and most difficult. Also teachers were interviewed regarding the difficulties of these students while engaging in mathematics. The results of the study showed that very few topics at a higher level of primary schooling are considered to be difficult for these students. The results of these studies show that disability is not posing any barrier to learn, rather it is.

Agarwal (2004) compared the academic skills of SwVI in three settings special, semi integrated and integrated and found the semi integrated being most effective in imparting academic skills. The SwVI were more efficient both in special academic skill like Braille reading as well as general academic skills such as problem solving, reasoning information providing and language comprehension and usage. This ability was attributed to their exposure to subjects like mathematics and science. The investigator concluded that CwVI should be admitted to mainstream schools in large numbers. Integrated setting should be promoted and strengthened. Special schools should be utilized to provide resource services as a supplement to integrated setting. SwVI performing on par with their grade mates were observed by Lali (1995) in Kerala in classes 8 to 10. Khan (1999) remarked that SwVI performed better in language compared to mathematics. Academic retardation was perceived to be due to certain personality factors and predicting that full participation and equality would be helpful in minimizing these factors that may be stemming from confinement in special environment. This finding is strongly advocating inclusive education for SwVI for better academic environment there by better performance. Sarkar (2015) in a study on science comprehension among CwVI in relation to their cognitive abilities and learning styles revealed that most of them were identified as having average comprehension and average cognitive abilities.

#### **1.4 Rationale**

Review of research in the above section reveals that the feeling of belongingness to the subject and confidence in the ability to perform is a factor that supports success of students in science career. Studies also direct towards the fact that students with visual impairment perform on par with their peers if given opportunity. There are discrete examples of persons with visual impairment as successful scientists. Hence in the present study it is intended to find out the scenario of science learning among students with visual impairment at secondary schools with respect to their challenges and processes to overcome.

## **1.5 Objectives**

In the backdrop of the above rationale, and the stated problem the study aims

- a. To find out the different types of challenges faced by the students with visual impairment in learning of science.
- b. To identify the processes adopted by students with visual impairment in order to overcome the challenges while learning science

## **1.6 Research Question**

The study proposed to answer the following questions

- a. What are the challenges faced by students with visual impairment in secondary school to learn science?
- b. How do students with visual impairment cope with the situation to learn science in secondary school?

## **1.7 Delimitation**

The study was conducted with a limited sample from a special secondary school and few participants are from post-secondary education both from special and inclusive schools. The participants of the study are from the city of Bhubaneswar only.

## **1.8 Conclusion**

This chapter is presented with conceptual framework of science learning of students with visual impairment (SwVI) at the secondary level. It also consists of reviews related to science learning of students with disabilities and those with visual impairment. Objectives, research questions and delimitations are also included in the chapter.

#### **2.1 Introduction**

The present study was planned to find out challenges faced by visual impaired learner in learning science and process adopted by them to overcome it. A case study approach was made use of, wherein data/information were collected from various perspective such observation of the children inside and outside the science classroom, interview of students and peers to know involvement and difficulties faced by learners in the science learning activities.

#### **2.2 Method**

A case study approach was used as a method for the study, wherein students with visual impairment studying science at secondary level were selected as participates by using purposive sampling method.

#### **2.3 Population and Participants**

Students with visual impairment at secondary schools, peers, teachers, head teachers were the population of the study and participants were purposively drawn from special schools for students with visual impairment. Availability of SwVI and feasibility for collecting information from various sources was the major criteria for selecting schools and participants studying at secondary level. Thus, the participants were drawn by purposive sampling technique without any geographical restrictions. Head teachers, teachers, student (children and peer group) were sampled from the schools/ habitation. In the present study while selecting the participant major criteria was there were students with disability studying at secondary school level.

#### **2.4 Tools**

Non-standardized tools were used for collection of data/information. Tools were developed and finalized in an in-house workshop at RIE, Bhubaneswar by the research team having expertise and experience in the concerned area. The tools developed were then tried out for selection of items, which were done as per the relevance of research objectives. The description of tools used is given below and all the Tools are given in Appendix -1.

### *Tool 1: Semi-structured Interview for Students*

The tool semi-structured interview for students was used to get the information from the participants regarding their area of interest in science, activities conducted by science teacher to support learning, activities carried out by them and difficulties faced during laboratory work, assistance provided by friends and teacher during lab work, how laboratory work helps them to learn science in better way and the way they use laboratory learning outside the laboratory situation.

## **2.5 Procedure of Data Collection**

After the tools were developed and tried out, procedures of data collection was discussed elaborately tool wise in an in-house meeting with team members. For each participant demographic information was collected by using information schedule. Then, the data / information was collected by personal involvement at the field along with resource Persons having expertise in the area of study with local language background and contextual knowledge. Collection of data was undertaken without interference / disturbances of investigators in the natural setting. Observation were noted in a field note / diary and incorporated in the narration of participants' profile.

## **2.6 Data Analysis**

The data were analyzed qualitatively. Accordingly scoring and interpretation was done objective wise. Moreover, perceptions of teachers and head teachers and information given by the peers were qualitatively narrated and anecdotes signifying their academic and social behaviors are given. The analysis is given in the following chapter in the form of two tables for student profile and availability of laboratory facility school wise followed by description on identified theme based on information gathered through interview and observation

## **2.7 Conclusion**

This chapter gives details of population, sample, tools used for collecting information including the procedure used to collect the same. The following chapter deals with systematic organization of the data in order to interpret and draw findings.

## **Chapter – III**

### **Analysis and Interpretation**

#### **3.1 Introduction**

The study is exploratory in nature. The study intended to collect data from students with visual impairment those who have completed and those who are studying in special school and inclusive school at secondary level. The participants of the study consists of five students with low vision and seven with blindness. Further, three were from inclusive setting and nine participants were drawn from special school of Bhubaneswar. The study intended to collect data about the science learning, the challenges faced in learning science and coping strategies adapted by the participating students. The teachers of the special schools also were source of data, their narration while collecting data from the students were considered for analysis. In addition few science classes were observed in the special schools.

##### **3.1.1 Analysis of Data**

The present study collected the data based on a questionnaire that was intending to gather information on the way the students with visual impairment perceive science as a subject of study and the process of learning of the participants. Teachers' narrations during student data collection and during classroom observation were also documented and used for analysis. The information thus collected were categorized in to Low Vision and Blindness for analysis and are organized in table1 (a), 1(b) respectively.

### 3.1.1 Profiling of Participants

**Table 1:** *Profile of Participant with Low Vision during Secondary Education Level*

Participant no.	Name of the Participant	School Setting	Degree of disability	Present Education	Assistive Devices used	Subject liked most	Motivation for continuing education	Goal for the future
L. V. 1.	*Raghav	Inclusive	Low Vision	B A, B. Ed Continuing	Hand Magnifier	Language	Family and school	Want to be a teacher
L.V. 2.	*Tapan	Inclusive	Low Vision (75%) Squint eye, Surgery was done during childhood	+2 Science completed. Now Continuing Diploma in Special Education	Eye Lenses in both eyes	Language and social science	Father and My Teacher	“I want to be a good teacher preferably a Language teacher. I want to pursue B. Ed.”
L.V.3	* Vijaya	Special	Low Vision	Class IX	Talking Books	Science and language	My Teachers	Go to College for higher education
L.V.4	*Manju	Special	Low Vision	Class IX	Talking Books		Teachers	Go for college education
L.V.5	* Deepa	Special	Low Vision	Class IX	Talking Books		Teachers	Go for college education

*Note:*

- i) Participants Numbers with L.V denotes Participants with Low Vision
- ii) \* Original name is concealed for confidentiality.

**Table 2: Profile of participant with Blindness during Secondary Education Level**

<b>Participant no.</b>	<b>Name of the Participant</b>	<b>Setting</b>	<b>% of disability</b>	<b>Education</b>	<b>Assistive Devices used</b>	<b>Subject likes most</b>	<b>Who motivates you?</b>	<b>How do you perceive education at Higher level?</b>
B. 1.	*Chinu	Inclusive	Blind	B A, B.Ed Cont.	Braille, Talking Book	Literature	Parents and teachers	Want to continue education to do masters in English literature
B. 2.	*Raj	Special	Blind	Class IXth	Braille, Talking Book	Science	Teachers	
B. 3.	*Vaishnab	Special	Blind	Class IXth	Braille, Talking Book	Science	Teachers	
B. 4	*Chandra	Special	Blind	Class IXth	Braille, Talking Book	Science	Teachers	
B. 5	*Jagan	Special	Blind	Class IXth	Braille, Talking Book	Science	Teachers	
B. 6	*Sonam	Special	Blind	Class IXth	Braille, Talking Book	Science	Teachers	
B. 7	*Rishna	Special	Blind	Class IX	Braille, Talking Book		Teachers	

*Note:*

- i) Participants Numbers with B denominates Participant with Blindness
- ii) \* Original name is concealed to maintain confidentiality

### 3.1.2 Analysis of Science Learning

The participants comprised of students from special school and inclusive schools and they are with both low vision and Blindness. Their science classes were observed, interacted with teachers and narratives were collected from students about their science learning. The perspective on science learning of students with visual impairment which is given herein is based on the above data source. Science learning of all the participants were analysed as per the narratives collected during the study. The response of students that were related to learning science were analysed and classified according to students studying in inclusive setting and students studying in special school setting. They are presented below.

#### A) The views on science learning of students studying in inclusive setting

Participant No.	Description
L V 1	<ul style="list-style-type: none"><li>• According to him a teacher should explain everything verbally and in detail. When he was in class X, one of his teacher denied to explain a particular concept again with the help of drawing.</li><li>• Sometimes teachers told that he cannot enrol for science stream in the college because of his limitations. When he was in class tenth he was not able to understand the practical experiments done in the laboratory.</li></ul>
L V 2	<ul style="list-style-type: none"><li>• Low vision creates hindrances in reading small letters. Therefore more listening activities and writing tasks are helpful in classroom situation. Some topics related to Chemistry like organic equation were easy. Peer support and teacher's support were helpful. Remedial classes were helpful.</li><li>• More explanations while doing demonstration was required. The drawing of diagrams and drawings need to be exempted. Repetition of some concepts and laboratory work (Example. Saturation Point) were needed.</li><li>• He used to repeat some experiments with the help of peers so that whatever confusion he had during the class time, would be clarified.</li></ul>

B 1.	<ul style="list-style-type: none"> <li>• He learned science when he was in school by making a visual painting in his imagination.</li> <li>• He opted for arts subject in his higher studies because he liked English literature more than other subjects.</li> <li>• When he was in class nine he felt that special school was not enough for him. So he joined regular school and studied well and passed his tenth class.</li> <li>• He expressed that because of stereotyping in society students who are visually challenged faces a lot of discouragement in taking science after class X.</li> <li>• He believed that he was able to learn science easily because he always got access and opportunity to interact with the children who were not physically challenged. For him peer learning is good. He got supporting parents and supportive teachers.</li> <li>• He explained that the way a teacher speaks brings a lot of changes in his learning. The pitch, voice modulation, clarity, pronunciation, effective-precise-specific accent of the teachers affects the learning of the students. He told he like doing group activities and it is beneficial for him.</li> <li>• According to him the three important aspects which help in science learning are (a) Broad interaction (b) Experiential learning (c) Parents and teachers support.</li> </ul>
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#### **B) The views on Learning Science of students of class IX studying in Special School**

- Out of the eight students, except two students everyone's favourite subject was science, because science gives them opportunity to know about their surrounding more elaborately and precisely. According to them this subject is unique, as it tells about their body, its function and inner structure. Science makes them understand about different phenomenon of environment, human beings and animals. Science acts as the source of new information.
- They expressed that there are some interesting topics in science subject. Eg:- Human Body, Animal Kingdom, Tissue System, Atoms, Tissue System, Flowers, Health and

Hygiene. But there are some other concepts which are very difficult to understand. Below a brief is given about topics of their likings and dislikings.

**Table 3:** *Interesting topics in science for CwVI*

Participant No.	Topics related to Science they are interested in	Topics that are challenging for them
L. V 4	Topics related to Human and Animal	Light
L V. 5	Bacteria	Light
B 2.	New Technology	Light
B. 3	Atomic Energy	Metals and Non metals
B 6.	Tissue System	Light and Metal
B 7	New Information and Technology	Space

- They wanted their class to be free from any restrictions. They wanted their teachers to teach them every concept clearly and elaborately. They wanted some concepts to be taught repeatedly also because sometimes they feel science has fun and some interesting elements.
- Teacher's explanation, audio aids and recordings help them to understand the science concepts.
- They repeated many activities to enjoy the tasks and to understand the concept.
- They felt that group work makes learning more enjoyable and help them to understand more precisely.

### C) Laboratory Work

Information relating to Laboratory work in science was very limited in this study. The schools did not have sufficient laboratory facility to support learning of science in a inclusive setting. However, the limited narrative available is presented herewith.

Participant L V 2 used to avoid practical works in the laboratory. He always avoided the use of chemical particularly in measuring and combining the chemicals. An anecdote is illustrated here.

**Anecdote No 1:**

Participant L V 2. : When I was in class 11th, we were doing laboratory experiments. My friends were faster than me to complete the work. I was little slower in completing my task. My Science teacher suddenly scolded me “every time you are late. Try to complete it in time. All are doing, why are you not?” This made me insulted. I thought my teacher had no wrong intention to hurt me but may be he is very much used to teach the so called sighted students. May be he had forgotten about my limitations. On the next day the same teacher came to me and consoles. When my father came to visit me, I described the matter. Being a teacher my father explained me how to overcome different situations. That time I got emotional, but now since I am going to be a teacher, I always think how I will take care of my students.

**Anecdote No 2:**

There is no formal Science laboratory available in the selected special school. Though Science kit is available, use of science kit is limited. Therefore, information about laboratory work is also very limited.

**3.1.3 Challenges in Learning Science**

- Science is taught as a compulsory school subject in the curriculum. Due to lack of adaptations there are some challenges faced by the participants in learning science.
- The participant L V 2 faced difficulties in understanding the concepts of Physics like Prizm, Refraction, concepts in Biology like Microscopic views, drawing diagrams and smaller parts of anything. He had a fear to examine the heartbeats of Frog in Zoology.
- The participants studying in Special school expressed that there are some topics which is really hard to understand. Example- Light (as per the students light is something similar to broken mirror), metals and non-metals.
- Most of the participants expressed that the concepts related to Physics and some Units related to chemistry are very difficult.
- Topics related to biology is comparatively easier for them because they are taught through life experiences.

### 3.1.4 Coping Strategies

Participant L V. 2 expressed that when he appeared XII<sup>th</sup> class final theory examination, he had to draw the diagram without the help of Scribe. “Problem Solving” items in Physics were difficult, so he left those. Mostly he used the get-by-heart technique and also repeated practice of the previous year questions. He also used to ask his peers and sometimes used coding technique.

Participants of special school expressed that Books, discussion with friends, people interaction (who knows the answer), discussion with teachers helped them to solve their problem in learning science. One student replied he tried to co-relate new information with the facts which he already knows and tried to make a connection or sometimes he tried to remember whether he has heard of it earlier or not.

### 3.1.5 Application of Science Learning

Application of science in daily life is one of the important objectives of teaching science at school level. Since environment was limited for most of the participants, gaining experiences from the environment was also restricted. Application of science learning for these participants was also limited. Further, participant L V 2 added, he was studying in a residential college, there was little scope to go out of the campus. But during this research study he was preparing small science projects as part of his curriculum. Participants of Special School narrated that “We do wash our hands before taking food. Whenever we fall sick, we try to find out the reason behind that, eg:- remembering what we ate yesterday, is it because of weather, or any other factor?”. We also use tape recorder, mobile for recording books and use them for listening.

#### **Anecdote 3:**

Participant B 1: Different teachers have different opinions. I never depend on one book or one teacher. When I was being asked how I understand the concept of “Light”. I replied light is warmer than wind. When I feel warmer, I can know that this is day time and my teacher taught me this since my childhood.

- Once one of my seniors asked me How do you see? Without hesitation I replied, “I ‘see’ through sound (my ears)”. I can ‘see’ through touch also. I can ‘see’ through my thinking also.

## 3.2 Findings and Discussion

The present study has the following major findings.

### Major Findings and discussion

- The students with visual impairment like to learn the subject science in their school just like any other student. Thus the gap is not ability to learn but attitude towards learning. Mastropieri and Scruggs (1995) and Patton (1995) remind us that hands-on activities and personally relevant topics are critical for engaging students with disabilities in science learning. Furthermore, when creating inquiry based science experiences for students with disabilities, it is critical that educators make students feel emotionally safe and have the freedom to pursue investigations without unnecessary teacher evaluation or interference in the inquiry process (Maroney et al. 2003).
- For learning of science the most preferred way is discussion with parents, peer group and teachers without visual impairment. This supports the importance of inclusive education for students with visual impairment. Many students find that when science is taught in a hands-on, inquiry-based manner, it is a preferred subject area (Bennington 2004). This is especially true for students with disabilities who depend on these experiences to access content (Melber 2004).
- Out of the total participants four participants liked Language subject than science. Rest of them showed interest in science as it is fun and interesting. The findings pave way for further research as the literature suggests that students with visual impairment are good in languages and not inclined towards science and mathematics.
- All the participants of special schools use talking books and braille books whereas the participants of inclusive setting use printed books. It is required to explore the availability and supply of suitable resources for supporting science learning of students with disability and specifically visual impairment. Technology proves to be a good means to be used by the teachers in order to meet the needs of the visually impaired students in the classroom (Tobin 1997). The teachers can also use tangible symbols for these learners with severe impairment even (Trief 2019).
- Most of the participants expressed that they like Biology. This could be due to the concreteness of the subject. However no one categorically said that they dislike physics and chemistry. This clearly directs the professionals to look for ways of developing

abstract thinking and visualization of the abstractness as a higher level of cognitive functioning.

- All the participants of special school opined that repetition of lessons; detailed verbal explanations by the teachers help them to understand the science concepts whereas participants of inclusive setting sought of the support of both teachers and peers in clarifying their doubts. As the findings in the study of Agarwal (2005) indicate the benefit of semi integrated set up for developing effective academic skills of students with visual impairment, it could be mainly due to the benefit of academic interaction among peers without visual impairment.
- Laboratory work experiences were not very prominent because of non-availability of formal science laboratory. Only one participant with low vision has comparatively better experience in laboratory work.

### **3.3 Educational Implications**

The present study has the above major findings. There are some educational implications for the students, teachers, parents and professionals.

The analysis of the participants' responses indicates that conditions of loss of sight restrict the mobility and gaining environmental experiences. Peer support of those without visual impairment is highly required in exploring the environment. This is possible only in an inclusive school. In addition, a sighted peer is a buddy for student with visual impairment not only in learning science but in life skill education.

Through the teachers' interaction during this study, it was felt that adaptation was highly required. Some items of the science kit is not appropriate for students with visual impairment. Training of science teacher with specific skills of adaptation of method and material for students with disability and for those with visual impairment will help them to make necessary adaptations.

The study has further implication that parents, teachers and community to encourage the children to pursue higher education rather than restricting them by indicating the child's limitations.

Both students with low vision and blindness should not be restricted at different levels to opt for science stream in higher secondary education. The professionals should not be under the impression that students with visual impairment are not interested in science, rather by understanding their interest, they should be provided with opportunity to take up science.

### **3.4 Limitations**

The present study covered a small sample size. Only three participants studying in inclusive setting were included in this study. Non-availability of Laboratory facility in schools also created barrier for exploring their science learning.

### **3.5 Recommendations**

1. The professionals and policy makers must make decisions about an alternative theory paper which will substitute the laboratory practical work.
2. Laboratory manual can be developed in braille so that students can read the scientific steps of the experiments.

### **3.6 Conclusion**

This chapter of the study covers the analysis and interpretation of the data. The interaction of the teacher, narratives of the participants were presented in different captions. The study includes two interesting anecdotes. Some Science process skills have to be developed among students with visual impairment. Students studying in inclusive environment were proved to have better coping strategies and learning in comparison to students staying in boarding school. In spite of few limitations, the study has some major findings and educational implications for students, teachers, parents and professionals.

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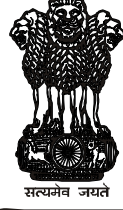
### Semi-structured Interview for Students

#### Personal information of the student:

- Name of the School:
- Name of the Student:
- Class:-
- Type and degree of Disability:
- Assistive Devices used, if any:
- Assistive Devices used Since:

- 
1. Which subject is interesting to you?
  2. How do you want that subject to be taught to you?
  3. Which are the topics that you like in science?
  4. What helps you to understand science concepts?
  5. Do you face any difficulty in understanding science concept in science class?
  6. How you solve your problems of learning science?
  7. Can you explain a situation wherein you used your own technique to learn a science concept?

8. How you want your teacher to teach in science class and why?
9. How does the laboratory work help you to learn science subjects?
10. Have you ever repeated any activities done in science class? Yes    No
- a. If yes, Why?
    - i. To understand the concept
    - ii. Enjoyed repeating
    - iii. Wanted to compare and verify previous results
    - iv. To have mastery of skills in doing that activity.
11. Do you want to do group work in science class?
12. Have you applied your science learning outside the school?  
Briefly describe. (What/ how?)
- a. Classroom
  - b. Home
  - c. Playground
  - d. Garden
  - e. Other place
13. Is there any other important aspect you want to share with us regarding science learning?



# भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

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सामाजिक न्याय और अधिकारिता मंत्रालय

(दिव्यांगजन सशक्तिकरण विभाग)

अधिसूचना

नई दिल्ली, 4 जनवरी, 2018

**का.आ. 76(अ).**—जबकि दिव्यांगजन सशक्तिकरण विभाग, सामाजिक न्याय और अधिकारिता मंत्रालय ने विभिन्न निर्धारित दिव्यांगताओं के प्रमाणन के लिए मूल्यांकन एवं प्रक्रिया हेतु दिशा-निर्देश सुझाने के लिए सचिव, दिव्यांगजन सशक्तिकरण विभाग की अध्यक्षता में तारीख 8 जुलाई, 2015 के आदेश **(अनुबंध-I)** द्वारा एक विशेषज्ञ समिति गठित की गई थी;

और जबकि विशेषज्ञ समिति ने 10 नवम्बर, 2015 को बैठक की और यह निर्णय लिया की निम्नलिखित श्रेणियों में 8 उप समितियां स्थापित की जाएं:

- (i) गतिविषयक दिव्यांगता ;
- (ii) दृष्टि बाधिता;
- (iii) श्रवण बाधिता ;
- (iv) चिरकालिक तंत्रिका दशाएं;
- (v) रक्त संबंधी विकारों से प्रभावित व्यक्ति;
- (vi) विकास संबंधी विकार;
- (vii) मानसिक रुग्णता; और
- (viii) बहु दिव्यांगता ;

और जबकि दिव्यांगजन सशक्तिकरण विभाग द्वारा उक्त 8 उप-समितियां तारीख 21 सितम्बर, 2016, 3 अक्टूबर, 2016 और 23 जनवरी, 2017 के आदेशों द्वारा स्थापित की गई थी।

और जबकि उक्त उप-समितियां ने विस्तृत विचार-विमर्श के बाद अपनी रिपोर्टें प्रस्तुत की और इन रिपोर्टों को सचिव, दिव्यांगजन सशक्तिकरण विभाग की अध्यक्षता में विशेषज्ञ समिति द्वारा जाँच की गई;

यह परीक्षण यह बताता है कि रक्त के थक्के के लिए कितना समय लगता है यह VIII (8), IX (9), XI (11), और XII (12) फैक्टरों की थक्का क्षमता को मापता है। यदि इनमें से किसी भी थक्के वाले फैक्टर बहुत कम हैं, तो खून के थक्का के लिए सामान्य से अधिक समय लगता है। इस परीक्षण के परिणाम हेमोफिलिया ए या बी वाले लोगों के मध्य लंबा क्लोटिंग समय दिखाएंगे। जमावट की इस प्रक्रिया में कोओलिन या कोलेजन या एलेगिक एसिड द्वारा प्रेरित किया जाता है। सामान्य समय यानी 30–32 सेकंड है और सस्ते होते हैं और अधिकांश स्थानों पर उपलब्ध हैं।

प्रोथ्रोम्बिन टाइम (पीटी) टेस्ट

यह परीक्षण रक्त के थक्के के लिए जो समय लेता है उसे भी मापता है यह प्राथमिक रूप से I (1), II (2), V (5), VII(7) और X (10) फैक्टरों की थक्का क्षमता को मापता है। यदि इनमें से कोई भी कारक बहुत कम है, तो खून के थक्के के लिए सामान्य से अधिक समय लगता है हेमोफिलिया ए और बी वाले अधिकांश लोगों में इस परीक्षण के परिणाम सामान्य होंगे।

टिप्पण: ये परीक्षण सरल, करने में आसान और स्क्रीनिंग परीक्षण के रूप में कार्य करते हैं और अधिकांश स्थानों पर उपलब्ध हैं।

रक्त के थक्के फैक्टरों के लिए विशिष्ट परीक्षण (फैक्टर परख) फैक्टर VIII या फैक्टर IX स्तरों को मापने और निदान की पुष्टि करने के लिए किया जा सकता है। फैक्टर परख खून बहाव विकार के निदान और पुष्टि करने के लिए आवश्यकता हैं। यह रक्त परीक्षण हेमोफिलिया के प्रकार और गंभीरता को दर्शाता है सर्वोत्तम उपचार योजना बनाने के लिए प्रकार और गंभीरता को जानना महत्वपूर्ण है।

I. फैक्टर VIII प्रोटीन है जो हेमोफिलिया ए में कमी है।

II. फैक्टर IX प्रोटीन है जो हेमोफिलिया बी में कमी है।

[सं. 16–09/2014–डीडी–III]

शकुंतला डौले गामलिन, सचिव

## MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT

[Department of Empowerment of Persons with Disabilities (Divyangjan)]

### NOTIFICATION

New Delhi, the 4th January, 2018

**S.O. 76(E).**—Whereas the Department of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment, had constituted an expert committee vide order dated the 8th July, 2015 (**Annexure I**) under the chairmanship of Secretary, Department of Empowerment of Persons with Disabilities to suggest guidelines for evaluation and procedure for certification of various specified disabilities;

And whereas the expert Committee met on the 10th November, 2015 and decided that eight sub-committees in the following categories should be set up:

- (i) locomotor disability;
- (ii) visual impairment;
- (iii) hearing impairment;
- (iv) chronic neurological conditions;
- (v) persons affected with blood related disorders;
- (vi) developmental disorders;
- (vii) mental illness; and
- (viii) multiple disabilities;

And whereas the above eight sub-committees were set up by the Department of Empowerment of Persons with Disabilities vide orders dated the 21st September, 2016, the 3rd October, 2016 and the 23rd January, 2017.

And whereas the said sub-committees, after detailed deliberations, submitted their reports and these reports were examined by the expert committee headed by Secretary, Department of Empowerment of Persons with Disabilities;

And whereas the expert committee noted that the Ministry of Health and Family Welfare is the final authority to recommend guidelines on evaluation and procedure for certification of specified disabilities and accordingly the consolidated reports of all the eight sub-committees were referred to the Ministry of Health and Family Welfare for finalisation;

And whereas a meeting was held on the 11th April, 2017 under the chairmanship of Secretary, Ministry of Health and Family Welfare to consider the reports submitted by the eight sub-committees and subsequently Ministry of Health and Family Welfare conveyed their recommendations on 9th June 2017;

Now, therefore, in exercise of powers conferred by Section 56 of the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the Central Government hereby notifies the guidelines for the purpose of assessing the extent of following specified disabilities in a person after having considered the recommendations of the Ministry of Health and Family Welfare as provided at **Annexure II**, namely:-

- I. locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy;
- II. blindness and low-vision;
- III. deaf and hard of hearing and speech and language disability;
- IV. intellectual disability and specific learning disabilities;
- V. mental illness;
- VI. chronic neurological conditions;
- VII. haemophilia, thalassemia and sickle cell disease; and
- VIII. multiple disabilities.

2. The said guidelines for the purpose of assessing disabilities at Annexure II shall supersede the guidelines for evaluation of various disabilities and procedure for certification *vide* Government of India, Ministry of Social Justice and Empowerment notification number 16-18/97-NI I. dated the 1<sup>st</sup> June 2001 and the guidelines for evaluation and assessment of mental illness and procedure of certification *vide* Government of India, Ministry of Social Justice and Empowerment notification number 16-18/97-NI dated the 18<sup>th</sup> February 2002, except as respects things done or omitted to be done before such supersession.

**Note 1:-** In terms of Section 57 of the Rights of the Persons with Disabilities Act, 2016 (49 of 2016), the State Governments or as the case may be, Union Territory Administrators shall designate persons, having requisite qualifications and experience, as certifying authorities, who shall be competent to issue the certificate of disability and also notify the jurisdiction within which and the terms and conditions subject to which, the certifying authority shall perform its certification functions.

**Note 2:-** The Director General of Health Services, Ministry of Health and Family Welfare, Government of India shall be the final authority to decide upon cases where any controversy or doubt arises in matters relating to interpretation of the definitions or classifications or evaluation procedure regarding the said guidelines.

**Annexure I**

**File No. 16-09/2014-DD-III**

**Government of India**

**Ministry of Social Justice & Empowerment**

**Department of Empowerment of Persons with Disabilities**

**(DD-III Section)**

Paryavaran Bhawan, CGO Complex,

Lodhi Road, New Delhi

Dated the 8<sup>th</sup> July, 2015

### **ORDER**

**Sub:-** Constitution of Committee to furnish guidelines for evaluation and certification of 12 newly identified disabilities in the Rights of Persons with Disabilities Bill.

It has been decided with the approval of Hon'ble Minister (SJ&E) to constitute the Expert Committee to finalise guidelines for evaluation and certification of 12 newly identified disabilities in the Rights of Persons with Disabilities Bill, 2014 with the following composition:-

- |    |   |          |
|----|---|----------|
| 1. | Secretary<br>Department of Empowerment of Persons with Disabilities,<br>Government of India | Chairman |
| 2. | Secretary<br>Ministry of Health & Family Welfare, Government of India                       | Member   |
| 3. | Director<br>All India Institute of Medical Sciences,<br>New Delhi                           | Member   |

4.	Director General Health Services Ministry of Health & Family Welfare Nirman Bhawan, New Delhi	Member
5.	Head of Department Neurology, Safdarjung Hospital, New Delhi	Member
6.	Head of Department Psychiatry Dr Ram Manohar Lohia Hospital, New Delhi	Member
7.	Head of Department ENT Safdarjung Hospital New Delhi	Member
8.	Head of Department Hematology Safdarjung Hospital New Delhi	Member
9.	Head of Department Ophthalmology Dr Ram Manohar Lohia Hospital New Delhi	Member
10.	Head of Department Paediatrics Safdarjung Hospital New Delhi	Member
11.	Head of Department PMR Safdarjung Hospital New Delhi	Member
12.	Director, Ali Yavar Jung National Institute for the Hearing Handicapped Mumbai	Member
13.	Director National Institute of Mentally Handicapped Manovikasnagar, Secunderabad	Member
14.	Director National Institute for Empowerment of Persons with Multiple Disabilities, Tamil Nadu	Member

15.	Director National Institute for the Orthopedically Handicapped, Kolkata	Member
16.	Director National Institute for the Visually Handicapped, Uttarakhand	Member
17.	Director National Institute for Rehabilitation Training and Research, Cuttack	Member
18.	Director Pt Deendayal Upadhaya Institute for Physically Handicapped, New Delhi	Member
19.	Secretary, Indian Council for Medical Research	Member
20.	Joint Secretary Department of Empowerment of Persons with Disabilities, Paryavaran Bhawan, CGO Complex, New Delhi	Member
21.	Director Department of Empowerment of Persons with Disabilities, Paryavaran Bhawan, CGO Complex, New Delhi	Convener

2. The terms of reference for the Committee are as follows:-

(a) The Expert Committee shall:

- (i) review existing guidelines for evaluation and certification of various disabilities,
- (ii) formulate guidelines for evaluation of newly introduced disabilities in the RPwD Bill, 2014 and procedure for certification,
- (iii) look into the best practices of certification prevailing across the nations.

(b) The Committee may co-opt any other member.

(c) Meetings of the Committee will be held in Delhi as per the convenience of the Chairman.

(d) TA/DA will be borne by the respective organization

(e) The Committee should submit its report within 6 months.

sd/-

**(Awanish K. Awasthi)**

Joint Secretary to Govt. of India

Tel.No. 24369056

To

1. All Members of the Committee
2. PS to Minister (SJ&E)
3. PS to Secretary (DEPwD)
4. PPS to JS (DEPwD)
5. PA to Director (DEPwD)

**SECTION K:****18. Muscular Dystrophy**

**18.1. Definition.-** "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.

**18.2.** After detailed clinical examination, each of the features namely, weakness, contractures, scoliosis, cardiac or pulmonary involvement are evaluated and disability is computed based on the criteria for each of these and added to the locomotor disability component, using the combining formula:  $a + \frac{b(90-a)}{90}$  (a = higher value, b = lower value). Disability is to be expressed in relation to the whole body. Total % of disability will not exceed 100%. Due to progressive nature of this disease, review may be necessary after a period, such as 2 years or as desired by the patient or as decided by the disability board.

**18.3 Medical Authority and instruments required for certification of locomotor disability**

**18.3.1** The Medical Superintendent or Chief Medical Officer or Civil Surgeon or any other equivalent authority as notified by the State Government shall be the head of the certification board for the purpose of certification of locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy. The Board shall comprise of:

- (i) Medical Superintendent or Chief Medical Officer or Civil Surgeon
- (ii) Specialist in Physical Medicine and Rehabilitation or Specialist in Orthopedics
- (iii) One specialist as nominated by Chief Medical Officer as per the condition of the person with disability.

**18.3. 2.** The most important resource is the knowledge and skill of the Members/Experts involved in the process. However, a few items listed below may also be required:

- a. A measuring tape for measuring – vertical height of the person, degree of chest expansion, shortening of an extremity, or difference in girth of a limb etc.,
- b. Goniometers – small, medium and large, for measuring range of motion at different joints,
- c. Hand-held dynamometer,
- d. Clean cotton piece for testing corneal sensation,
- e. A ball point pen for testing sensory deficit e.g., in leprosy-cured person,
- f. X-ray films, e.g., in cases with spinal deformity, amputation, arthritis, club foot, congenital limb deficiency, fractures etc.

**II. VISUAL IMPAIRMENT****19.1. Definition.-** Visual impairment

(a) "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.

(b) "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.

**19.2. Nature of Certificate:** The medical authority will decide whether disability certificate should be temporary or permanent. The disability shall be permanent to be certified. The certificate can be temporary if condition is likely to worsen and also for specific purposes such as for pursuing education. The need of reassessment, if required, should be clearly mentioned in the certificate with time frame. In certain cases such as keratoconus, developmental defects, operated congenital cataract with corneal decompensation, operated congenital glaucoma with hazy cornea etc., the patient especially can be issued a temporary certificate.

### 19.3. Visual Impairment Certification Criteria and Gradation

**Vision assessment should be done after best possible correction (medical, surgical or usual/conventional spectacles).** The Ophthalmologist shall circle the vision Status and the Percentage Impairment and mark the Disability category accordingly as under:-

Better eye Best Corrected	Worse eye Best Corrected	Per cent Impairment	Disability category
6/6 to 6/18	6/6 to 6/18	0%	0
	6/24 to 6/60	10%	0
	Less than 6/60 to 3/60	20%	I
	Less than 3/60 No Light Perception	30%	II (One eyed person)
6/24 to 6/60 Or Visual field less than 40 up to 20 degree around centre of fixation or heminaopia involving macula	6/24 to 6/60	40%	III a (low vision)
	Less than 6/60 to 3/60	50%	III b (low vision)
	Less than 3/60 to No Light Perception	60%	III c (low vision)
Less than 6/60 to 3/60 Or Visual field less than 20 up to 10 degree around centre of fixation	Less than 6/60 to 3/60	70%	III d (low vision)
	Less than 3/60 to No Light Perception	80%	III e (low vision)
Less than 3/60 to 1/60 Or Visual field less than 10 degree around centre of fixation	Less than 3/60 to No Light Perception	90%	IV a (Blindness)
Only HMCF Only Light Perception, No Light Perception	Only HMCF Only Light Perception, No Light Perception	100%	IV b (Blindness)

- For Visual acuity the line should be read completely, in case of partial line read, one line below that line should be taken for visual acuity.

**Matrix Table****Left Eye Vision [Best Corrected Visual Acuity (BCVA)]**

Right Eye Vision [Best Corrected Visual Acuity (BCVA)]		6/6 to 6/18	6/24	6/36	6/60	3/60	2/60	1/60	HMCF to PL-
	6/6 to 6/18	0 %	10 %	10 %	10 %	20 %	30 %	30 %	30 %
	6/24	10 %	40 %	40 %	40 %	50 %	60 %	60 %	60 %
	6/36	10 %	40 %	40 %	40 %	50 %	60 %	60 %	60 %
	6/60	10 %	40 %	40 %	40 %	50 %	60 %	60 %	60 %
	3/60	20 %	50 %	50 %	50 %	70 %	80 %	80 %	80 %
	2/60	30 %	60 %	60 %	60 %	80 %	90 %	90 %	90 %
	1/60	30 %	60 %	60 %	60 %	80 %	90 %	90 %	90 %
	HMCF to PL-	30 %	60 %	60 %	60 %	80 %	90 %	90 %	100 %

- Yellow- Right eye is Better eye Brown- Left eye is better eye
- Percent disability is marked inside the box corresponding to the visual acuity for both eyes

**Field of Vision around centre of fixation****Left Eye**

Right Eye		<40° to 20°	<20° to 10°	<10°
	<40° to 20°	40 %	50 %	60 %
	<20° to 10°	50 %	70 %	80 %
	<10°	60 %	80 %	100 %

- Yellow- Right eye is Better eye Brown- Left eye is better eye (only better eye Fields to be taken in to account for determining the %)

**19.4. Medical Authority.**

The medical authority shall comprise of one ophthalmologist and certificate of disability shall be countersigned by Medical Superintendent or Chief Medical Officer or Civil Surgeon or any other equivalent authority as notified the State Government.

**F. No. 34-02/2015-DD-III**  
**Government of India**  
**Ministry of Social Justice & Empowerment**  
**Department of Empowerment of of Persons with Disabilities (Divyangjan)**

\*\*\*

Pt. Deendayal Antyodaya Bhawan,  
C.G.O. Complex, New Delhi -110003  
Dated: the 29<sup>th</sup> August, 2018

**Office Memorandum**

**Subject:** Guidelines for conducting written examination for Persons with Benchmark Disabilities

The undersigned is directed to say that this Department had issued the guidelines for conducting written examination for persons with disabilities defined in terms of erstwhile Persons with Disabilities (Equal Opportunities, Protection for Rights and Full Participation) Act, 1995 vide OM No. 16-110/2003-DD.III dated 26/02/2013. The Department had constituted a Committee under the Chairmanship of Secretary, DEPwD in March, 2015 to review the said guidelines based on the issues raised by Union Public Service Commission and others. Meanwhile the Central Government enacted the Rights of Persons with Disabilities Act, 2016 (RPwD Act, 2016 ) which came into force from 19.04.2017. The Act provides for reservation in Government jobs for persons with benchmark disabilities as defined under section 2 (r) of the said Act.

Based on the findings of the Committee, the Central Government hereby lays down the revised guidelines for conducting written examination for persons with benchmark disabilities in supersession of the earlier guidelines issued vide OM No. 16-110/2003-DD.III dated 26/02/2013 as under:

- I. These guidelines may be called as "Guidelines for conducting written examination for persons with benchmark disabilities 2018".
- II. There should be a uniform and comprehensive policy across the country for persons with benchmark disabilities for written examination taking into account improvement in technology and new avenues opened to the persons with benchmark disabilities providing a level playing field. Policy should also have flexibility to accommodate the specific needs on case-to-case basis.
- III. There is no need for fixing separate criteria for regular and competitive examinations.

IV. The facility of Scribe/Reader/Lab Assistant should be allowed to any person with benchmark disability as defined under section 2(r) of the RPwD Act, 2016 and has limitation in writing including that of speed if so desired by him/her.

In case of persons with benchmark disabilities in the category of blindness, locomotor disability (both arm affected-BA) and cerebral palsy, the facility of scribe/reader/lab assistant shall be given, if so desired by the person.

In case of other category of persons with benchmark disabilities, the provision of scribe/reader/lab assistant can be allowed on production of a certificate to the effect that the person concerned has physical limitation to write, and scribe is essential to write examination on his behalf, from the Chief Medical Officer/Civil Surgeon/Medical Superintendent of a Government health care institution as per proforma at **APPENDIX-I**.

V. The candidate should have the discretion of opting for his own scribe/reader/lab assistant or request the Examination Body for the same. The examining body may also identify the scribe/ reader/lab assistant to make panels at the District/Division/ State level as per the requirements of the examination. In such instances the candidates should be allowed to meet the scribe **two days** before the examination so that the candidates get a chance to check and verify whether the scribe is suitable or not.

VI. In case the examining body provides the scribe/reader/lab assistant, it shall be ensured that qualification of the scribe should not be more than the minimum qualification criteria of the examination. However, the qualification of the scribe/reader should always be matriculate or above.

In case the candidate is allowed to bring his own scribe, the qualification of the scribe should be one step below the qualification of the candidate taking examination. The persons with benchmark disabilities opting for own scribe/reader should submit details of the own scribe as per proforma at **APPENDIX-II**

VII. There should also be flexibility in accommodating any change in scribe/reader/lab assistant in case of emergency. The candidates should also be allowed to take more than one scribe/reader for writing different papers especially for languages. However, there can be only one scribe per subject.

VIII. Persons with benchmark disabilities should be given, as far as possible, the option of choosing the mode for taking the examinations i.e. in Braille or in the computer or in large print or even by recording the answers as the examining bodies

can easily make use of technology to convert question paper in large prints, e-text, or Braille and can also convert Braille text in English or regional languages.

IX. In case, the persons with benchmark disabilities are allowed to take examination on computer system, they should be allowed to check the computer system one day in advance so that the problems, if any in the software/system could be rectified. Use of own computer/laptop should not be allowed for taking examination. However, enabling accessories for the computer based examinations such as keyboard, customized mouse etc should be allowed.

X. The procedure of availing the facility of scribe should be simplified and the necessary details should be recorded at the time of filling up of the forms. Thereafter, the examining body should ensure availability of question papers in the format opted by the candidate as well as suitable seating arrangement for giving examination.

XI. The disability certificate issued by the competent medical authority at any place should be accepted across the country.

XII. The word "extra time or additional time" that is being currently used should be changed to "compensatory time" and the same should not be less than 20 minutes per hour of examination for persons who are allowed use of scribe/reader/lab assistant. All the candidates with benchmark disability not availing the facility of scribe may be allowed additional time of minimum of one hour for examination of 3 hours duration. In case the duration of the examination is less than an hour, then the duration of additional time should be allowed on pro-rata basis. Additional time should not be less than 5 minutes and should be in the multiple of 5.

XIII. The candidates should be allowed to use assistive devices like talking calculator (in cases where calculators are allowed for giving exams), tailor frame, Braille slate, abacus, geometry kit, Braille measuring tape and augmentative communication devices like communication chart and electronic devices.

XIV. Proper seating arrangement (preferably on the ground floor) should be made prior to the commencement of examination to avoid confusion or distraction during the day of the exam. The time of giving the question papers should be marked accurately and timely supply of supplementary papers should be ensured.

XV. As far as possible, the examining body should also provide reading material in Braille or E-Text or on computers having suitable screen reading software for open book examination. Similarly online examination should be in accessible format i.e. websites, question papers and all other study material should be accessible as per the international standards laid down in this regard.

XVI. Alternative objective questions in lieu of descriptive questions should be provided for Hearing-Impaired persons, in addition to the existing policy of giving alternative questions in lieu of questions requiring visual inputs, for persons with Visual Impairment.

XVII. As far as possible the examination for persons with disabilities should be held at the ground floor. The examination centres should be accessible for persons with disabilities.

2. It is requested to ensure that the above guidelines are scrupulously followed while conducting examination for persons with benchmark disabilities. All the recruitment agencies, Academics/Examination Bodies etc. under the administrative control of each Ministry/Deapartment may be advised appropriately to ensure compliance of implementing these guidelines. Action taken in this regard may be intimated to this office.

3. The above guidelines are issued with the approval of Hon'ble Minister (Social Justice & Empowerment).

Yours faithfully,

  
(D.K. Pandya)

Under Secretary to the Government of India  
Tele. No. 24369059

To

1. Secretary of all Ministries/Department.
2. Secretary, UPSC, Shahjahan Road, New Delhi.
3. Chairman, SSC, Block No.12, CGO Complex, Lodhi Road, New Delhi-110003.
4. Chairman, University Grants Commission with a request to issue necessary instructions to all universities including Deemed Universities for compliance.
5. Chairman, Railway Board
6. All National Institutes and RCI under administrative control of Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of SJ&E, New Delhi

**Copy for information to:** CCPD, Sarojini Bhawan, Bhagwan Dass Road, New Delhi

**Certificate regarding physical limitation in an examinee to write**

This is to certify that, I have examined Mr/Ms/Mrs \_\_\_\_\_ (name of the candidate with disability), a person with \_\_\_\_\_ (nature and percentage of disability as mentioned in the certificate of disability), S/o/D/o \_\_\_\_\_, a resident of \_\_\_\_\_ (Village/District/State) and to state that he/she has physical limitation which hampers his/her writing capabilities owing to his/her disability.

Signature

Chief Medical Officer/Civil Surgeon/ Medical Superintendent of a  
Government health care institution

Name & Designation.

Name of Government Hospital/Health Care Centre with Seal

Place:

Date:

**Note:**

Certificate should be given by a specialist of the relevant stream/disability (eg. Visual impairment – Ophthalmologist, Locomotor disability – Orthopaedic specialist/PMR).

**Letter of Undertaking for Using Own Scribe**

I \_\_\_\_\_, a candidate with \_\_\_\_\_ (name of the disability) appearing for the \_\_\_\_\_ (name of the examination) bearing Roll No. \_\_\_\_\_ at \_\_\_\_\_ (name of the centre) in the District \_\_\_\_\_, \_\_\_\_\_ (name of the State). My qualification is \_\_\_\_\_.

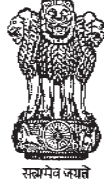
I do hereby state that \_\_\_\_\_ (name of the scribe) will provide the service of scribe/reader/lab assistant for the undersigned for taking the aforesaid examination.

I do hereby undertake that his qualification is \_\_\_\_\_. In case, subsequently it is found that his qualification is not as declared by the undersigned and is beyond my qualification, I shall forfeit my right to the post and claims relating thereto.

(Signature of the candidate with Disability)

Place:

Date:



# भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II — खण्ड 1

PART II — Section 1

प्राधिकार से प्रकाशित

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No. 59] NEW DELHI, WEDNESDAY, DECEMBER 28, 2016/PAUSHA 07, 1938 (SAKA)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।

Separate paging is given to this Part in order that it may be filed as a separate compilation.

## MINISTRY OF LAW AND JUSTICE

(Legislative Department)

*New Delhi, the 28th December, 2016/Pausha 17, 1938 (Saka)*

The following Act of Parliament received the assent of the President on the 27th December, 2016, and is hereby published for general information:—

### THE RIGHTS OF PERSONS WITH DISABILITIES ACT, 2016

(No. 49 OF 2016)

*[27th December, 2016]*

An Act to give effect to the United Nations Convention on the Rights of Persons with Disabilities and for matters connected therewith or incidental thereto.

WHEREAS the United Nations General Assembly adopted its Convention on the Rights of Persons with Disabilities on the 13th day of December, 2006;

AND WHEREAS the aforesaid Convention lays down the following principles for empowerment of persons with disabilities,—

- (a) respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons;
- (b) non-discrimination;
- (c) full and effective participation and inclusion in society;
- (d) respect for difference and acceptance of persons with disabilities as part of human diversity and humanity;

(e) equality of opportunity;

(f) accessibility;

(g) equality between men and women;

(h) respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities;

AND WHEREAS India is a signatory to the said Convention;

AND WHEREAS India ratified the said Convention on the 1st day of October, 2007;

AND WHEREAS it is considered necessary to implement the Convention aforesaid.

BE it enacted by Parliament in the Sixty-seventh Year of the Republic of India as follows:—

## CHAPTER I

### PRELIMINARY

Short title and commencement.

1. (1) This Act may be called the Rights of Persons with Disabilities Act, 2016.

(2) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

Definitions.

2. In this Act, unless the context otherwise requires,—

(a) “appellate authority” means an authority notified under sub-section (3) of section 14 or sub-section (1) of section 53 or designated under sub-section (1) of section 59, as the case may be;

(b) “appropriate Government” means,—

(i) in relation to the Central Government or any establishment wholly or substantially financed by that Government, or a Cantonment Board constituted under the Cantonments Act, 2006, the Central Government;

41 of 2006.

(ii) in relation to a State Government or any establishment, wholly or substantially financed by that Government, or any local authority, other than a Cantonment Board, the State Government.

(c) “barrier” means any factor including communicational, cultural, economic, environmental, institutional, political, social, attitudinal or structural factors which hampers the full and effective participation of persons with disabilities in society;

(d) “care-giver” means any person including parents and other family Members who with or without payment provides care, support or assistance to a person with disability;

(e) “certifying authority” means an authority designated under sub-section (1) of section 57;

(f) “communication” includes means and formats of communication, languages, display of text, Braille, tactile communication, signs, large print, accessible multimedia, written, audio, video, visual displays, sign language, plain-language, human-reader, augmentative and alternative modes and accessible information and communication technology;

(g) “competent authority” means an authority appointed under section 49;

(h) “discrimination” in relation to disability, means any distinction, exclusion, restriction on the basis of disability which is the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field and includes all forms of discrimination and denial of reasonable accommodation;

(i) “establishment” includes a Government establishment and private establishment;

(j) “Fund” means the National Fund constituted under section 86;

(k) “Government establishment” means a corporation established by or under a Central Act or State Act or an authority or a body owned or controlled or aided by the Government or a local authority or a Government company as defined in section 2 of the Companies Act, 2013 and includes a Department of the Government;

18 of 2013.

(l) “high support” means an intensive support, physical, psychological and otherwise, which may be required by a person with benchmark disability for daily activities, to take independent and informed decision to access facilities and participating in all areas of life including education, employment, family and community life and treatment and therapy;

(m) “inclusive education” means a system of education wherein students with and without disability learn together and the system of teaching and learning is suitably adapted to meet the learning needs of different types of students with disabilities;

(n) “information and communication technology” includes all services and innovations relating to information and communication, including telecom services, web based services, electronic and print services, digital and virtual services;

(o) “institution” means an institution for the reception, care, protection, education, training, rehabilitation and any other activities for persons with disabilities;

(p) “local authority” means a Municipality or a Panchayat, as defined in clause (e) and clause (f) of article 243P of the Constitution; a Cantonment Board constituted under the Cantonments Act, 2006; and any other authority established under an Act of Parliament or a State Legislature to administer the civic affairs;

41 of 2006.

(q) “notification” means a notification published in the Official Gazette and the expression “notify” or “notified” shall be construed accordingly;

(r) “person with benchmark disability” means a person with not less than forty per cent. of a specified disability where specified disability has not been defined in measurable terms and includes a person with disability where specified disability has been defined in measurable terms, as certified by the certifying authority;

(s) “person with disability” means 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;

(t) “person with disability having high support needs” means a person with benchmark disability certified under clause (a) of sub-section (2) of section 58 who needs high support;

(u) “prescribed” means prescribed by rules made under this Act;

(v) “private establishment” means a company, firm, cooperative or other society, associations, trust, agency, institution, organisation, union, factory or such other establishment as the appropriate Government may, by notification, specify;

(w) “public building” means a Government or private building, used or accessed by the public at large, including a building used for educational or vocational purposes, workplace, commercial activities, public utilities, religious, cultural, leisure or recreational activities, medical or health services, law enforcement agencies, reformatories or judicial foras, railway stations or platforms, roadways bus stands or terminus, airports or waterways;

(x) “public facilities and services” includes all forms of delivery of services to the public at large, including housing, educational and vocational trainings, employment

and career advancement, shopping or marketing, religious, cultural, leisure or recreational, medical, health and rehabilitation, banking, finance and insurance, communication, postal and information, access to justice, public utilities, transportation;

(y) “reasonable accommodation” means necessary and appropriate modification and adjustments, without imposing a disproportionate or undue burden in a particular case, to ensure to persons with disabilities the enjoyment or exercise of rights equally with others;

(z) “registered organisation” means an association of persons with disabilities or a disabled person organisation, association of parents of persons with disabilities, association of persons with disabilities and family members, or a voluntary or non-governmental or charitable organisation or trust, society, or non-profit company working for the welfare of the persons with disabilities, duly registered under an Act of Parliament or a State Legislature;

(za) “rehabilitation” refers to a process aimed at enabling persons with disabilities to attain and maintain optimal, physical, sensory, intellectual, psychological environmental or social function levels;

(zb) “Special Employment Exchange” means any office or place established and maintained by the Government for the collection and furnishing of information, either by keeping of registers or otherwise, regarding—

(i) persons who seek to engage employees from amongst the persons with disabilities;

(ii) persons with benchmark disability who seek employment;

(iii) vacancies to which persons with benchmark disabilities seeking employment may be appointed;

(zc) “specified disability” means the disabilities as specified in the Schedule;

(zd) “transportation systems” includes road transport, rail transport, air transport, water transport, para transit systems for the last mile connectivity, road and street infrastructure, etc.;

(ze) “universal design” means the design of products, environments, programmes and services to be usable by all people to the greatest extent possible, without the need for adaptation or specialised design and shall apply to assistive devices including advanced technologies for particular group of persons with disabilities.

## CHAPTER II

### RIGHTS AND ENTITLEMENTS

Equality and  
non-  
discrimination.

3. (1) The appropriate Government shall ensure that the persons with disabilities enjoy the right to equality, life with dignity and respect for his or her integrity equally with others.

(2) The appropriate Government shall take steps to utilise the capacity of persons with disabilities by providing appropriate environment.

(3) No person with disability shall be discriminated on the ground of disability, unless it is shown that the impugned act or omission is a proportionate means of achieving a legitimate aim.

(4) No person shall be deprived of his or her personal liberty only on the ground of disability.

(5) The appropriate Government shall take necessary steps to ensure reasonable accommodation for persons with disabilities.

4. (1) The appropriate Government and the local authorities shall take measures to ensure that the women and children with disabilities enjoy their rights equally with others.

Women and children with disabilities.

(2) The appropriate Government and local authorities shall ensure that all children with disabilities shall have right on an equal basis to freely express their views on all matters affecting them and provide them appropriate support keeping in view their age and disability.”.

5. (1) The persons with disabilities shall have the right to live in the community.

Community life.

(2) The appropriate Government shall endeavour that the persons with disabilities are,—

(a) not obliged to live in any particular living arrangement; and

(b) given access to a range of in-house, residential and other community support services, including personal assistance necessary to support living with due regard to age and gender.

6. (1) The appropriate Government shall take measures to protect persons with disabilities from being subjected to torture, cruel, inhuman or degrading treatment.

Protection from cruelty and inhuman treatment.

(2) No person with disability shall be a subject of any research without,—

(i) his or her free and informed consent obtained through accessible modes, means and formats of communication; and

(ii) prior permission of a Committee for Research on Disability constituted in the prescribed manner for the purpose by the appropriate Government in which not less than half of the Members shall themselves be either persons with disabilities or Members of the registered organisation as defined under clause (z) of section 2.

7. (1) The appropriate Government shall take measures to protect persons with disabilities from all forms of abuse, violence and exploitation and to prevent the same, shall—

Protection from abuse, violence and exploitation.

(a) take cognizance of incidents of abuse, violence and exploitation and provide legal remedies available against such incidents;

(b) take steps for avoiding such incidents and prescribe the procedure for its reporting;

(c) take steps to rescue, protect and rehabilitate victims of such incidents; and

(d) create awareness and make available information among the public.

(2) Any person or registered organisation who or which has reason to believe that an act of abuse, violence or exploitation has been, or is being, or is likely to be committed against any person with disability, may give information about it to the Executive Magistrate within the local limits of whose jurisdiction such incidents occur.

(3) The Executive Magistrate on receipt of such information, shall take immediate steps to stop or prevent its occurrence, as the case may be, or pass such order as he deems fit for the protection of such person with disability including an order—

(a) to rescue the victim of such act, authorising the police or any organisation working for persons with disabilities to provide for the safe custody or rehabilitation of such person, or both, as the case may be;

(b) for providing protective custody to the person with disability, if such person so desires;

(c) to provide maintenance to such person with disability.

(4) Any police officer who receives a complaint or otherwise comes to know of abuse, violence or exploitation towards any person with disability shall inform the aggrieved person of—

(a) his or her right to apply for protection under sub-section (2) and the particulars of the Executive Magistrate having jurisdiction to provide assistance;

(b) the particulars of the nearest organisation or institution working for the rehabilitation of persons with disabilities;

(c) the right to free legal aid; and

(d) the right to file a complaint under the provisions of this Act or any other law dealing with such offence:

Provided that nothing in this section shall be construed in any manner as to relieve the police officer from his duty to proceed in accordance with law upon receipt of information as to the commission of a cognizable offence.

(5) If the Executive Magistrate finds that the alleged act or behaviour constitutes an offence under the Indian Penal Code, or under any other law for the time being in force, he may forward the complaint to that effect to the Judicial or Metropolitan Magistrate, as the case may be, having jurisdiction in the matter.

45 of 1860.

Protection and safety.

**8. (1)** The persons with disabilities shall have equal protection and safety in situations of risk, armed conflict, humanitarian emergencies and natural disasters.

(2) The National Disaster Management Authority and the State Disaster Management Authority shall take appropriate measures to ensure inclusion of persons with disabilities in its disaster management activities as defined under clause (e) of section 2 of the Disaster Management Act, 2005 for the safety and protection of persons with disabilities.

53 of 2005.

(3) The District Disaster Management Authority constituted under section 25 of the Disaster Management Act, 2005 shall maintain record of details of persons with disabilities in the district and take suitable measures to inform such persons of any situations of risk so as to enhance disaster preparedness.

53 of 2005.

(4) The authorities engaged in reconstruction activities subsequent to any situation of risk, armed conflict or natural disasters shall undertake such activities, in consultation with the concerned State Commissioner, in accordance with the accessibility requirements of persons with disabilities.

Home and family.

**9. (1)** No child with disability shall be separated from his or her parents on the ground of disability except on an order of competent court, if required, in the best interest of the child.

(2) Where the parents are unable to take care of a child with disability, the competent court shall place such child with his or her near relations, and failing that within the community in a family setting or in exceptional cases in shelter home run by the appropriate Government or non-governmental organisation, as may be required.

Reproductive rights.

**10. (1)** The appropriate Government shall ensure that persons with disabilities have access to appropriate information regarding reproductive and family planning.

(2) No person with disability shall be subject to any medical procedure which leads to infertility without his or her free and informed consent.

Accessibility in voting.

**11.** The Election Commission of India and the State Election Commissions shall ensure that all polling stations are accessible to persons with disabilities and all materials related to the electoral process are easily understandable by and accessible to them.

Access to justice.

**12. (1)** The appropriate Government shall ensure that persons with disabilities are able to exercise the right to access any court, tribunal, authority, commission or any other body having judicial or quasi-judicial or investigative powers without discrimination on the basis of disability.

(2) The appropriate Government shall take steps to put in place suitable support measures for persons with disabilities specially those living outside family and those disabled requiring high support for exercising legal rights.

39 of 1987.

(3) The National Legal Services Authority and the State Legal Services Authorities constituted under the Legal Services Authorities Act, 1987 shall make provisions including reasonable accommodation to ensure that persons with disabilities have access to any scheme, programme, facility or service offered by them equally with others.

(4) The appropriate Government shall take steps to—

(a) ensure that all their public documents are in accessible formats;

(b) ensure that the filing departments, registry or any other office of records are supplied with necessary equipment to enable filing, storing and referring to the documents and evidence in accessible formats; and

(c) make available all necessary facilities and equipment to facilitate recording of testimonies, arguments or opinion given by persons with disabilities in their preferred language and means of communication.

**13.** (1) The appropriate Government shall ensure that the persons with disabilities have right, equally with others, to own or inherit property, movable or immovable, control their financial affairs and have access to bank loans, mortgages and other forms of financial credit.

Legal capacity.

(2) The appropriate Government shall ensure that the persons with disabilities enjoy legal capacity on an equal basis with others in all aspects of life and have the right to equal recognition everywhere as any other person before the law.

(3) When a conflict of interest arises between a person providing support and a person with disability in a particular financial, property or other economic transaction, then such supporting person shall abstain from providing support to the person with disability in that transaction:

Provided that there shall not be a presumption of conflict of interest just on the basis that the supporting person is related to the person with disability by blood, affinity or adoption.

(4) A person with disability may alter, modify or dismantle any support arrangement and seek the support of another:

Provided that such alteration, modification or dismantling shall be prospective in nature and shall not nullify any third party transaction entered into by the person with disability with the aforesaid support arrangement.

(5) Any person providing support to the person with disability shall not exercise undue influence and shall respect his or her autonomy, dignity and privacy.

**14.** (1) Notwithstanding anything contained in any other law for the time being in force, on and from the date of commencement of this Act, where a district court or any designated authority, as notified by the State Government, finds that a person with disability, who had been provided adequate and appropriate support but is unable to take legally binding decisions, may be provided further support of a limited guardian to take legally binding decisions on his behalf in consultation with such person, in such manner, as may be prescribed by the State Government:

Provision for guardianship.

Provided that the District Court or the designated authority, as the case may be, may grant total support to the person with disability requiring such support or where the limited guardianship is to be granted repeatedly, in which case, the decision regarding the support to be provided shall be reviewed by the Court or the designated authority, as the case may be, to determine the nature and manner of support to be provided.

*Explanation.*—For the purposes of this sub-section, “limited guardianship” means a system of joint decision which operates on mutual understanding and trust between the guardian and the person with disability, which shall be limited to a specific period and for specific decision and situation and shall operate in accordance to the will of the person with disability.

(2) On and from the date of commencement of this Act, every guardian appointed under any provision of any other law for the time being in force, for a person with disability shall be deemed to function as a limited guardian.

(3) Any person with disability aggrieved by the decision of the designated authority appointing a legal guardian may prefer an appeal to such appellate authority, as may be notified by the State Government for the purpose.

Designation of  
authorities to  
support.

**15. (1)** The appropriate Government shall designate one or more authorities to mobilise the community and create social awareness to support persons with disabilities in exercise of their legal capacity.

(2) The authority designated under sub-section (1) shall take measures for setting up suitable support arrangements to exercise legal capacity by persons with disabilities living in institutions and those with high support needs and any other measures as may be required.

### CHAPTER III

#### EDUCATION

Duty of  
educational  
institutions.

**16.** The appropriate Government and the local authorities shall endeavour that all educational institutions funded or recognised by them provide inclusive education to the children with disabilities and towards that end shall—

(i) admit them without discrimination and provide education and opportunities for sports and recreation activities equally with others;

(ii) make building, campus and various facilities accessible;

(iii) provide reasonable accommodation according to the individual's requirements;

(iv) provide necessary support individualised or otherwise in environments that maximise academic and social development consistent with the goal of full inclusion;

(v) ensure that the education to persons who are blind or deaf or both is imparted in the most appropriate languages and modes and means of communication;

(vi) detect specific learning disabilities in children at the earliest and take suitable pedagogical and other measures to overcome them;

(vii) monitor participation, progress in terms of attainment levels and completion of education in respect of every student with disability;

(viii) provide transportation facilities to the children with disabilities and also the attendant of the children with disabilities having high support needs.

Specific  
measures to  
promote and  
facilitate  
inclusive  
education.

**17.** The appropriate Government and the local authorities shall take the following measures for the purpose of section 16, namely:—

(a) to conduct survey of school going children in every five years for identifying children with disabilities, ascertaining their special needs and the extent to which these are being met:

Provided that the first survey shall be conducted within a period of two years from the date of commencement of this Act;

(b) to establish adequate number of teacher training institutions;

(c) to train and employ teachers, including teachers with disability who are qualified in sign language and Braille and also teachers who are trained in teaching children with intellectual disability;

(d) to train professionals and staff to support inclusive education at all levels of school education;

(e) to establish adequate number of resource centres to support educational institutions at all levels of school education;

(f) to promote the use of appropriate augmentative and alternative modes including means and formats of communication, Braille and sign language to supplement the use of one's own speech to fulfill the daily communication needs of persons with speech, communication or language disabilities and enables them to participate and contribute to their community and society;

(g) to provide books, other learning materials and appropriate assistive devices to students with benchmark disabilities free of cost up to the age of eighteen years;

(h) to provide scholarships in appropriate cases to students with benchmark disability;

(i) to make suitable modifications in the curriculum and examination system to meet the needs of students with disabilities such as extra time for completion of examination paper, facility of scribe or amanuensis, exemption from second and third language courses;

(j) to promote research to improve learning; and

(k) any other measures, as may be required.

**18.** The appropriate Government and the local authorities shall take measures to promote, protect and ensure participation of persons with disabilities in adult education and continuing education programmes equally with others.

Adult  
education.

## CHAPTER IV

### SKILL DEVELOPMENT AND EMPLOYMENT

**19.** (1) The appropriate Government shall formulate schemes and programmes including provision of loans at concessional rates to facilitate and support employment of persons with disabilities especially for their vocational training and self-employment.

Vocational  
training and  
self-  
employment.

(2) The schemes and programmes referred to in sub-section (1) shall provide for—

(a) inclusion of person with disability in all mainstream formal and non-formal vocational and skill training schemes and programmes;

(b) to ensure that a person with disability has adequate support and facilities to avail specific training;

(c) exclusive skill training programmes for persons with disabilities with active links with the market, for those with developmental, intellectual, multiple disabilities and autism;

(d) loans at concessional rates including that of microcredit;

(e) marketing the products made by persons with disabilities; and

(f) maintenance of disaggregated data on the progress made in the skill training and self-employment, including persons with disabilities.

**20.** (1) No Government establishment shall discriminate against any person with disability in any matter relating to employment:

Non-  
discrimination  
in  
employment.

Provided that the appropriate Government may, having regard to the type of work carried on in any establishment, by notification and subject to such conditions, if any, exempt any establishment from the provisions of this section.

(2) Every Government establishment shall provide reasonable accommodation and appropriate barrier free and conducive environment to employees with disability.

(3) No promotion shall be denied to a person merely on the ground of disability.

(4) No Government establishment shall dispense with or reduce in rank, an employee who acquires a disability during his or her service:

Provided that, if an employee after acquiring disability is not suitable for the post he was holding, shall be shifted to some other post with the same pay scale and service benefits:

Provided further that if it is not possible to adjust the employee against any post, he may be kept on a supernumerary post until a suitable post is available or he attains the age of superannuation, whichever is earlier.

(5) The appropriate Government may frame policies for posting and transfer of employees with disabilities.

Equal  
opportunity  
policy.

**21.** (1) Every establishment shall notify equal opportunity policy detailing measures proposed to be taken by it in pursuance of the provisions of this Chapter in the manner as may be prescribed by the Central Government.

(2) Every establishment shall register a copy of the said policy with the Chief Commissioner or the State Commissioner, as the case may be.

Maintenance  
of records.

**22.** (1) Every establishment shall maintain records of the persons with disabilities in relation to the matter of employment, facilities provided and other necessary information in compliance with the provisions of this Chapter in such form and manner as may be prescribed by the Central Government.

(2) Every employment exchange shall maintain records of persons with disabilities seeking employment.

(3) The records maintained under sub-section (1) shall be open to inspection at all reasonable hours by such persons as may be authorised in their behalf by the appropriate Government.

Appointment  
of Grievance  
Redressal  
Officer.

**23.** (1) Every Government establishment shall appoint a Grievance Redressal Officer for the purpose of section 19 and shall inform the Chief Commissioner or the State Commissioner, as the case may be, about the appointment of such officer.

(2) Any person aggrieved with the non-compliance of the provisions of section 20, may file a complaint with the Grievance Redressal Officer, who shall investigate it and shall take up the matter with the establishment for corrective action.

(3) The Grievance Redressal Officer shall maintain a register of complaints in the manner as may be prescribed by the Central Government, and every complaint shall be inquired within two weeks of its registration.

(4) If the aggrieved person is not satisfied with the action taken on his or her complaint, he or she may approach the District-Level Committee on disability.

## CHAPTER V

### SOCIAL SECURITY, HEALTH, REHABILITATION AND RECREATION

Social security.

**24.** (1) The appropriate Government shall within the limit of its economic capacity and development formulate necessary schemes and programmes to safeguard and promote the right of persons with disabilities for adequate standard of living to enable them to live independently or in the community:

Provided that the quantum of assistance to the persons with disabilities under such schemes and programmes shall be at least twenty-five per cent. higher than the similar schemes applicable to others.

(2) The appropriate Government while devising these schemes and programmes shall give due consideration to the diversity of disability, gender, age, and socio-economic status.

(3) The schemes under sub-section (1) shall provide for,—

(a) community centres with good living conditions in terms of safety, sanitation, health care and counselling;

(b) facilities for persons including children with disabilities who have no family or have been abandoned, or are without shelter or livelihood;

(c) support during natural or man-made disasters and in areas of conflict;

(d) support to women with disability for livelihood and for upbringing of their children;

(e) access to safe drinking water and appropriate and accessible sanitation facilities especially in urban slums and rural areas;

(f) provisions of aids and appliances, medicine and diagnostic services and corrective surgery free of cost to persons with disabilities with such income ceiling as may be notified;

(g) disability pension to persons with disabilities subject to such income ceiling as may be notified;

(h) unemployment allowance to persons with disabilities registered with Special Employment Exchange for more than two years and who could not be placed in any gainful occupation;

(i) care-giver allowance to persons with disabilities with high support needs;

(j) comprehensive insurance scheme for persons with disability, not covered under the Employees State Insurance Schemes, or any other statutory or Government-sponsored insurance schemes;

(k) any other matter which the appropriate Government may think fit.

**25. (1)** The appropriate Government and the local authorities shall take necessary measures for the persons with disabilities to provide,— Healthcare.

(a) free healthcare in the vicinity specially in rural area subject to such family income as may be notified;

(b) barrier-free access in all parts of Government and private hospitals and other healthcare institutions and centres;

(c) priority in attendance and treatment.

**(2)** The appropriate Government and the local authorities shall take measures and make schemes or programmes to promote healthcare and prevent the occurrence of disabilities and for the said purpose shall—

(a) undertake or cause to be undertaken surveys, investigations and research concerning the cause of occurrence of disabilities;

(b) promote various methods for preventing disabilities;

(c) screen all the children at least once in a year for the purpose of identifying “at-risk” cases;

(d) provide facilities for training to the staff at the primary health centres;

(e) sponsor or cause to be sponsored awareness campaigns and disseminate or cause to be disseminated information for general hygiene, health and sanitation;

(f) take measures for pre-natal, perinatal and post-natal care of mother and child;

(g) educate the public through the pre-schools, schools, primary health centres, village level workers and *anganwadi* workers;

(h) create awareness amongst the masses through television, radio and other mass media on the causes of disabilities and the preventive measures to be adopted;

(i) healthcare during the time of natural disasters and other situations of risk;

(j) essential medical facilities for life saving emergency treatment and procedures; and

(k) sexual and reproductive healthcare especially for women with disability.

**26.** The appropriate Government shall, by notification, make insurance schemes for their employees with disabilities. Insurance schemes.

**27. (1)** The appropriate Government and the local authorities shall within their economic capacity and development, undertake or cause to be undertaken services and programmes of Rehabilitation.

rehabilitation, particularly in the areas of health, education and employment for all persons with disabilities.

(2) For the purposes of sub-section (1), the appropriate Government and the local authorities may grant financial assistance to non-Governmental Organisations.

(3) The appropriate Government and the local authorities, while formulating rehabilitation policies shall consult the non-Governmental Organisations working for the cause of persons with disabilities.

Research and development.

**28.** The appropriate Government shall initiate or cause to be initiated research and development through individuals and institutions on issues which shall enhance habilitation and rehabilitation and on such other issues which are necessary for the empowerment of persons with disabilities.

Culture and recreation.

**29.** The appropriate Government and the local authorities shall take measures to promote and protect the rights of all persons with disabilities to have a cultural life and to participate in recreational activities equally with others which include,—

(a) facilities, support and sponsorships to artists and writers with disability to pursue their interests and talents;

(b) establishment of a disability history museum which chronicles and interprets the historical experiences of persons with disabilities;

(c) making art accessible to persons with disabilities;

(d) promoting recreation centres, and other associational activities;

(e) facilitating participation in scouting, dancing, art classes, outdoor camps and adventure activities;

(f) redesigning courses in cultural and arts subjects to enable participation and access for persons with disabilities;

(g) developing technology, assistive devices and equipments to facilitate access and inclusion for persons with disabilities in recreational activities; and

(h) ensuring that persons with hearing impairment can have access to television programmes with sign language interpretation or sub-titles.

Sporting activities.

**30. (1)** The appropriate Government shall take measures to ensure effective participation in sporting activities of the persons with disabilities.

(2) The sports authorities shall accord due recognition to the right of persons with disabilities to participate in sports and shall make due provisions for the inclusion of persons with disabilities in their schemes and programmes for the promotion and development of sporting talents.

(3) Without prejudice to the provisions contained in sub-sections (1) and (2), the appropriate Government and the sports authorities shall take measures to,—

(a) restructure courses and programmes to ensure access, inclusion and participation of persons with disabilities in all sporting activities;

(b) redesign and support infrastructure facilities of all sporting activities for persons with disabilities;

(c) develop technology to enhance potential, talent, capacity and ability in sporting activities of all persons with disabilities;

(d) provide multi-sensory essentials and features in all sporting activities to ensure effective participation of all persons with disabilities;

(e) allocate funds for development of state of art sport facilities for training of persons with disabilities;

(f) promote and organise disability specific sporting events for persons with disabilities and also facilitate awards to the winners and other participants of such sporting events.

## CHAPTER VI

## SPECIAL PROVISIONS FOR PERSONS WITH BENCHMARK DISABILITIES

35 of 2009.

**31.** (1) Notwithstanding anything contained in the Rights of Children to Free and Compulsory Education Act, 2009, every child with benchmark disability between the age of six to eighteen years shall have the right to free education in a neighbourhood school, or in a special school, of his choice.

Free education for children with benchmark disabilities.

(2) The appropriate Government and local authorities shall ensure that every child with benchmark disability has access to free education in an appropriate environment till he attains the age of eighteen years.

**32.** (1) All Government institutions of higher education and other higher education institutions receiving aid from the Government shall reserve not less than five per cent. seats for persons with benchmark disabilities.

Reservation in higher educational institutions.

(2) The persons with benchmark disabilities shall be given an upper age relaxation of five years for admission in institutions of higher education.

**33.** The appropriate Government shall—

Identification of posts for reservation.

(i) identify posts in the establishments which can be held by respective category of persons with benchmark disabilities in respect of the vacancies reserved in accordance with the provisions of section 34;

(ii) constitute an expert committee with representation of persons with benchmark disabilities for identification of such posts; and

(iii) undertake periodic review of the identified posts at an interval not exceeding three years.

**34.** (1) Every appropriate Government shall appoint in every Government establishment, not less than four per cent. of the total number of vacancies in the cadre strength in each group of posts meant to be filled with persons with benchmark disabilities of which, one per cent. each shall be reserved for persons with benchmark disabilities under clauses (a), (b) and (c) and one per cent. for persons with benchmark disabilities under clauses (d) and (e), namely:—

Reservation.

(a) blindness and low vision;

(b) deaf and hard of hearing;

(c) locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy;

(d) autism, intellectual disability, specific learning disability and mental illness;

(e) multiple disabilities from amongst persons under clauses (a) to (d) including deaf-blindness in the posts identified for each disabilities:

Provided that the reservation in promotion shall be in accordance with such instructions as are issued by the appropriate Government from time to time:

Provided further that the appropriate Government, in consultation with the Chief Commissioner or the State Commissioner, as the case may be, may, having regard to the type of work carried out in any Government establishment, by notification and subject to such conditions, if any, as may be specified in such notifications exempt any Government establishment from the provisions of this section.

(2) Where in any recruitment year any vacancy cannot be filled up due to non-availability of a suitable person with benchmark disability or for any other sufficient reasons, such vacancy shall be carried forward in the succeeding recruitment year and if in the succeeding recruitment year also suitable person with benchmark disability is not available, it may first be filled by interchange among the five categories and only when there is no person with disability available for the post in that year, the employer shall fill up the vacancy by appointment of a person, other than a person with disability:

Provided that if the nature of vacancies in an establishment is such that a given category of person cannot be employed, the vacancies may be interchanged among the five categories with the prior approval of the appropriate Government.

(3) The appropriate Government may, by notification, provide for such relaxation of upper age limit for employment of persons with benchmark disability, as it thinks fit.

Incentives to employers in private sector.

**35.** The appropriate Government and the local authorities shall, within the limit of their economic capacity and development, provide incentives to employer in private sector to ensure that at least five per cent. of their work force is composed of persons with benchmark disability.

Special employment exchange.

**36.** The appropriate Government may, by notification, require that from such date, the employer in every establishment shall furnish such information or return as may be prescribed by the Central Government in relation to vacancies appointed for persons with benchmark disability that have occurred or are about to occur in that establishment to such special employment exchange as may be notified by the Central Government and the establishment shall thereupon comply with such requisition.

Special schemes and development programmes.

**37.** The appropriate Government and the local authorities shall, by notification, make schemes in favour of persons with benchmark disabilities, to provide,—

(a) five per cent. reservation in allotment of agricultural land and housing in all relevant schemes and development programmes, with appropriate priority to women with benchmark disabilities;

(b) five per cent. reservation in all poverty alleviation and various developmental schemes with priority to women with benchmark disabilities;

(c) five per cent. reservation in allotment of land on concessional rate, where such land is to be used for the purpose of promoting housing, shelter, setting up of occupation, business, enterprise, recreation centres and production centres.

## CHAPTER VII

### SPECIAL PROVISIONS FOR PERSONS WITH DISABILITIES WITH HIGH SUPPORT NEEDS

Special provisions for persons with disabilities with high support.

**38. (1)** Any person with benchmark disability, who considers himself to be in need of high support, or any person or organisation on his or her behalf, may apply to an authority, to be notified by the appropriate Government, requesting to provide high support.

(2) On receipt of an application under sub-section (1), the authority shall refer it to an Assessment Board consisting of such Members as may be prescribed by the Central Government.

(3) The Assessment Board shall assess the case referred to it under sub-section (1) in such manner as may be prescribed by the Central Government, and shall send a report to the authority certifying the need of high support and its nature.

(4) On receipt of a report under sub-section (3), the authority shall take steps to provide support in accordance with the report and subject to relevant schemes and orders of the appropriate Government in this behalf.

## CHAPTER VIII

### DUTIES AND RESPONSIBILITIES OF APPROPRIATE GOVERNMENTS

Awareness campaigns.

**39. (1)** The appropriate Government, in consultation with the Chief Commissioner or the State Commissioner, as the case may be, shall conduct, encourage, support or promote awareness campaigns and sensitisation programmes to ensure that the rights of the persons with disabilities provided under this Act are protected.

(2) The programmes and campaigns specified under sub-section (1) shall also,—

(a) promote values of inclusion, tolerance, empathy and respect for diversity;

(b) advance recognition of the skills, merits and abilities of persons with disabilities and of their contributions to the workforce, labour market and professional fee;

(c) foster respect for the decisions made by persons with disabilities on all matters related to family life, relationships, bearing and raising children;

(d) provide orientation and sensitisation at the school, college, University and professional training level on the human condition of disability and the rights of persons with disabilities;

(e) provide orientation and sensitisation on disabling conditions and rights of persons with disabilities to employers, administrators and co-workers;

(f) ensure that the rights of persons with disabilities are included in the curriculum in Universities, colleges and schools.

**40.** The Central Government shall, in consultation with the Chief Commissioner, formulate rules for persons with disabilities laying down the standards of accessibility for the physical environment, transportation, information and communications, including appropriate technologies and systems, and other facilities and services provided to the public in urban and rural areas.

Accessibility.

**41.** (1) The appropriate Government shall take suitable measures to provide,—

Access to transport.

(a) facilities for persons with disabilities at bus stops, railway stations and airports conforming to the accessibility standards relating to parking spaces, toilets, ticketing counters and ticketing machines;

(b) access to all modes of transport that conform the design standards, including retrofitting old modes of transport, wherever technically feasible and safe for persons with disabilities, economically viable and without entailing major structural changes in design;

(c) accessible roads to address mobility necessary for persons with disabilities.

(2) The appropriate Government shall develop schemes programmes to promote the personal mobility of persons with disabilities at affordable cost to provide for,—

(a) incentives and concessions;

(b) retrofitting of vehicles; and

(c) personal mobility assistance.

**42.** The appropriate Government shall take measures to ensure that,—

Access to information and communication technology.

(i) all contents available in audio, print and electronic media are in accessible format;

(ii) persons with disabilities have access to electronic media by providing audio description, sign language interpretation and close captioning;

(iii) electronic goods and equipment which are meant for every day use are available in universal design.

**43.** The appropriate Government shall take measures to promote development, production and distribution of universally designed consumer products and accessories for general use for persons with disabilities.

Consumer goods.

**44.** (1) No establishment shall be granted permission to build any structure if the building plan does not adhere to the rules formulated by the Central Government under section 40.

Mandatory observance of accessibility norms.

(2) No establishment shall be issued a certificate of completion or allowed to take occupation of a building unless it has adhered to the rules formulated by the Central Government.

**45.** (1) All existing public buildings shall be made accessible in accordance with the rules formulated by the Central Government within a period not exceeding five years from the date of notification of such rules:

Time limit for making existing infrastructure and premises accessible and action for that purpose.

Provided that the Central Government may grant extension of time to the States on a case to case basis for adherence to this provision depending on their state of preparedness and other related parameters.

(2) The appropriate Government and the local authorities shall formulate and publish an action plan based on prioritisation, for providing accessibility in all their buildings and spaces providing essential services such as all primary health centres, civil hospitals, schools, railway stations and bus stops.

Time limit  
for  
accessibility  
by service  
providers.

**46.** The service providers whether Government or private shall provide services in accordance with the rules on accessibility formulated by the Central Government under section 40 within a period of two years from the date of notification of such rules:

Provided that the Central Government in consultation with the Chief Commissioner may grant extension of time for providing certain category of services in accordance with the said rules.

Human  
resource  
development.

**47. (1)** Without prejudice to any function and power of Rehabilitation Council of India constituted under the Rehabilitation Council of India Act, 1992, the appropriate Government shall endeavour to develop human resource for the purposes of this Act and to that end shall,—

34 of 1992.

(a) mandate training on disability rights in all courses for the training of Panchayati Raj Members, legislators, administrators, police officials, judges and lawyers;

(b) induct disability as a component for all education courses for schools, colleges and University teachers, doctors, nurses, para-medical personnel, social welfare officers, rural development officers, asha workers, *anganwadi* workers, engineers, architects, other professionals and community workers;

(c) initiate capacity building programmes including training in independent living and community relationships for families, members of community and other stakeholders and care providers on care giving and support;

(d) ensure independence training for persons with disabilities to build community relationships on mutual contribution and respect;

(e) conduct training programmes for sports teachers with focus on sports, games, adventure activities;

(f) any other capacity development measures as may be required.

(2) All Universities shall promote teaching and research in disability studies including establishment of study centres for such studies.

(3) In order to fulfil the obligation stated in sub-section (1), the appropriate Government shall in every five years undertake a need based analysis and formulate plans for the recruitment, induction, sensitisation, orientation and training of suitable personnel to undertake the various responsibilities under this Act.

Social audit.

**48.** The appropriate Government shall undertake social audit of all general schemes and programmes involving the persons with disabilities to ensure that the scheme and programmes do not have an adverse impact upon the persons with disabilities and need the requirements and concerns of persons with disabilities.

## CHAPTER IX

### REGISTRATION OF INSTITUTIONS FOR PERSONS WITH DISABILITIES AND GRANTS TO SUCH INSTITUTIONS

Competent  
authority.

**49.** The State Government shall appoint an authority as it deems fit to be a competent authority for the purposes of this Chapter.

Registration.

**50.** Save as otherwise provided under this Act, no person shall establish or maintain any institution for persons with disabilities except in accordance with a certificate of registration issued in this behalf by the competent authority:

Provided that an institution for care of mentally ill persons, which holds a valid licence under section 8 of the Mental Health Act, 1987 or any other Act for the time being in force, shall not be required to be registered under this Act.

14 of 1987.

**51.** (1) Every application for a certificate of registration shall be made to the competent authority in such form and in such manner as may be prescribed by the State Government.

Application  
and grant of  
certificate of  
registration.

(2) On receipt of an application under sub-section (1), the competent authority shall make such enquiries as it may deem fit and on being satisfied that the applicant has complied with the requirements of this Act and the rules made thereunder, it shall grant a certificate of registration to the applicant within a period of ninety days of receipt of application and if not satisfied, the competent authority shall, by order, refuse to grant the certificate applied for:

Provided that before making any order refusing to grant a certificate, the competent authority shall give the applicant a reasonable opportunity of being heard and every order of refusal to grant a certificate shall be communicated to the applicant in writing.

(3) No certificate of registration shall be granted under sub-section (2) unless the institution with respect to which an application has been made is in a position to provide such facilities and meet such standards as may be prescribed by the State Government.

(4) The certificate of registration granted under sub-section (2) ,—

(a) shall, unless revoked under section 52 remain in force for such period as may be prescribed by the State Government;

(b) may be renewed from time to time for a like period; and

(c) shall be in such form and shall be subject to such conditions as may be prescribed by the State Government.

(5) An application for renewal of a certificate of registration shall be made not less than sixty days before the expiry of the period of validity.

(6) A copy of the certificate of registration shall be displayed by the institution in a conspicuous place.

(7) Every application made under sub-section (1) or sub-section (5) shall be disposed of by the competent authority within such period as may be prescribed by the State Government.

**52.** (1) The competent authority may, if it has reason to believe that the holder of a certificate of registration granted under sub-section (2) of section 51 has,—

Revocation  
of  
registration.

(a) made a statement in relation to any application for the issue or renewal of the certificate which is incorrect or false in material particulars; or

(b) committed or has caused to be committed any breach of rules or any conditions subject to which the certificate was granted,

it may, after making such inquiry, as it deems fit, by order, revoke the certificate:

Provided that no such order shall be made until an opportunity is given to the holder of the certificate to show cause as to why the certificate of registration shall not be revoked.

(2) Where a certificate of registration in respect of an institution has been revoked under sub-section (1), such institution shall cease to function from the date of such revocation:

Provided that where an appeal lies under section 53 against the order of revocation, such institution shall cease to function,—

(a) where no appeal has been preferred immediately on the expiry of the period prescribed for the filing of such appeal; or

(b) where such appeal has been preferred, but the order of revocation has been upheld, from the date of the order of appeal.

(3) On the revocation of a certificate of registration in respect of an institution, the competent authority may direct that any person with disability who is an inmate of such institution on the date of such revocation, shall be—

(a) restored to the custody of his or her parent, spouse or lawful guardian, as the case may be; or

(b) transferred to any other institution specified by the competent authority.

(4) Every institution which holds a certificate of registration which is revoked under this section shall, immediately after such revocation, surrender such certificate to the competent authority.

Appeal.

**53.** (1) Any person aggrieved by the order of the competent authority refusing to grant a certificate of registration or revoking a certificate of registration may, within such period as may be prescribed by the State Government, prefer an appeal to such appellate authority, as may be notified by the State Government against such refusal or revocation.

(2) The order of the appellate authority on such appeal shall be final.

Act not to apply to institutions established or maintained by Central or State Government.

**54.** Nothing contained in this Chapter shall apply to an institution for persons with disabilities established or maintained by the Central Government or a State Government.

Assistance to registered institutions.

**55.** The appropriate Government may within the limits of their economic capacity and development, grant financial assistance to registered institutions to provide services and to implement the schemes and programmes in pursuance of the provisions of this Act.

## CHAPTER X

### CERTIFICATION OF SPECIFIED DISABILITIES

Guidelines for assessment of specified disabilities.

**56.** The Central Government shall notify guidelines for the purpose of assessing the extent of specified disability in a person.

Designation of certifying authorities.

**57.** (1) The appropriate Government shall designate persons, having requisite qualifications and experience, as certifying authorities, who shall be competent to issue the certificate of disability.

(2) The appropriate Government shall also notify the jurisdiction within which and the terms and conditions subject to which, the certifying authority shall perform its certification functions.

Procedure for certification.

**58.** (1) Any person with specified disability, may apply, in such manner as may be prescribed by the Central Government, to a certifying authority having jurisdiction, for issuing of a certificate of disability.

(2) On receipt of an application under sub-section (1), the certifying authority shall assess the disability of the concerned person in accordance with relevant guidelines notified under section 56, and shall, after such assessment, as the case may be,—

(a) issue a certificate of disability to such person, in such form as may be prescribed by the Central Government;

(b) inform him in writing that he has no specified disability.

(3) The certificate of disability issued under this section shall be valid across the country.

Appeal against a decision of certifying authority.

**59.** (1) Any person aggrieved with decision of the certifying authority, may appeal against such decision, within such time and in such manner as may be prescribed by the State Government, to such appellate authority as the State Government may designate for the purpose.

(2) On receipt of an appeal, the appellate authority shall decide the appeal in such manner as may be prescribed by the State Government.

## CHAPTER XI

## CENTRAL AND STATE ADVISORY BOARDS ON DISABILITY AND DISTRICT LEVEL COMMITTEE

**60.** (1) The Central Government shall, by notification, constitute a body to be known as the Central Advisory Board on Disability to exercise the powers conferred on, and to perform the functions assigned to it, under this Act.

Constitution  
of Central  
Advisory  
Board on  
Disability.

(2) The Central Advisory Board shall consist of,—

(a) the Minister in charge of Department of Disability Affairs in the Central Government, Chairperson, *ex officio*;

(b) the Minister of State in charge dealing with Department of Disability Affairs in the Ministry in the Central Government, Vice Chairperson, *ex officio*;

(c) three Members of Parliament, of whom two shall be elected by Lok Sabha and one by the Rajya Sabha, Members, *ex officio*;

(d) the Ministers in charge of Disability Affairs of all States and Administrators or Lieutenant Governors of the Union territories, Members, *ex officio*;

(e) Secretaries to the Government of India in charge of the Ministries or Departments of Disability Affairs, Social Justice and Empowerment, School Education and Literacy, and Higher Education, Women and Child Development, Expenditure, Personnel and Training, Administrative Reforms and Public Grievances, Health and Family Welfare, Rural Development, Panchayati Raj, Industrial Policy and Promotion, Urban Development, Housing and Urban Poverty Alleviation, Science and Technology, Communications and Information Technology, Legal Affairs, Public Enterprises, Youth Affairs and Sports, Road Transport and Highways and Civil Aviation, Members, *ex officio*;

(f) Secretary, National Institute of Transforming India (NITI) Aayog, Member, *ex officio*;

(g) Chairperson, Rehabilitation Council of India, Member, *ex officio*;

(h) Chairperson, National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities, Member, *ex officio*;

(i) Chairman-cum-Managing Director, National Handicapped Finance Development Corporation, Member, *ex officio*;

(j) Chairman-cum-Managing Director, Artificial Limbs Manufacturing Corporation, Member, *ex officio*;

(k) Chairman, Railway Board, Member, *ex officio*;

(l) Director-General, Employment and Training, Ministry of Labour and Employment, Member, *ex officio*;

(m) Director, National Council for Educational Research and Training, Member, *ex officio*;

(n) Chairperson, National Council of Teacher Education, Member, *ex officio*;

(o) Chairperson, University Grants Commission, Member, *ex officio*;

(p) Chairperson, Medical Council of India, Member, *ex officio*;

(q) Directors of the following Institutes:—

(i) National Institute for the Visually Handicapped, Dehradun;

(ii) National Institute for the Mentally Handicapped, Secundrabad;

(iii) Pandit Deen Dayal Upadhyay Institute for the Physically Handicapped, New Delhi;

(iv) Ali Yavar Jung National Institute for the Hearing Handicapped, Mumbai;

- (v) National Institute for the Orthopaedically Handicapped, Kolkata;
- (vi) National Institute of Rehabilitation Training and Research, Cuttack;
- (vii) National Institute for Empowerment of Persons with Multiple Disabilities, Chennai;
- (viii) National Institute for Mental Health and Sciences, Bangalore;
- (ix) Indian Sign Language Research and Training Centre, New Delhi, Members, *ex officio*;

(r) Members to be nominated by the Central Government,—

- (i) five Members who are experts in the field of disability and rehabilitation;
- (ii) ten Members, as far as practicable, being persons with disabilities, to represent non-Governmental Organisations concerned with disabilities or disabled persons organisations:

Provided that out of the ten Members nominated, at least, five Members shall be women and at least one person each shall be from the Scheduled Castes and the Scheduled Tribes;

- (iii) up to three representatives of national level chambers of commerce and industry;

(s) Joint Secretary to the Government of India dealing with the subject of disability policy, Member-Secretary, *ex officio*.

Terms and conditions of Service of members.

**61.** (1) Save as otherwise provided under this Act, a Member of the Central Advisory Board nominated under clause (r) of sub-section (2) of section 60 shall hold office for a term of three years from the date of his nomination:

Provided that such a Member shall, notwithstanding the expiration of his term, continue to hold office until his successor enters upon his office.

(2) The Central Government may, if it thinks fit, remove any Member nominated under clause (r) of sub-section (2) of section 60, before the expiry of his term of office after giving him a reasonable opportunity of showing cause against the same.

(3) A Member nominated under clause (r) of sub-section (2) of section 60 may at any time resign his office by writing under his hand addressed to the Central Government and the seat of the said Member shall thereupon become vacant.

(4) A casual vacancy in the Central Advisory Board shall be filled by a fresh nomination and the person nominated to fill the vacancy shall hold office only for the remainder of the term for which the Member in whose place he was so nominated.

(5) A Member nominated under sub-clause (i) or sub-clause (iii) of clause (r) of sub-section (2) of section 60 shall be eligible for renomination.

(6) The Members nominated under sub-clause (i) and sub-clause (ii) of clause (r) of sub-section (2) of section 60 shall receive such allowances as may be prescribed by the Central Government.

Disqualifications.

**62.** (1) No person shall be a Member of the Central Advisory Board, who —

- (a) is, or at any time has been, adjudged insolvent or has suspended payment of his debts or has compounded with his creditors, or
- (b) is of unsound mind and stands so declared by a competent court, or
- (c) is, or has been, convicted of an offence which, in the opinion of the Central Government, involves moral turpitude, or
- (d) is, or at any time has been, convicted of an offence under this Act, or
- (e) has so abused his position in the opinion of the Central Government as a Member so as to render his continuance in the office is prejudicial interests of the general public.

(2) No order of removal shall be made by the Central Government under this section unless the Member concerned has been given a reasonable opportunity of showing cause against the same.

(3) Notwithstanding anything contained in sub-section (1) or sub-section (5) of section 61, a Member who has been removed under this section shall not be eligible for renomination as a Member.

**63.** If a Member of the Central Advisory Board becomes subject to any of the disqualifications specified in section 62, his seat shall become vacant.

**64.** The Central Advisory Board shall meet at least once in every six months and shall observe such rules of procedure in regard to the transaction of business at its meetings as may be prescribed.

**65.** (1) Subject to the provisions of this Act, the Central Advisory Board on disability shall be the national-level consultative and advisory body on disability matters, and shall facilitate the continuous evolution of a comprehensive policy for the empowerment of persons with disabilities and the full enjoyment of rights.

(2) In particular and without prejudice to the generality of the foregoing provisions, the Central Advisory Board on disability shall perform the following functions, namely:—

(a) advise the Central Government and the State Governments on policies, programmes, legislation and projects with respect to disability;

(b) develop a national policy to address issues concerning persons with disabilities;

(c) review and coordinate the activities of all Departments of the Government and other Governmental and non-Governmental Organisations which are dealing with matters relating to persons with disabilities;

(d) take up the cause of persons with disabilities with the concerned authorities and the international organisations with a view to provide for schemes and projects for the persons with disabilities in the national plans;

(e) recommend steps to ensure accessibility, reasonable accommodation, non-discrimination for persons with disabilities *vis-à-vis* information, services and the built environment and their participation in social life;

(f) monitor and evaluate the impact of laws, policies and programmes to achieve full participation of persons with disabilities; and

(g) such other functions as may be assigned from time to time by the Central Government.

**66.** (1) Every State Government shall, by notification, constitute a body to be known as the State Advisory Board on disability to exercise the powers conferred on, and to perform the function assigned to it, under this Act.

(2) The State Advisory Board shall consist of—

(a) the Minister in charge of the Department in the State Government dealing with disability matters, Chairperson, *ex officio*;

(b) the Minister of State or the Deputy Minister in charge of the Department in the State Government dealing with disability matters, if any, Vice-Chairperson, *ex officio*;

(c) secretaries to the State Government in charge of the Departments of Disability Affairs, School Education, Literacy and Higher Education, Women and Child Development, Finance, Personnel and Training, Health and Family Welfare, Rural Development, Panchayati Raj, Industrial Policy and Promotion, Labour and Employment, Urban Development, Housing and Urban Poverty Alleviation, Science and Technology, Information Technology, Public Enterprises, Youth Affairs and Sports, Road Transport and any other Department, which the State Government considers necessary, Members, *ex officio*;

(d) three Members of the State Legislature of whom two shall be elected by the Legislative Assembly and one by the Legislative Council, if any, and where there is no Legislative Council, three Members shall be elected by the Legislative Assembly, Members, *ex officio*;

Vacation of seats by Members.

Meetings of the Central Advisory Board on disability.

Functions of Central Advisory Board on disability.

State Advisory Board on disability.

(e) Members to be nominated by the State Government:—

(i) five Members who are experts in the field of disability and rehabilitation;

(ii) five Members to be nominated by the State Government by rotation to represent the districts in such manner as may be prescribed:

Provided that no nomination under this sub-clause shall be made except on the recommendation of the district administration concerned;

(iii) ten persons as far as practicable, being persons with disabilities, to represent non-Governmental Organisations or associations which are concerned with disabilities:

Provided that out of the ten persons nominated under this clause, at least, five shall be women and at least one person each shall be from the Scheduled Castes and the Scheduled Tribes;

(iv) not more than three representatives of the State Chamber of Commerce and Industry;

(f) officer not below the rank of Joint Secretary in the Department dealing with disability matters in the State Government, Member-Secretary, *ex officio*.

Terms and conditions of service of Members.

**67. (1)** Save as otherwise provided under this Act, a Member of the State Advisory Board nominated under clause (e) of sub-section (2) of section 66, shall hold office for a term of three years from the date of his nomination:

Provided that such a Member shall, notwithstanding the expiration of his term, continue to hold office until his successor enters upon his office.

(2) The State Government may, if it thinks fit, remove any Member nominated under clause (e) of sub-section (2) of section 66, before the expiry of his term of office after giving him a reasonable opportunity of showing cause against the same.

(3) A Member nominated under clause (e) of sub-section (2) of section 66 may at any time resign his office by writing under his hand addressed to the State Government and the seat of the said Member shall thereupon become vacant.

(4) A casual vacancy in the State Advisory Board shall be filled by a fresh nomination and the person nominated to fill the vacancy shall hold office only for the remainder of the term for which the Member in whose place he was so nominated.

(5) A Member nominated under sub-clause (i) or sub-clause (iii) of clause (e) of sub-section (2) of section 66 shall be eligible for renomination.

(6) the Members nominated under sub-clause (i) and sub-clause (ii) of clause (e) of sub-section (2) of section 66 shall receive such allowances as may be prescribed by the State Government.

Disqualification.

**68. (1)** No person shall be a Member of the State Advisory Board, who—

(a) is, or at any time has been, adjudged insolvent or has suspended payment of his debts or has compounded with his creditors, or

(b) is of unsound mind and stands so declared by a competent court, or

(c) is, or has been, convicted of an offence which, in the opinion of the State Government, involves moral turpitude, or

(d) is, or at any time has been, convicted of an offence under this Act, or

(e) has so abused in the opinion of the State Government his position as a Member as to render his continuance in the State Advisory Board detrimental to the interests of the general public.

(2) No order of removal shall be made by the State Government under this section unless the Member concerned has been given a reasonable opportunity of showing cause against the same.

(3) Notwithstanding anything contained in sub-section (1) or sub-section (5) of section 67, a Member who has been removed under this section shall not be eligible for renomination as a Member.

**69.** If a Member of the State Advisory Board becomes subject to any of the disqualifications specified in section 68 his seat shall become vacant.

Vacation of seats.

**70.** The State Advisory Board shall meet at least once in every six months and shall observe such rules or procedure in regard to the transaction of business at its meetings as may be prescribed by the State Government.

Meetings of State Advisory Board on disability.

**71.** (1) Subject to the provisions of this Act, the State Advisory Board shall be the State-level consultative and advisory body on disability matters, and shall facilitate the continuous evolution of a comprehensive policy for the empowerment of persons with disabilities and the full enjoyment of rights.

Functions of State Advisory Board on disability.

(2) In particular and without prejudice to the generality of the foregoing provisions, the State Advisory Board on disability shall perform the following functions, namely:—

(a) advise the State Government on policies, programmes, legislation and projects with respect to disability;

(b) develop a State policy to address issues concerning persons with disabilities;

(c) review and coordinate the activities of all Departments of the State Government and other Governmental and non-Governmental Organisations in the State which are dealing with matters relating to persons with disabilities;

(d) take up the cause of persons with disabilities with the concerned authorities and the international organisations with a view to provide for schemes and projects for the persons with disabilities in the State plans;

(e) recommend steps to ensure accessibility, reasonable accommodation, non-discrimination for persons with disabilities, services and the built environment and their participation in social life on an equal basis with others;

(f) monitor and evaluate the impact of laws, policies and programmes designed to achieve full participation of persons with disabilities; and

(g) such other functions as may be assigned from time to time by the State Government.

**72.** The State Government shall constitute District-level Committee on disability to perform such functions as may be prescribed by it.

District-level Committee on disability.

**73.** No act or proceeding of the Central Advisory Board on disability, a State Advisory Board on disability, or a District-level Committee on disability shall be called in question on the ground merely of the existence of any vacancy in or any defect in the constitution of such Board or Committee, as the case may be.

Vacancies not to invalidate proceedings.

## CHAPTER XII

### CHIEF COMMISSIONER AND STATE COMMISSIONER FOR PERSONS WITH DISABILITIES

**74.** (1) The Central Government may, by notification, appoint a Chief Commissioner for Persons with Disabilities (hereinafter referred to as the "Chief Commissioner") for the purposes of this Act.

Appointment of Chief Commissioner and Commissioners.

(2) The Central Government may, by notification appoint two Commissioners to assist the Chief Commissioner, of which one Commissioner shall be a persons with disability.

(3) A person shall not be qualified for appointment as the Chief Commissioner or Commissioner unless he has special knowledge or practical experience in respect of matters relating to rehabilitation.

(4) The salary and allowances payable to and other terms and conditions of service (including pension, gratuity and other retirement benefits) of the Chief Commissioner and Commissioners shall be such as may be prescribed by the Central Government.

(5) The Central Government shall determine the nature and categories of officers and other employees required to assist the Chief Commissioner in the discharge of his functions and provide the Chief Commissioner with such officers and other employees as it thinks fit.

(6) The officers and employees provided to the Chief Commissioner shall discharge their functions under the general superintendence and control of the Chief Commissioner.

(7) The salaries and allowances and other conditions of service of officers and employees shall be such as may be prescribed by the Central Government.

(8) The Chief Commissioner shall be assisted by an advisory committee comprising of not more than eleven members drawn from the experts from different disabilities in such manner as may be prescribed by the Central Government.

Functions of  
Chief  
Commissioner.

**75.** (1) The Chief Commissioner shall—

(a) identify, *suo motu* or otherwise, the provisions of any law or policy, programme and procedures, which are inconsistent with this Act and recommend necessary corrective steps;

(b) inquire, *suo motu* or otherwise, deprivation of rights of persons with disabilities and safeguards available to them in respect of matters for which the Central Government is the appropriate Government and take up the matter with appropriate authorities for corrective action;

(c) review the safeguards provided by or under this Act or any other law for the time being in force for the protection of rights of persons with disabilities and recommend measures for their effective implementation;

(d) review the factors that inhibit the enjoyment of rights of persons with disabilities and recommend appropriate remedial measures;

(e) study treaties and other international instruments on the rights of persons with disabilities and make recommendations for their effective implementation;

(f) undertake and promote research in the field of the rights of persons with disabilities;

(g) promote awareness of the rights of persons with disabilities and the safeguards available for their protection;

(h) monitor implementation of the provisions of this Act and schemes, programmes meant for persons with disabilities;

(i) monitor utilisation of funds disbursed by the Central Government for the benefit of persons with disabilities; and

(j) perform such other functions as the Central Government may assign.

(2) The Chief Commissioner shall consult the Commissioners on any matter while discharging its functions under this Act.

Action of  
appropriate  
authorities on  
recommendation  
of Chief  
Commissioner.

**76.** Whenever the Chief Commissioner makes a recommendation to an authority in pursuance of clause (b) of section 75, that authority shall take necessary action on it, and inform the Chief Commissioner of the action taken within three months from the date of receipt of the recommendation:

Provided that where an authority does not accept a recommendation, it shall convey reasons for non-acceptance to the Chief Commissioner within a period of three months, and shall also inform the aggrieved person.

5 of 1908.

**77. (1)** The Chief Commissioner shall, for the purpose of discharging his functions under this Act, have the same powers of a civil court as are vested in a court under the Code of Civil Procedure, 1908 while trying a suit, in respect of the following matters, namely:—

### Powers of Chief Commissioner.

- (a) summoning and enforcing the attendance of witnesses;
- (b) requiring the discovery and production of any documents;
- (c) requisitioning any public record or copy thereof from any court or office;
- (d) receiving evidence on affidavits; and
- (e) issuing commissions for the examination of witnesses or documents.

45 of 1860.

(2) Every proceeding before the Chief Commissioner shall be a judicial proceeding within the meaning of sections 193 and 228 of the Indian Penal Code and the Chief Commissioner shall be deemed to be a civil court for the purposes of section 195 and Chapter XXVI of the Code of Criminal Procedure, 1973.

2 of 1974.

**78.** (1) The Chief Commissioner shall submit an annual report to the Central Government and may at any time submit special reports on any matter, which, in his opinion, is of such urgency or importance that it shall not be deferred till submission of the annual report.

Annual and  
special  
reports by  
Chief  
Commissioner.

(2) The Central Government shall cause the annual and the special reports of the Chief Commissioner to be laid before each House of Parliament, along with a memorandum of action taken or proposed to be taken on his recommendations and the reasons for non-acceptance the recommendations, if any.

(3) The annual and special reports shall be prepared in such form, manner and contain such details as may be prescribed by the Central Government.

**79.** (1) The State Government may, by notification, appoint a State Commissioner for Persons with Disabilities (hereinafter referred to as the "State Commissioner") for the purposes of this Act.

Appointment  
of State  
Commissioner  
in States.

(2) A person shall not be qualified for appointment as the State Commissioner unless he has special knowledge or practical experience in respect of matters relating to rehabilitation.

(3) The salary and allowances payable to and other terms and conditions of service (including pension, gratuity and other retirement benefits) of the State Commissioner shall be such as may be prescribed by the State Government.

(4) The State Government shall determine the nature and categories of officers and other employees required to assist the State Commissioner in the discharge of his functions and provide the State Commissioner with such officers and other employees as it thinks fit.

(5) The officers and employees provided to the State Commissioner shall discharge his functions under the general superintendence and control of the State Commissioner.

(6) The salaries and allowances and other conditions of service of officers and employees shall be such as may be prescribed by the State Government.

(7) The State Commissioner shall be assisted by an advisory committee comprising of not more than five members drawn from the experts in the disability sector in such manner as may be prescribed by the State Government.

**80.** The State Commissioner shall—

### Functions of State Commissioner.

- (a) identify, *suo motu* or otherwise, provision of any law or policy, programme and procedures, which are in consistent with this Act, and recommend necessary corrective steps;
- (b) inquire, *suo motu* or otherwise deprivation of rights of persons with disabilities and safeguards available to them in respect of matters for which the State Government is the appropriate Government and take up the matter with appropriate authorities for corrective action;

(c) review the safeguards provided by or under this Act or any other law for the time being in force for the protection of rights of persons with disabilities and recommend measures for their effective implementation;

(d) review the factors that inhibit the enjoyment of rights of persons with disabilities and recommend appropriate remedial measures;

(e) undertake and promote research in the field of the rights of persons with disabilities;

(f) promote awareness of the rights of persons with disabilities and the safeguards available for their protection;

(g) monitor implementation of the provisions of this Act and schemes, programmes meant for persons with disabilities;

(h) monitor utilisation of funds disbursed by the State Government for the benefits of persons with disabilities; and

(i) perform such other functions as the State Government may assign.

Action by appropriate authorities on recommendation of State Commissioner.

**81.** Whenever the State Commissioner makes a recommendation to an authority in pursuance of clause (b) of section 80, that authority shall take necessary action on it, and inform the State Commissioner of the action taken within three months from the date of receipt of the recommendation:

Provided that where an authority does not accept a recommendation, it shall convey reasons for non-acceptance to the State Commissioner for Persons with Disabilities within the period of three months, and shall also inform the aggrieved person.

Powers of State Commissioner.

**82.** (1) The State Commissioner shall, for the purpose of discharging their functions under this Act, have the same powers of a civil court as are vested in a court under the Code of Civil Procedure, 1908 while trying a suit, in respect of the following matters, namely:—

5 of 1908.

(a) summoning and enforcing the attendance of witnesses;

(b) requiring the discovery and production of any documents;

(c) requisitioning any public record or copy thereof from any court or office;

(d) receiving evidence on affidavits; and

(e) issuing commissions for the examination of witnesses or documents.

(2) Every proceeding before the State Commissioner shall be a judicial proceeding within the meaning of sections 193 and 228 of the Indian Penal Code and the State Commissioners shall be deemed to be a civil court for the purposes of section 195 and Chapter XXVI of the Code of Criminal Procedure, 1973.

45 of 1860.

2 of 1974.

Annual and special reports by State Commissioner.

**83.** (1) The State Commissioner shall submit an annual report to the State Government and may at any time submit special reports on any matter, which, in its opinion, is of such urgency or importance that it shall not be deferred till submission of the annual report.

(2) The State Government shall cause the annual and the special reports of the State Commissioner for persons with disabilities to be laid before each House of State Legislature where it consists of two Houses or where such Legislature consist of one House, before that House along with a memorandum of action taken or proposed to be taken on the recommendation of the State Commissioner and the reasons for non-acceptance the recommendations, if any.

(3) The annual and special reports shall be prepared in such form, manner and contain such details as may be prescribed by the State Government.

## CHAPTER XIII

## SPECIAL COURT

**84.** For the purpose of providing speedy trial, the State Government shall, with the concurrence of the Chief Justice of the High Court, by notification, specify for each district, a Court of Session to be a Special Court to try the offences under this Act.

Special Court.

**85. (1)** For every Special Court, the State Government may, by notification, specify a Public Prosecutor or appoint an advocate, who has been in practice as an advocate for not less than seven years, as a Special Public Prosecutor for the purpose of conducting cases in that Court.

Special Public Prosecutor.

(2) The Special Public Prosecutor appointed under sub-section (1) shall be entitled to receive such fees or remuneration as may be prescribed by the State Government.

## CHAPTER XIV

## NATIONAL FUND FOR PERSONS WITH DISABILITIES

**86. (1)** There shall be constituted a Fund to be called the National Fund for persons with disabilities and there shall be credited thereto—

National Fund for persons with disabilities.

(a) all sums available under the Fund for people with disabilities, constituted *vide* notification No. S.O. 573 (E), dated the 11th August, 1983 and the Trust Fund for Empowerment of Persons with Disabilities, constituted *vide* notification No. 30-03/2004-DDII, dated the 21st November, 2006, under the Charitable Endowment Act, 1890.

(b) all sums payable by banks, corporations, financial institutions in pursuance of judgment dated the 16th April, 2004 of the Hon'ble Supreme Court in Civil Appeal Nos. 4655 and 5218 of 2000;

(c) all sums received by way of grant, gifts, donations, benefactions, bequests or transfers;

(d) all sums received from the Central Government including grants-in-aid;

(e) all sums from such other sources as may be decided by the Central Government.

(2) The Fund for persons with disabilities shall be utilised and managed in such manner as may be prescribed.

**87. (1)** The Central Government shall maintain proper accounts and other relevant records and prepare an annual statement of accounts of the Fund including the income and expenditure accounts in such form as may be prescribed in consultation with the Comptroller and Auditor-General of India.

Accounts and audit.

(2) The accounts of the Fund shall be audited by the Comptroller and Auditor-General of India at such intervals as may be specified by him and any expenditure incurred by him in connection with such audit shall be payable from the Fund to the Comptroller and Auditor-General of India.

(3) The Comptroller and Auditor-General of India and any other person appointed by him in connection with the audit of the accounts of the Fund shall have the same rights, privileges and authority in connection with such audit as the Comptroller and Auditor-General of India generally has in connection with the audit of the Government accounts, and in particular, shall have the right to demand production of books of account, connected vouchers and other documents and papers and to inspect any of the offices of the Fund.

(4) The accounts of the Fund as certified by the Comptroller and Auditor-General of India or any other person appointed by him in this behalf, together with the audit report thereon, shall be laid before each House of Parliament by the Central Government.

## CHAPTER XV

## STATE FUND FOR PERSONS WITH DISABILITIES

State Fund for persons with disabilities.

**88.** (1) There shall be constituted a Fund to be called the State Fund for persons with disabilities by a State Government in such manner as may be prescribed by the State Government.

(2) The State Fund for persons with disabilities shall be utilised and managed in such manner as may be prescribed by the State Government.

(3) Every State Government shall maintain proper accounts and other relevant records of the State Fund for persons with disabilities including the income and expenditure accounts in such form as may be prescribed by the State Government in consultation with the Comptroller and Auditor-General of India.

(4) The accounts of the State Fund for persons with disabilities shall be audited by the Comptroller and Auditor-General of India at such intervals as may be specified by him and any expenditure incurred by him in connection with such audit shall be payable from the State Fund to the Comptroller and Auditor-General of India.

(5) The Comptroller and Auditor-General of India and any person appointed by him in connection with the audit of the accounts of the State Fund for persons with disabilities shall have the same rights, privileges and authority in connection with such audit as the Comptroller and Auditor-General of India generally has in connection with the audit of the Government accounts, and in particular, shall have right to demand production of books of accounts, connected vouchers and other documents and papers and to inspect any of the offices of the State Fund.

(6) The accounts of the State Fund for persons with disabilities as certified by the Comptroller and Auditor-General of India or any other person appointed by him in this behalf together with the audit report thereon shall be laid before each House of the State Legislature where it consists of two Houses or where such Legislature consists of one House before that House.

## CHAPTER XVI

## OFFENCES AND PENALTIES

Punishment for contravention of provisions of Act or rules or regulations made thereunder.

**89.** Any person who contravenes any of the provisions of this Act, or of any rule made thereunder shall for first contravention be punishable with fine which may extend to ten thousand rupees and for any subsequent contravention with fine which shall not be less than fifty thousand rupees but which may extend to five lakh rupees.

Offences by companies.

**90.** (1) Where an offence under this Act has been committed by a company, every person who at the time the offence was committed, was in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

*Explanation.*—For the purposes of this section,—

(a) “company” means any body corporate and includes a firm or other association of individuals; and

(b) “director”, in relation to a firm, means a partner in the firm.

**91.** Whoever, fraudulently avails or attempts to avail any benefit meant for persons with benchmark disabilities, shall be punishable with imprisonment for a term which may extend to two years or with fine which may extend to one lakh rupees or with both.

Punishment for fraudulently availing any benefit meant for persons with benchmark disabilities.

**92.** Whoever,—

(a) intentionally insults or intimidates with intent to humiliate a person with disability in any place within public view;

(b) assaults or uses force to any person with disability with intent to dishonour him or outrage the modesty of a woman with disability;

(c) having the actual charge or control over a person with disability voluntarily or knowingly denies food or fluids to him or her;

(d) being in a position to dominate the will of a child or woman with disability and uses that position to exploit her sexually;

(e) voluntarily injures, damages or interferes with the use of any limb or sense or any supporting device of a person with disability;

(f) performs, conducts or directs any medical procedure to be performed on a woman with disability which leads to or is likely to lead to termination of pregnancy without her express consent except in cases where medical procedure for termination of pregnancy is done in severe cases of disability and with the opinion of a registered medical practitioner and also with the consent of the guardian of the woman with disability,

Punishment for offences of atrocities.

shall be punishable with imprisonment for a term which shall not be less than six months but which may extend to five years and with fine.

**93.** Whoever, fails to produce any book, account or other documents or to furnish any statement, information or particulars which, under this Act or any order, or direction made or given thereunder, is duty bound to produce or furnish or to answer any question put in pursuance of the provisions of this Act or of any order, or direction made or given thereunder, shall be punishable with fine which may extend to twenty-five thousand rupees in respect of each offence, and in case of continued failure or refusal, with further fine which may extend to one thousand rupees for each day, of continued failure or refusal after the date of original order imposing punishment of fine.

Punishment for failure to furnish information.

**94.** No Court shall take cognizance of an offence alleged to have been committed by an employee of the appropriate Government under this Chapter, except with the previous sanction of the appropriate Government or a complaint is filed by an officer authorised by it in this behalf.

Previous sanction of appropriate Government.

**95.** Where an act or omission constitutes an offence punishable under this Act and also under any other Central or State Act, then, notwithstanding anything contained in any other law for the time being in force, the offender found guilty of such offence shall be liable to punishment only under such Act as provides for punishment which is greater in degree.

Alternative punishments.

## CHAPTER XVII

## MISCELLANEOUS

Application of other laws not barred.

**96.** The provisions of this Act shall be in addition to, and not in derogation of, the provisions of any other law for the time being in force.

Protection of action taken in good faith.

**97.** No suit, prosecution or other legal proceeding shall lie against the appropriate Government or any officer of the appropriate Government or any officer or employee of the Chief Commissioner or the State Commissioner for anything which is in good faith done or intended to be done under this Act or the rules made thereunder.

Power to remove difficulties.

**98.** (1) If any difficulty arises in giving effect to the provisions of this Act, the Central Government may, by order, published in the Official Gazette, make such provisions or give such directions, not inconsistent with the provisions of this Act, as may appear to it to be necessary or expedient for removing the difficulty:

Provided that no such order shall be made under this section after the expiry of the period of two years from the date of commencement of this Act.

(2) Every order made under this section shall be laid as soon as may be, after it is made, before each House of Parliament.

Power to amend Schedule.

**99.** (1) On the recommendations made by the appropriate Government or otherwise, if the Central Government is satisfied that it is necessary or expedient so to do, it may, by notification, amend the Schedule and any such notification being issued, the Schedule shall be deemed to have been amended accordingly.

(2) Every such notification shall, as soon as possible after it is issued, shall be laid before each House of Parliament.

Power of Central Government to make rules.

**100.** (1) The Central Government may, subject to the condition of previous publication, by notification, make rules for carrying out the provisions of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) the manner of constituting the Committee for Research on Disability under sub-section (2) of section 6;

(b) the manner of notifying the equal opportunity policy under sub-section (1) of section 21;

(c) the form and manner of maintaining records by every establishment under sub-section (1) of section 22;

(d) the manner of maintenance of register of complaints by grievance redressal officer under sub-section (3) of section 23;

(e) the manner of furnishing information and return by establishment to the Special Employment Exchange under section 36;

(f) the composition of the Assessment Board under sub-section (2) and manner of assessment to be made by the Assessment Board under sub-section (3) of section 38;

(g) rules for person with disabilities laying down the standards of accessibility under section 40;

(h) the manner of application for issuance of certificate of disability under sub-section (1) and form of certificate of disability under sub-section (2) of section 58;

(i) the allowances to be paid to nominated Members of the Central Advisory Board under sub-section (6) of section 61;

(j) the rules of procedure for transaction of business in the meetings of the Central Advisory Board under section 64;

(k) the salaries and allowances and other conditions of services of Chief Commissioner and Commissioners under sub-section (4) of section 74;

(l) the salaries and allowances and conditions of services of officers and staff of the Chief Commissioner under sub-section (7) of section 74;

(m) the composition and manner of appointment of experts in the advisory committee under sub-section (8) of section 74;

(n) the form, manner and content of annual report to be prepared and submitted by the Chief Commissioner under sub-section (3) of section 78;

(o) the procedure, manner of utilisation and management of the Fund under sub-section (2) of section 86; and

(p) the form for preparation of accounts of Fund under sub-section (1) of section 87.

(3) Every rule made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

**101.** (1) The State Government may, subject to the condition of previous publication, by notification, make rules for carrying out the provisions of this Act, not later than six months from the date of commencement of this Act.

Power of State Government to make rules.

(2) In particular, and without prejudice to the generality of foregoing powers, such rules may provide for all or any of the following matters, namely:—

(a) the manner of constituting the Committee for Research on Disability under sub-section (2) of section 5;

(b) the manner of providing support of a limited guardian under sub-section (1) of section 14;

(c) the form and manner of making an application for certificate of registration under sub-section (1) of section 51;

(d) the facilities to be provided and standards to be met by institutions for grant of certificate of registration under sub-section (3) of section 51;

(e) the validity of certificate of registration, the form of, and conditions attached to, certificate of registration under sub-section (4) of section 51;

(f) the period of disposal of application for certificate of registration under sub-section (7) of section 51;

(g) the period within which an appeal to be made under sub-section (1) of section 53;

(h) the time and manner of appealing against the order of certifying authority under sub-section (1) and manner of disposal of such appeal under sub-section (2) of section 59;

(i) the allowances to be paid to nominated Members of the State Advisory Board under sub-section (6) of section 67;

(j) the rules of procedure for transaction of business in the meetings of the State Advisory Board under section 70;

(k) the composition and functions of District Level Committee under section 72;

(l) salaries, allowances and other conditions of services of the State Commissioner under sub-section (3) of section 79;

(m) the salaries, allowances and conditions of services of officers and staff of the State Commissioner under sub-section (3) of section 79;

(n) the composition and manner of appointment of experts in the advisory committee under sub-section (7) of section 79;

(o) the form, manner and content of annual and special reports to be prepared and submitted by the State Commissioner under sub-section (3) of section 83;

(p) the fee or remuneration to be paid to the Special Public Prosecutor under sub-section (2) of section 85;

(q) the manner of constitution of State Fund for persons with disabilities under sub-section (1), and the manner of utilisation and management of State Fund under sub-section (2) of section 88;

(r) the form for preparation of accounts of the State Fund for persons with disabilities under sub-section (3) of section 88.

(3) Every rule made by the State Government under this Act shall be laid, as soon as may be after it is made, before each House of the State Legislature where it consists of two Houses, or where such State Legislature consists of one House, before that House.

Repeal and  
savings.

**102.** (1) The Persons with Disabilities (Equal Opportunity Protection of Rights and Full Participation) Act, 1995 is hereby repealed. 1 of 1996.

(2) Notwithstanding the repeal of the said Act, anything done or any action taken under the said Act, shall be deemed to have been done or taken under the corresponding provisions of this Act.

## THE SCHEDULE

[See clause (zc) of section 2]

## SPECIFIED DISABILITY

## 1. Physical disability.—

A. Locomotor disability (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—

(a) "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 construed accordingly;

(b) "cerebral palsy" means 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;

(c) "dwarfism" means a medical or genetic condition resulting in an adult height of 4 feet 10 inches (147 centimeters) or less;

(d) "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;

(e) "acid attack victims" means a person disfigured due to violent assaults by throwing of acid or similar corrosive substance.

## B. Visual impairment—

(a) "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.

(b) "low-vision" means a condition where a person has any of the following conditons, 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.

C. Hearing impairment—

(a) "deaf" means persons having 70 DB hearing loss in speech frequencies in both ears;

(b) "hard of hearing" means person having 60 DB to 70 DB hearing loss in speech frequencies in both ears;

D. "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.

2. 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, including—

(a) "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;

(b) "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.

3. Mental behaviour,—

"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 subnormality of intelligence.

4. Disability caused due to—

(a) chronic neurological conditions, such as—

(i) "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;

(ii) "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.

(b) Blood disorder—

(i) "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;

(ii) "thalassemia" means a group of inherited disorders characterised by reduced or absent amounts of haemoglobin.

(iii) "sickle cell disease" means a hemolytic disorder characterised by chronic anemia, painful events, and various complications due to associated

tissue and organ damage; "hemolytic" refers to the destruction of the cell membrane of red blood cells resulting in the release of hemoglobin.

5. 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.

6. Any other category as may be notified by the Central Government.

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DR. G. NARAYANARAJU,  
*Secretary to the Govt. of India.*

## Suggested Readings

- Ministry of Urban development. (2016). Harmonised guidelines and space standards for barrier free built environment for persons with disability and elderly persons, Govt. of India, New Delhi.
- MSJE. (2015). Accessible WASH public spaces and school: Practitioners Manual, Making water, sanitation and Hygiene accessible and safe through improved planning and design. Department of empowerment of persons with disability, Ministry of social justice and empowerment, Govt. of India
- MSJE. (2016). Inclusiveness and Accessibility Index: A Toolkit for Organizations to promote Inclusiveness of Persons with Disabilities. Department of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment, Government of India.
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