Communication Inventory for Infants (CII)

6 – **12** months

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CERTIFICATE

This is to certify that this dissertation entitled "*Communication Inventory for Infants (CII) 6- 12 Month)*" is a bonafide work submitted in part fulfilment for the degree of Master of Science (Speech Language Pathology) of the student Registration No. 09SLP013. This has been carried out the under guidance of a faculty of this institute and has not been submitted earlier to any other university for the award of any diploma or degree.

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CERTIFICATE

This is to certify that this dissertation entitled "*Communication Inventory for Infants (CII) 6- 12 Month*)" has been prepared under my supervision and guidance. It is also certified that this dissertation has not been submitted earlier to any other university for the award of any diploma or degree.

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DECLARATION

This is to declare that this Master's dissertation entitled "*Communication Inventory for Infants (CII) 6- 12 Month*)" is the result of my own study under the guidance of Dr. K. S. Prema, Professor of Language Pathology & Head- Dept. of Special Education, All India Institute of Speech and Hearing, Mysore, and has not been submitted earlier to any other university for the award of any diploma or degree.

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CHAPTER I

INTRODUCTION

Communication is the process by which individuals exchange information and convey ideas (Owens, 1990). It is an active process, which involves encoding, transmitting and decoding intended message. It requires a receiver who decodes or comprehends the message. It is one of basic needs of human beings and a gift that helps to lead a better quality of life. Communication may take place wither in the verbal mode with the help of speech of in the nonverbal more through gestures, signs, symbols, body language and/or written language. Verbal mode of communication to transmit messages involves precise coordination of neuromuscular mechanism in order to produce speech sounds and linguistic units. Individuals select a mode depending on the context, their needs, the needs of the decoder and messages they wish to transmit. Messages for communication are coded by employing language system that is specific to a given community.

Language is a socially shared code, or conventional system, that represents ideas through the use of arbitrary symbols and rules that govern combinations of these symbols. There are many languages, each with its own particular symbols and rules. Language exits because language users have agreed on the symbols and rules to be used. Language is described by five domains, phonology, morphology, syntax, semantics and pragmatics. These domains can be grouped into Form (Phonology, Morphology, Syntax), Content (Semantics) and Use (Pragmatics) of language.

The form of the language comes from the sound system (phonology) and the grammar system (morphology and syntax). It is the structural aspect of the language.

While phonology is the sound system of a language, morphology is the smallest unit of language that expresses meaning and syntax is the sentence-level structure of language that marks relationships between words and ideas and semantics is the meaning system of language. It can be the meaning expressed by single vocabulary (e.g., Dog i.e., noun, animal), items of the proposition expressed by vocabulary items in combination (e.g., mommy shoe i.e., the shoe belongs to mummy; shoe mommy i.e., a request for the child's shoe). Pragmatics refers to how an individual uses the form and content of language. Pragmatic behaviors may include the intention that an utterance or gesture conveys, the way in which an individual uses and understands body language, the social appropriateness of utterances, and the process of ensuring that appropriate amount of information is provided to a listener.

Effectiveness of communication also depends on usage of paralinguistic and nonlinguistic cues. Paralinguistic cues include intonation patterns, stress, and speech rate, can signal attitudes and emotions of the speaker and alter the linguistic information. In addition to paralinguistic cues, non linguistic cues also contribute to the communication process. Nonlinguistic cues include gestures, body movements, eye contact, and facial expressions. For example, an individual who looks at the speaker and intermittently nods his or her head, indicate active involvement in the communication process. Conversely, an individual who does not make eye contact often communicates a lack of interest or involvement in the communicative interaction, and in turn may diminish communication with the listener.

In many conditions individuals can expresses better with nonverbal behavior than with speech. Nonverbal behaviors are right from the infancy stage of communication development. Infancy is the stage which happens between birth to 2 years or first two years of life where an infant learns to communicate and nonverbal behaviors such as smiling, pointing to objects as well as a few paralinguistic behaviors such as different types of crying, making different intonation patterns.

1.1 Development of Communication

Stages of communication development are described in detail by Shulman and Capone (2007) as perlocutionary, illocutionary and locutionary stages. The perlocutionary stage refers to the unintentional stage of communication. During this stage, the infant produces behaviors such as burping or vocalizations that have no intended message. This stage typically occurs around 8 to 10 months of age. Typically developing infants begins to use gestures and nonlinguistic vocalizations (e.g., jargon) intentionally to communicate around 10 months which is called as illocutionary stage of communication. Around 12 months of age, an infant enters the locutionary stage of communication and produces his/her first words. This phase is characterized by intentional communication expressed with words. Some behaviors observed during the perlocutionary and illocutionary stages of communication are referred to as prelinguistic skills. They include gestures, eye contact, joint attention, and turn taking behaviors. The prelinguistic skills such as eye contact, joint attention; and taking turns during an interaction are building blocks of successful communication and language learning. Imitation is another skill that helps infants to learn language. The locutionary phase of communication development involves linguistic and metalinguistic skills. Development of language is largely completed by eight years of years (e.g., phonology), however, with a few aspects such as semantics that continue to develop through adulthood. In order to

understand the development of communication and its disorders, assessment of communication skills is done by employing checklist, tests and other such tools.

1.2 Assessment of Communication

There are different ways to assess communication skills in infants. Checklists, scales, tests and inventories are the most often employed tools in clinical and field set-up. Checklist helps to examine the presence of a few specified behaviors in an individual, where as tests are used for the purpose of diagnosis of a condition. Purpose of a language test could be either for screening to check if children have any problem with language development or for diagnosis and quantification of behavior(s) in a condition.

i) Denver Developmental Screening Test II (DDST-II) developed by William & Josiah (1984) is a performance based test that assesses children's development, between one month and six years. It assesses four areas of functioning: fine motor-adaptive, gross motor, personal-social and language skills.

ii) Receptive Expressive Emergent Language Skills, REELS (Bzoch & league, 1971) is a scale for assessment of language development that assesses verbal language ability of a child in comprehension and expression domains. It assesses a child from zero to thirty six months of age. While the first year age range is divided into one month interval, the second year with 2 months age interval and at third year with 3 month age interval periods. Each interval includes three skills in both comprehension and expression domains. It assesses the language ability in the phonology, semantic and syntactic domains only and does not consider the pragmatic or cognitive dimensions as a part of the assessment. *iii) The Rossetti-Infant Toddler Scale (Rossetti, 1990)* is a scale assesses the preverbal and verbal domains of language development (interaction, attachment, pragmatics, gesture play and language development and language expression). It is designed for the children from birth to 36 months. It is administered based on a child in 3 months groupings with approximately 30 items in each group. The items are compilation of author's observation, description from developmental hierarchies of behaviors recognized and used by leading authorities in the field of infant and toddler assessment. The scale is criterion referenced and measures the child's communicative behavior on direct observations and parental reports obtained through questionnaire.

iv) The communication and symbolic behavior scale (Wetherby and Pizant, 1993) is a norm referenced standardized instrument used to assesses infants, toddlers and preschool children. It is an interactive assessment designed to provide opportunities for children to communicate non-linguistically with gestures and vocalizations during play routines with adults. It is administered on children with functional communication age of 6-24 months to 72 months. The test comprises of 22 rating scales grouped under 7 heads namely; communicative functions, gesture communicative means, verbal communicative means, vocal communicative behaviors, reciprocity, social-affective signaling and symbolic behavior.

Checklists, scales and tests includes skills related to verbal language (for example, REELS), and many tests fail to account for non verbal communication. Checklist and scales generally include critical items to decide on the presence or absence of the problem, while tests having corporate representational skills, the presence or absence of which indicate normal development of impairment. Not all tests for language account for

the other related behaviors like cognition, social communication, play behaviors, etc., since communication is strongly related to these above mentioned behaviors, it is necessary to assess development of language as well as these associated behaviors. Therefore, to overcome this problem language inventory is developed by a few investigators, one such being Mac Arthur Communication Developmental Inventory (1993).

Inventory includes items for a detailed profiling of developmental pattern under different domains. It also includes associated factors which are likely to influence communication development. Inventory helps in both assessment and in intervention. Inventory serves as a guide for goal setting, by finding hierarchy for items to develop. E.g., Mac Arthur Communication Developmental Inventory, CDI (Fenson et al, 1993). Communication Developmental Inventory is used by many investigators to study communication development in Children. Fenson, Dale, Reznick, Thal, Bates & Reilly (1993) developed a Mac Arthur communication developmental inventory. They included all the domains of communication, like reception, expression and cognition skills of communication. The age range is divided into 2 groups, 8-18 months and 18-24 months. Inventory is divided into three parts: the early phrases, the vocabulary and the nonverbal communication. Early phrases include the phrases which the infant understands in that age. E. g., are you hungry? Want to go out? This section assesses only comprehension ability of the child. Vocabulary section is further divided into many parts according to different lexical categories like body parts, family members, food items, etc.... In this section both comprehension and expression of lexical items are evaluated. Nonverbal communication part includes gestures, games, routines, and adult imitated activities. This

section assesses gestural communicating ability of the child. Authors have provided the normative values for each age group and separately for male and female children with which a clinician can understand whether a given child is following normal developmental pattern or not (See Appendix I for Mac Arthur's communication developmental inventory).

1.3 Assessment of Language in Indian Context

Receptive Expressive Emergent Language Skills, REELS (Bzoch & League, 1971) is main test which is to measure the language ability in Indian population. It assesses child for zero months to thirty six months. REELS was standardized on Indian population (Madhu, Deepa, Harshan, Suhas and Chengappa, 2009). Authors administered REELS test on 720 typically developing children in Karnataka and make necessary changes in REELS according to the Indian Developmental pattern.

The scales of early communication skills for hearing impaired (Moog & Geers, 1975) which measure the speech and language development of the hearing impaired children age range between 2 years to 8 years 11 months. Test divided into four sections-receptive language skills, expressive language skills, nonverbal receptive language skills and expressive language skills. There are two levels specified in receptive and expressive language skills section as A and B. 'A' level items describe the use of skills in structured situation and 'B' level items represents use skills spontaneously. The scales of early communication skills for hearing impaired was standardized on Indian population of hearing impaired by Swati (1993).

Preschool language scale (Vaidyanathan, 1984) assesses early communicative behavior of children in the domains of comprehension, expression and cognition using questions addressed to parents or caregivers. This was specifically intended for children in the age of 9 months to 36 months. It consists of twenty seven items grouped under 9 different age groups depending on age at which the aspects of language and cognition emerge. Unlike other language scales, this emphasizes on the pragmatic aspects and enables to identify language delay/disorder and aids to plan appropriate intervention programs. The items from the preschool language scale were adapted to devise the 3 D LAT (Herleker, 1986). The task was framed as questions and rest of the frame work was similar to Vaidyanathan's scale. These scales measure the verbal language ability of children and pay no focus on the nonverbal language skills of preschool children. Assessment tools solely evaluating nonverbal language development are very limited, although, some tests have included assessment of non verbal language development along with verbal development.

Behavior Assessment Scales for Indian Children with Mental Retardation, BASIC-MR (Peshawaria and Venkatesan, 1992). A test which was developed for identification of Mentally Retarded children. This scale includes mainly 2 parts, Part A has 280 items spread over 7 skills behavioral domains and Part B has 75 items pertaining to problem behaviors. BASIC-MR focuses on older children (3-18years) than the infants, toddlers, and preschoolers. To overcome this problem Venkatesan (2002), developed a activity checklist for preschool children with developmental disabilities (ACPC-DD). It assesses the children between zero to seventy two months. The ACPC-DD consists of 400 items distributed evenly across 8 behavioral domains that are relevant to daily activities of infants, toddlers, and preschool aged children with developmental disabilities. India is a multilingual country where we can find 5 different language families with more than 100 languages (Mallikarjun, 2002). There is another checklist which develop for multilingual children is language acquisition in multilingual children (Prema, & Geetha, 2005). It assesses children between nine months to thirty six months. Skills are classified under three domains, language domain, behavioral domain and developmental domain. Language domain includes skills with respect to communication. It considers both verbal and nonverbal language skills. Behavioral domain includes skills with respect to associated problems like learning disability, Mental retardation, Cerebral Palsy and Developmental domain skills with respect to different developmental domains like sensory, gross and fine motor and cognitive development.

Culture is a product of universal biological needs and function universal problems created to address their needs, and the context in which people live (Matsumoto, 2006). Language in a multicultural and multilingual population is diverse. Culture affects the language lexicon (Caroll, 1956; Stigler & Baranes, 1988), thought (Abel & Candel, 1998; Ervin, 1964; Hull, 1963; Matsumoto & Asser, 1992) and pragmatics [children personal narratives (Minami & McCabe, 1955), self discourse (Chen, 1995), Compliments (Barnuld & Araki, 1985) and interpersonal criticism (Nomura & Barnlond, 1983)]. Applying these tools on Indian population is not appropriate. Hence it is necessary to develop inventory for Indian population.

1.4 Need for the Study

Communication starts developing as soon as a child born with the onset of birth cry. Communication is very rapid during the early childhood. Communication development in early childhood like infancy is an indicator of a child's communication proficiency in future (Shulman and Capone, 2007). There many assessment tools developed for toddlers and children with late childhood period than infants. There are very less number of tools available to measure communication among which majority of the tools focus on verbal language and very few on nonverbal language.

Among the available tools for language measures, there are many tests and a few Inventories which were developed for Western population. MacArthur Communication Development Inventory (CDI) is a tool which is widely used to measure both modes of communication (verbal and nonverbal) in infants (eight months to sixteen months). It can be easily adapted to other languages. It is standardized in 60 languages worldwide.

Since culture has an impact on language and communication (Hall, 1959), and India is well known for its multicultural and multilingual nature with five different language families and more than 100 languages (Mallikarjun, 2002), the available tests and tools developed for the Western context, cannot be directly employed for Indian population. Hence there is a need to develop Communication Inventory for Indian population. In view of the above need, the present study was designed with the following objectives:

1.5 Objectives of the Study

- 1. To develop a Communication Inventory (CII) for Infants aged 6 -12 months keeping the framework of MacArthur CDI as reference
- 2. Translation and adaptation of CII for infants from Kannada speaking families.

CHAPTER II

REVIEW OF LITERATURE

Communication is part of human life "Communication is the process in which individuals exchange information and convey ideas" (Owens, 1990). Communication needs two persons one is a sender and another is a receiver of message. Owens (1990) states that communication happens only when a message is conveyed between or among two or more individuals. Communication consists of speech, language, paralinguistic cues, and nonlinguistic cues.

There are two main ways of communication, verbal and nonverbal communication. Nonverbal communication can be divided into three group manual signs, symbol system, and communication aids. Speech is the verbal method of communication. Speech is one of the modes that may be used for communication. It is the oral verbal mode of transmitting messages and involves the precise coordination of oral neuromuscular movements in order to produce sounds and linguistic units. There are other modes available to communicate apart from speech. Writing, drawing, and manual signing are the other modes of communication. Individuals select a mode depending on the context, their needs, the needs of the decoder and messages they wish to transmit.

Language is a socially shared code, or conventional system, that represents ideas through the use of arbitrary symbols and rules that govern combinations of these symbols. There are many languages, each with its own particular symbols and rules. Language exits because language users have agreed on the symbols and rules to be used. Language is described by five domains: pragmatics, semantics, phonology, morphology and syntax. These domains can be grouped into the Form (Phonology, Morphology, Syntax), Content (Semantics) and Use (Pragmatics) rules of language.

The form of the language comes from the sound system (phonology) and the grammar system (morphology and syntax). It is the structural aspect of the language. While phonology is the sound system of a language, morphology is the smallest unit of language that expresses meaning and syntax is the sentence-level structure of language that marks relationships between words and ideas and semantics is the meaning system of language. It can be the meaning expressed by single vocabulary (e.g., Dog i.e., noun, animal), items of the proposition expressed by vocabulary items in combination (e.g., mommy shoe i.e., the shoe belongs to mummy; shoe mommy i.e., a request for the child's shoe). Pragmatics refers to how an individual uses the form and content of language. Pragmatic behaviors may include the intention that an utterance or gesture conveys, the way in which an individual's uses and understands body language, the social appropriateness of utterances, and the process of ensuring that appropriate amount of information is provided to a listener.

Communication will be effective when an individual uses paralinguistic and nonlinguistic cues. E.g., the individual who looks at others as they talk and may intermittently nod his or her head, indicate active involvement in the communication process. Conversely, the individual who does not make eye contact often communicates a lack of interest or involvement in the communicative interaction in turn may hamper communication with the speaker. In other words we can call this as non verbal communication. Nonverbal Communication (NVC) is usually understood as the process of communication through sending and receiving wordless messages. Nonverbal communication is defined as "The way in which people communicate, intentionally or unintentionally, without words; nonverbal cues include paralinguistic cues like intonation, stress, speech rate, and Nonlinguistic cues like gestures, body movements, eye contact, facial expression (Bernstein & Tiegerman, 1997; Areson, Wilson, & Akert, 2010). Paralinguistic cues can signal attitudes and emotions of the speaker and alter the linguistic information. In addition to paralinguistic cues, non linguistic cues also contribute to the communication process.

Argyle (1986) put forward the hypothesis that whereas spoken language is normally used for communicating information about events external to the speakers, nonverbal codes are used to establish and maintain interpersonal relationships. It is considered more polite or nicer to communicate attitudes towards others non-verbally rather than verbally, for instance in order to avoid embarrassing situations.

Argyle (1986) concluded there are five primary functions of nonverbal bodily behavior in human communication:

- Express emotions
- Express interpersonal attitudes
- To accompany speech in managing the cues of interaction between speakers and listeners
- Self-presentation of one's personality
- Rituals (greetings)

Doherty and Sneddon (2003), outlined seven principles to capture the essence of communication with children. Among these, four refer to adult and the child communication and the other three principles are characteristics of adult communication.

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i) Intentionality: nonverbal behavior is distinguished from nonverbal communication on the basis of its intentionality. A nonverbal behavior produced with intent would mean nonverbal communication. Most of the information derived from babies behaviors particularly in their early months are not produced intentionally. For example, crying is initially reflexive; only at around nine months, babies cry to get others attention or attain certain things. Response by the communication partner to the child's early attempts to communicate intentions fosters communication development.

ii) Visual cues: For communication, children rely mostly on visual cues. A shared visual context to interact and the nonverbal signal that the context encompasses are central to children's ability to communicate their feelings and thoughts and to understand other people. The rich repertoire of visual cues that children employ provides the communication partner a window to the child's emotional physiological and cognitive states.

iii) Communication is innate: The debate on nature-nurture argument prevails in communication development. Doherty and Sneddon (2003), outlined three evidences to support the innateness in communication. First, is the evidence of skills such as emotional facial expression in lower animals, which do not possess human like thinking abilities suggesting that the skill is innate. Second, that the skill is universal and is derived from the genetic make-up. Third, that these skills are seen in babies before they learn formal communication suggesting innateness.

iv) Communication is learned: Though children are born with genetic endowment that unfolds later to become a good communicator, their childhood experiences influence their

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communication development. Children learn how best to use their nonverbal skills, the rules concerning them and read other nonverbal cues in their late childhood.

v) Adult should be attentive: Not much information about children's nonverbal cues can be obtained unless they are attended to effectively by the communication partners/ adults.

vi) *Responsiveness:* This is an essential feature in providing quality interaction for children. The response ought to occur within a reasonable time span and in a consistent manner to children's requests to facilitate communication.

vii) *Scaffolding*: It is the support given by an adult to the child in assisting their understanding. In order to scaffold effectively the adult should be able to judge accurately the child's ability and level of knowledge in order to provide new information and also to help at appropriate times. These principles form the basis of communication development in children.

Bruner (1981) identified three broad functions of communication that emerge during the infancy that covers the first year of life:

- a) Behavior regulation (acts used to regulate another's behavior)
- b) Social interaction (acts used to gain or maintain others attention to self) and
- c) Joint attention (acts used to direct another's attention to an entity or an event)

Infancy is the stage which happens between birth to 2 years or first two years of life where infants start learning to communicate using paralinguistic (different types of crying, making different intonation patterns) and nonlinguistic cues (smile at listener, pointing to the objects) than verbal language. Infancy stage is very critical because there

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will be rapid growth in all the areas of development like speech, language, motor, cognitive and social.

2.1 Communication Development

Stages of communication development are described in detail by Shulman and Capone (2007), as perlocutionary, illocutionary and locutionary stages. The perlocutionary stage refers to the unintentional stage of communication. During this stage, the infant produces behaviors such as burping or vocalizations that have no intended message. This stage typically occurs around 8 to 10 months of age. Typically developing infants begins to use gestures and nonlinguistic vocalizations (e.g., jargon) intentionally to communicate around 10 months which is called as illocutionary stage of communication. Around 12 months of age, an infant enters the locutionary stage of communication and produces his/her first words. This phase is characterized by intentional communication expressed with words. Some behaviors observed during the perlocutionary and illocutionary stages of communication are referred to as prelinguistic skills. They include gestures, eye contact, joint attention, and turn taking behaviors. The prelinguistic skills such as eye contact, joint attention; and taking turns during an interaction are building blocks of successful communication and language learning. Imitation is another skill that helps infants to learn language. The locutionary phase of communication development involves linguistic and metalinguistic skills. Development of language is largely completed by eight years of years (e.g., phonology), however, with a few aspects such as semantics that continue to develop through adulthood. In order to understand the development of communication and its disorders, assessment of communication skills is done by employing checklist, tests and other such tools.

2.1.1: Verbal language development: Verbal communication starts as soon as the child is born with 'birth cry'. At birth, the first vocalizations a child makes are reflexive and are sometimes called unlearned sounds. Reflexive vocalization are also referred to as vegetative sounds, sounds made by a passive, living organism (Hulit & Howard, 2002). Such sounds may include cries, coughs, gurgles, hiccups, and burps. As the child rapidly develops, different types of pre-language sounds are produced that eventually formulate meaningful utterances (Hulit & Howard, 2002; Owens, 2008). Between 2 and 3 months of age, young children often begin cooing. Cooing sounds are noncrying vowel-like productions made when the child is comfortable contented. These sounds generally include vowel-like sounds produced within a single breath that many contain brief consonant-like sounds (/k/, /g/, /h/) (Angell, 2010).

At approximately 5 to 6 months of age, children begin to babble, producing fully resonant nuclei (Hulit & Howard, 2002; Owens, 2008). These vocalizations consist of vowel-like sounds that are similar to /a/ along with consonants-like sound production made up mostly of /p/, /b/, /w/ and /m/ sounds. These utterances are random combinations of vowels and consonants. At babbling stage child appear to listen to caregivers' speech and try to imitate intonation patterns be making experiments with the volume, pitch, and rate (Owens, 2008).

During the time babbling is produced, different types of babbling develop that bring children closer and closer to true word production. Babbling types include marginal, reduplicated, variegated, and jargon babbling (Hulit & Howard, 2002). Marginal babbling is a bridge between cooing and true babbling and consists of singlesyllable productions of vowel and consonants sounds. These productions can begin with either the consonant or the vowel sound, such as /ab/, or /ba/. Reduplicated babbling is considered the beginning of true babbling, beginning to appear at approximately 6 months of age. This type of babbling is the repeated consonant-vowel productions (e.g., /babababa/, /mamamama/). Consonant sounds used in this type of babbling are generally front-of-the-mouth utterances (e.g., /m/, /p/, /b/, /t/, /d/, and /n/).

Variegated babbling contains syllable production that is further developed, appears at 7 months of age (Angell, 2010). This form of babbling includes successive syllables of different consonant-vowel productions. Children may different patterns like CV, CVC, and VCV patterns. Example includes /badagata, /mamgaga/, or /amatod/. Variegated babbling often includes wider variety of consonant sounds includes fricatives (/f/, /v, /s/, /z/, /ð/, / \mathcal{O} /,/s/and /z/), affricates (/ts/ and /dz/), liquids (/l/ and /r/), and fewer reduplicated babbling productions (Angell, 2010).

At approximately 8 months of age, children begin jargon babbling and begin to include intonation to their utterances. Intonation is the melodic patterning of adult speech utterances that includes rhythm, stress, and rote variations. As children babble reduplicated and variegated types of syllables with intonation, the utterances begin to sound more like adult speech productions. Children's utterances may often sound like questions, commands, and statements. Jargon babbling, however, is still not true language production.

Echolalia, repeating the communications of others immediately after their production by caregivers, is also common between the approximate ages of 8 to 12 months. Echolalic imitation is done without understanding of the meaning of the

utterance. During 9 to 10 months of age, transition between babbling to true language begins. At this level children produce vocables, phonetically consistent forms (PCF), performatives, or protowords. All these terms refer to vocalizations that are consistent patterns of sound used within reference to particular things or situations. These vocalizations are not true words within the native language of caregivers, but they do fit the definition of true words; consistent and meaningful utterances that are used with intention (Hulit & Howard, 2002). Children develop their first words at approximately 12 months of age. By the end of first year child's expression includes words from three lexical categories, animals, food and toys. First words include dog, cat, ball, water, food, etc., (Nelson, 1973). Action words also appear quite early in life. They describe own actions before describing the actions of others (Huttenlocher, Smiley and Charney, 1983).

2.1.2: Development of Nonverbal Communication

It is generally agreed that infants communicate before they talk (Sugarman, 1983). That means nonverbal communication develops before verbal communication. Development of nonverbal communication is a cumulative effect of the development occurring in different channels like eye gaze, gestures and facial expression. Intentionality forms a basis of communication and hence, development of intentionality plays a major role in the development of communication. The development of intentionality is linked with the development of communication too. Intentional communication occurs when the child deliberately uses the specific signal to affect another's behavior (Bates, 1976). In an attempt to order the emergence of intentionality, Carpenter, Mastergeorge and Coggins (1983) studied 6 children at monthly intervals from 8 to 15 months of age. The median age of acquisition of "protest" was less than 8 months;

for "requesting actions and objects", "commenting on actions" was around 9.5 months and "commenting on objects" and "answering to questions" begin to emerge at 10.5 and 15 months respectively. Though this was the common trend, there were individual differences in typically developing children with respect to the order of acquisition.

Eye gaze is an important source of social communication for both child and adult. It is linking to number of aspects of social and emotional development. Eye contact and other aspects of gazing behavior play an important role in children's mental development. As early as one month of age, baby establishes eye contact with the parents, and by three months of age, the baby smiles backs to parents (Sugarman, 1983). Very young infants (3 months of age) show preferences for faces looking at them rather than looking away from them (Caron, Caron, Mustelin and Roberts, 1992). Table 1 shows the developmental milestones of facial expression.

Normal children are aware of "being seen" by the time they are around 30 months of age. Children alternate the gaze between the object and the other person as an indicator of request or comment on an object by one year of age. They begin to use gaze declaratively, accompanied by pointing gestures and head orientation by 18 months of age (Charman, Swettenhan, Baron-Cohen, Cox, Baird and Drew, 2000).

2.1.3: Development of Gestural Communication

There is abundant literature on the development of gestures and its relation to verbal communication development.

Table: 1

Developmental milestones of facial expression

Age (in months)	Developmental milestones	
Birth	Babies show a number of inborn reflexive facial expressions. These	
	include startle, crying and disgust.	
	They smile reflexively during rapid eye movement stage of sleep.	
2-4 months	During the second month they show 'true smiling'; they smile when	
	they find pleasurable.	
	They show anger on their faces by 4 months of age.	
5-8 months	Expression of 'fear' emerges around 6 months.	
	'Surprise' tends to emerge around seven or eight months but it is not	
	accompanied by raised eye brows.	
	Babies are increasingly adept at using facial and other expressions of	
	emotion to fulfill their desires.	
9 – 12 months	By ten months, babies began to use adult like facial expressions	
	directed to object as a source of information about the object.	
	At 12 months, children begin to use finer emotional expressions and	
	learned to display the rules of their culture.	
2-4years	By 2 years, children begin to recognize the main expressions of	
	emotion.	
	Preschool children can focus only on one feature of the facial	
	expression.	
5 years and	They have deeper understanding of mixed emotions.	
above	Older children have the ability to use internal features of faces such as	
	configuration of eye, mouth and nose.	

(Ref: Doherty-Sneddon, 2003)

a) "Showing off" is reported as one of first signs that an infant gives of intentional communication (Bates, Camaioni and Voltera, 1975; Bates, Benigni, Bretherton, Camaioni and voltera, 1979). Young infants repeat behaviors that have previously been

successful in gaining adults attention. The "showing off" behaviors received the "use of objects" as a means to obtain adult attention. The "use of objects" to gain adult attention is emergence of deictic gestures (showing, giving, pointing). These are also referred as prelinguistic gestures. They are termed prelinguistic as they occur prior to the development of spoken language, but deictic gestures continue to be used throughout the development of verbal communication. Showing, giving and pointing emerge in a predictable sequence at approximately 10 months of age (Bates, Camaioni and Voltera, 1975). These behaviors show a marked increase in occurrence after 11 months as other primitive gestures decline.

b) "*Ritualized request*" which includes a variety of behavior such as gesturing with a open-close grasping motion, placing adult hands on object to request or pulling at an empty hand to obtain something (Bates, Benigni, Bretherton, Camaioni & voltera, 1979), occur between 9 and 13 months. Around 12 months, "recognitory gestures" emerge which are actions without an object and depict the object by means of its function. These behaviors illustrate the potential for symbolic representation which is similar to spoken language.

c) "*Representational gestures*" are reported to be appear at around one year in children. Most of the representation gestures are used in first half of the second year of life and is continued until a comparable word is developed (Acredolo & Goodwyn, 1988). Representational gestures emerge before the onset of 25-word milestone. They are variously termed as symbolic, iconic, empty-handed or referent gesture (Acredolo & Goodwyn, 1996; Nicoladis, Mayberry & Genesse, 1999). During toddlerhood, typically developing children prefer verbal to gestural expression. Beginning of toddlerhood is marked by decrease in representational gestures, but on the other hand deictic gestures will increase (Iverson, Capirci, Longobardi & Caselli, 1999).

Typically developing children spontaneously produce gestures along with speech. Nonverbal and verbal language development co-occur in typically developing children. According to McNeill (1992), speech gesture coherence is possible because gesture and speech share common cognitive representation; that is, before the communication unfolds, gesture and speech are the part of a single idea. As expression developed further, message is parsed, with most information channeled into speech but some information channeled into gestures. The age at which children produce supplementary gesture speech combinations reliably predicts the age at which they produce two word utterances (Ozcaliscan and Golden-Meadow, 2005). Capirci, Iverson, Pizzuto, and volterra (1996), found that gestures and gesture-word combinations produced at 16 months of age correlated significantly with the total vocal production at 20 months of age and they also established a significant relation between the frequency of deictic or representational gesture use with the production of representational words at 16 months and total vocal production at 20 months of age. Harris, Barlow-Brown and Chasin (1995), found that the occurrence of pointing and comprehension of object name occur at nearly identical median age of 10 months; 21 days and 10 months; 22 days respectively. Gestures are related to the children's lexical and syntactic development. Firstly, most of the lexical items that each child produces initially in gesture later move to that child's verbal lexicon. Secondly, children who are first to produce gestures-plus-word combinations conveying two elements in a proposition (point at bird and say "nap") are also first to produce two-word combinations ("bird nap") (Iverson & Goldin-Meadow, 2005).

Early symbols, manual and spoken appear to share underlying cognitive abilities, so manual symbols can aid in advancing verbal language milestones and predict them to some extent. Gesture thus serves as predictors of language development and plays a vital role in normal language development. Gesture and language are developmentally linked in children with language impairments as much as they are related in typically developing children.

From the beginning of life, children develop in many ways, physically, cognitively, and socially. As the child develops across these areas, the child becomes more and more able to begin communication with others. Language development and the ability to communicate with others is an intricate process of development (Angell, 2010). In order for children to develop language abilities, skills associated with physical, cognitive, and social development must develop in a coordinated way, so that they can be integrated or combined to create meaningful connections with the child's environment. For example, once a child learns to pull to standing and begins to explore the environment, the child is exposed to new stimuli, which in turn can enhance cognitive and language development (Shulman & Capone, 2007).

2.1.4 Cognitive Development

Cognitive development refers to the progressive and continuous growth of perception, memory, imagination, conception, judgment, and reason; it is the intellectual counterpart of one's biological adaptation to the environment (Nicolosi, Harryman & Kresheck, 1989). Cognition also involves the mental activities of comprehending information and the process of acquiring, organizing, remembering, and using knowledge

(Owens, 2008). Paiget (1954) described cognitive development under four different stages. First stage is called as sensorimotor, starts at birth to 2 years of age. Second stage is preoperational stage exists between 2 to 7 years, concrete stage is the third stage, between 7 to 11 years and formal stage between 11 to 15 years. The cognitive development in sensorimotor stage is extraordinary (Shulman & Capone, 2007). Because of this Piaget further divided sensorimotor stage of cognitive development into 6 different stages. As main focus is on early cognitive and language development, it is important to look closely at these six stages, as the foundations of communication behavior are formed in this period. It helps us to know links between the various aspects of cognitive, motor, and linguistic development. Table 2 shows the stages of sensorimotor development as described by Piaget (1954).

Stage	Age range	Features
Reflexive	Birth to	A child interacts with the environment purely through
	2 months	reflexes such as sucking, looking, or grasping.
Primary	2-4 months	A child begins to coordinate sensory input and new
Circular		motor patters. For example, child may accidentally
Reaction		suck his thumb and enjoy the sensation. He later
		repeats the actions
Secondary	4-8 months	Input – output patterns (schemas) become more
Circular		complex and externally focused. A child may put a toy
Reaction		in his mouth repeatedly to trigger a response in the
		environment.

Table: 2Piaget's stages of sensorimotor development: Birth to 2 years of age

Coordination	8-12 months	Intentional behavior is evident in this stage. A child
Of Reaction		will also combine schemas to achieve a desired effect.
		A child will imitate the behavior of others. A child
		recognizes the objects have particular qualities.
Tertiary	12 – 18	A child will explore new ways to achieve purpose. For
Circular	months	example, the child may knock over a container to
Reaction		access something inside. The child is usually
		beginning to walk, and has great access to new aspects
		of the environment. Words also emerge, which give
		the child great power and control in this stage as
		communication is more sophisticated.
Early	18 – 24	Expanding language skills gives the child more ability
Representation	months	to control the environment. The child can now talk
al Thought		about events and things that are not present using
		words.

(Ref: Shulman B. B., & Capone, 2007)

2.1.5: Motor development

Each developmental milestones is marked by intricate changes in motor and communicative skills. Motor development includes development of both gross motor and fine motor skills. Gross motor skills refers to movements involving large muscles used for sitting upright and leg muscles used for walking. Smaller muscles, such as those in the fingers or tongue, are used for fine motor tasks, such as writing or talking respectively (Shulman & Capone, 2007). WHO Multicentre Growth Reference Study Group (2006) conducted longitudinal study on more than 800 children as an international study. Results include development of motor skills from birth to 18 months. In this study author gives a

range of age in months to each skill than a specific age at which motor skills develop is given in Table 3.

Table: 3

Development of motor skills

Sl no	Motor skill	Age range
1.	Sitting with support	4-9 months
2.	Standing with assistance	5-11 months
3.	Hands-&-knees crawling	5 ¹ / ₂ to 13 ¹ / ₂ months
4.	Walking with assistance	6 to 14 months
5.	Standing alone	7 to 17 months
б.	Walking alone	9 to 18 months

2.1.6: Social Emotional Development

In order to be an effective communicator a person should have good social behavior. This is true also with infants (Shulman & Capone, 2007). Infants have a preference for faces, and it is through this preference that they establish the foundation for early social relationships with others. Children establish imitation skills by studying others in their environment. This practice begins as imitation of facial expressions (such as smile) and then develops into imitation of more complex behaviors, such as actions or objects (e.g., throwing a ball, emptying a container), specific motor patters (e.g., clapping, dancing) and eventually speech and language development.

Self-regulation is an important dimension in social. Development of regulatory capacity evolves from control of physiological responses to control of emotional state of attention (National Research Council & Institute of medicine, 2000). The infant's ability

to control respiration, heart rate and temperature will be less at birth, as age advances, self regulation helps to control these factors. Similar is the picture for response to different sensory stimuli like visual, auditory, tactile and with sleep-wake cycle. A strong social-emotional foundation is the key to the development of verbal language behavior. Communication development does not take in isolation but in conjunction with other developmental milestones.

Table: 4

A (30)	Communication	Socialization
Age	Communication	Socialization
(months) 0.	CriesMakes noncrying speech-like	Recognizes nippleComforted by human voice
	sounds (usually while eating)	Smiles reflexively
1.	Responds to human voiceCries for assistance	Establishes eye contactQuiets when held
	 Makes pleasure sounds 	Adjust body to person holdingSmiles
2.	 Distinguishes different speech sounds Makes more guttural sounds 	 Excites when seeing people Prefers touch and oral stimulation to social stimulation Unselective social smile
3.	 Coos single syllables (CV) Turns head towards voice Responds vocally to others Makes vowels (predominantly) 	 Visually discriminate different people and objects Recognizes mother Selective social smile
4.	 Babbles strings of consonants Varies pitch of vocalization Imitates tones Smiles at person speaking to them 	 Pays attention to faces Discriminate different faces Looks in direction of person leaving room Anticipate being lifted Laughs when played with
5.	 Vocalizes to toys Discriminate angry and friendly voices Experiments with sounds Imitates some sounds Responds to name 	 Discriminate parents and siblings from others Imitates some movements of others Displays anger when some objects are taken away

Development of communication and social behavior

	• Smiles and vocalizes to image in a mirror	
6.	 Varies volume, pitch and rate of vocalization Vocalizes pleasure (squeals) Vocalizes displeasure 	 Differentiate social responses Prefers people games (i.e. peek-a-boo) Explores face of person holding them
7.	 Play vocally Produces several sounds in one breath Listens to vocalization of others Recognizes different tones and inflections 	 Resists Teases (start of humor) Laugh at funny expression Raises arms to be picked
8.	 Recognizes some words Repeats emphasized syllables Imitates gestures and tonal quality of adult speaker Echolalia 	 Act positively towards peers Attach to parent (mother) Shouts out for attention Responds to self in the mirror May prefer to be others (not left alone)
9.	 Produce distinct intonational patterns Imitates non speech sounds Uses social gestures Uses jargon 	 Explores other children "Performs" for family (i. e. "so big") Imitate play of others Plays action games May respond to name + no Attends to conversation
10.	Imitate adult sounds (if in repertoire)Obeys some commands	• Becomes aware of social approval and disapproval
11.	• Imitates inflections, rhythms, facial expressions	 Seeks approval Anticipate parents goals for child's action and tries to change it (protest or persuasion)
12.	 Follow simple motor instructions with visual cues. Reacts to "No" Speaks one or more words Mixes word and jargon (Angell. C., 20)	 Expresses people preferences Expresses different emotions

(Angell. C., 2010)

Development of communication, although follows a regular pattern, is not uniform. Owing to certain demographical factors that could have an influence on an infant's developmental stages, there are likely to be differences in the ages and stages of development. For example, as shown in Table 4 motor development has a range because one child may start at one point and other in some other point. E.g., a child may start sitting with support at the age of 6 months and another at either earlier or later. There are lots of factors will creates the difference in development of communication. Gender, social background, education of parents, socio-economic status, birth order of a child, in addition to certain inherent factors like hearing, motor, social, cognitive skills could exert its own influence on communication development. Battin & Haug, (1970) reported that a few intrinsic and a few extrinsic factors could affect development of communication in infants and children.

Tabl	10.	5
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Factors within himself	Within child's environment
Adequate intelligence	Love, acceptance and security.
Near normal hearing	Healthy intrafamily relationship
Properly functioning speech mechanism	Allowance for, challenge to, and stimulation of the child
	to function at this age level
Average auditory memory and attention span	Allowance of the child to function within his capabilities
	without undue pressure or unreasonably high standards.
Freedom from chronic illness	Discipline which is appropriate and consistent
Freedom from brain injury	Sufficient time, opportunity and encouragement for self
	expression.
Good emotional balance.	Stimulation with rich language experiences so that the
	child will have something to talk about.
	Good speech standards within the family.

Intrinsic and extrinsic factors for communication development

(Battin & Haug 1970)

Bereiter & Engleman, (1966) and Deutsch, (1967) said that children from deprived backgrounds exhibit thought processes and oral communication skills that are generally inferior to those of middle-class children. Williams (1969) reported that there are restriction and short comings in the language development of children from lower socio-economic group. Madhu, Deepa, Harshan, Suhas and Chengappa (2009) studied language development in 720 children from different regions of Karnataka (a state of India) and concluded that girls show faster development than boys, in comparison to rural children urban children had good number of vocabulary and less complex sentences. They reported even social economic background of the children will be having effect on language development. In view of the influence of demographic factors on communication development, it is necessary to examine if there are differences in communication development among such children.

2.2 Assessment of Communication

There are different ways to assess communication skills in infants. Checklists, scales, tests and inventories are the most often employed tools in clinical and field set-up. Checklist helps to examine the presence of a few specified behaviors in an individual, where as tests are used for the purpose of diagnosis of a condition. Purpose of a language test could be either for screening to check if children have any problem with language development or for diagnosis and quantification of behavior(s) in a condition.

i) Receptive Expressive Emergent Language Skills, REELS (Bzoch & league, 1971) is a scale for assessment of language development that assesses verbal language ability of a child in comprehension and expression domains. It assesses a child from zero to thirty six months of age. While the first year age range is divided into one month interval, the

second year with 2 months age interval and at third year with 3 month age interval periods. Each interval includes three skills in both comprehension and expression domains. It assesses the language ability in the phonology, semantic and syntactic domains only and does not consider the pragmatic or cognitive dimensions as a part of the assessment.

ii) Denver Developmental Screening Test II (DDST-II) developed by William & Josiah (1984). It is a performance based assesses children's development, between one month – six year. It assesses four areas of functioning: fine motor-adaptive, gross motor, personal-social and language skills.

iii) The Rossetti-Infant Toddler Scale (Rossetti, 1990) is a scale assesses the preverbal and verbal domains of language development (interaction, attachment, pragmatics, gesture play and language development and language expression). It is designed for the children from birth to 36 months. It is administered based on a child in 3 months groupings with approximately 30 items in each group. The items are compilation of author's observation, description from developmental hierarchies of behaviors recognized and used by leading authorities in the field of infant and toddler assessment. The scale is criterion referenced and measures the child's communicative behavior on direct observations and parental reports obtained through questionnaire.

iv) The communication and symbolic behavior scale (Wetherby and Pizant, 1993) is a norm referenced standardized instrument used to assesses infants, toddlers and preschool children. It is an interactive assessment designed to provide opportunities for children to communicate non-linguistically with gestures and vocalizations during play routines with

adults. It is administered on children with functional communication age of 6-24 months to 72 months. The test comprises of 22 rating scales grouped under 7 heads namely; communicative functions, gesture communicative means, verbal communicative means, vocal communicative behaviors, reciprocity, social-affective signaling and symbolic behavior.

v) Preschool language scale-4, PLS-4, (Zimmerman, Steiner, and Pond, 2002) is a Preschool Language Scale that is designed to identify young children from birth to 6 years 11 months old who have a language disorder or delay. It consists of two subscales for the assessments of auditory comprehension and expressive comprehension respectively. It also provides three supplemental measures, which include an articulation screener, a language sample checklist and a caregiver questionnaire.

Checklists, scales and tests includes skills related to verbal language (for example: REELS), and many tests fail to account for non verbal communication. Checklist and sc ales generally include critical items to decide on the presence or absence of the problem, while tests having corporate representational skills, the presence or absence of which indicate normal development of impairment. Not all tests for language account for the other related behaviors like cognition, social communication, play behaviors etc., since communication is strongly related to these above mentioned behaviors, it is necessary to assess development of language as well as these associated behaviors. Therefore, to overcome this problem language inventory is developed by a few investigators, one such being Mac Arthur Communication Developmental Inventory (1993).

Inventory includes items for a detailed profiling of developmental pattern under different domains. It also includes associated factors which are likely to influence communication development. Inventory helps in both assessment and in intervention. Inventory serves as a guide for goal setting, by finding hierarchy for items to develop. E.g., Mac Arthur's Communication Developmental Inventory CDI (Fenson et al, 1993). CDI is used by many investigators to study communication development in Children. Fenson, Dale, Reznick, Thal, Bates & Reilly (1993) developed a Mac Arthur communication developmental inventory. They included all the domains of communication, like reception, expression and cognition skills of communication. The age range is divided into two groups, eight to sixteen months and sixteen to twenty four months. Inventory is divided into three parts -the early phrases, the vocabulary, and the nonverbal communication. Early phrases include the phrases which the infant understands in that age. E. g., are you hungry? Want to go out? This section assesses only comprehension ability of the child. Vocabulary section is further divided into many parts according to different lexical categories like body parts, family members, food items, etc. In this section both comprehension and expression of lexical items are evaluated. Nonverbal communication part includes gestures, games, routines, adult imitated activities. This section assesses gestural communicating ability of the child. Authors have provided the normative values for each age group and separately for male and female children with which a clinician can understand whether a given child is following normal developmental pattern or not (See Appendix I for MacArthur Communication Developmental Inventory).

2.3 Assessment of language in the Indian Context

Receptive Expressive Emergent Language Skills, REELS (Bzoch & League. 1971) is main test which is to measure the language ability in Indian population. It assesses child for zero months to thirty six months. REELS was standardized on Indian population (Madhu, Deepa, Harshan, Suhas and Chengappa, 2009). Authors administered REELS test on 720 typically developing children in Karnataka and make necessary changes in REELS according to the Indian Developmental pattern.

The scales of early communication skills for hearing impaired (Moog & Geers, 1975) which measure the speech and language development of the hearing impaired children age range between 2 years to 8 years 11 months. Test divided into four sections-receptive language skills, expressive language skills, nonverbal receptive language skills and expressive language skills. There are two levels specified in receptive and expressive language skills section as A and B. 'A' level items describe the use of skills in structured situation and 'B' level items represents use skills spontaneously. The scales of early communication skills for hearing impaired was standardized on Indian population of hearing impaired by Swati (1993).

Preschool language scale (Vaidyanathan, 1984) assesses early communicative behavior of children in the domains of comprehension, expression and cognition using questions addressed to parents or caregivers. This was specifically intended for children in the age of 9 months to 36 months. It consists of twenty seven items grouped under 9 different age groups depending on age at which the aspects of language and cognition emerge. Unlike other language scales, this emphasizes on the pragmatic aspects and enables to identify language delay/ disorder and aids to plan appropriate intervention programs. The items from the preschool language scale were adapted to devise the 3 D LAT (Herleker, 1986). The task was framed as questions and rest of the frame work was similar to Vaidyanathan's scale. These scales measure the verbal language ability of children and pay no focus on the nonverbal language skills of preschool children. Assessment tools solely evaluating nonverbal language development are very limited, although, some tests have included assessment of non verbal language development along with verbal development. Usha (1986) found out effectiveness of 3 D LAT on hearing impaired population, whereas Kamalini, (1986) studied Mental retardation Population using 3D LAT.

Behavior Assessment Scales for Indian Children with Mental Retardation, BASIC-MR (Peshawaria and Venkatesan, 1992). A test which was developed for identification of Mentally Retarded children. This scale includes mainly 2 parts, Part A has 280 items spread over 7 skills behavioral domains and Part B has 75 items pertaining to problem behaviors. BASIC-MR focuses on older children (3-18years) than the infants, toddlers, and preschoolers. To overcome this problem Venkatesan (2002), developed a activity checklist for preschool children with developmental disabilities (ACPC-DD). It assesses the children between zero to seventy two months. The ACPC-DD consists of 400 items distributed evenly across 8 behavioral domains that are relevant to daily activities of infants, toddlers, and preschool aged children with developmental disabilities.

India is a multilingual country where we can find 5 different language families with more than 100 languages (Mallikarjun, 2002). There is another checklist which is developed for multilingual children is, language acquisition in multilingual children (Prema & Geetha, 2005). It assess children between nine months – thirty six months. Skills are classified under three domains, language domain, behavioral domain and developmental domain. Language domain includes skills with respect to communication. It considers both verbal and nonverbal language skills. Behavioral domain includes skills with respect to associated problems like learning disability, Mental retardation, Cerebral Palsy and Developmental domain skills with respect to different developmental domains like sensory, gross and fine motor and cognitive development. There are checklists and tests developed for assessment of communication skills in the Indian context. Table 6 shows the details of available checklists and tests.

Table 6

Sl	Title of test	Authors/Year	Age	Content areas
No			range	
1.	A test for assessing	Vijayalakshmi	1-5	It assesses comprehension and
	syntax in Kannada	(1981)	years	expression of a wide spectrum
				of grammatical categories and
				sentence types.
2.	A language test in	Kathyayani.	5-8	It evaluates various concepts of
	Kannada for	1984	years	expressionin terms of nouns,
	Expression in			verbs, gender, markers, tense
	Children			markers.
3.	A Screening Picture	Sreedevi, 1988	3-6	Helps in screening languge
	Vocabulary Test in		years	acquisition of Kannada speaking
	Kannada			children. Used as a clinical tool
				to identify comprehension
				deficiencies in language
				disordered children.
4.	A Screening Picture	Bhuvaneshwari,	3-6	Mainly a comprehension test.
	Vocabulary Test in	1993	years	Helps in identifying children
	Kannada			with language delay or language
				disorders
5.	Comprehensive	Navitha, 2009	3-6	Assesses language abilities-
	language assessment		years	reception, expression and
	tool for children (3-6			cognition.
	years)			

Communication development in an infant starts early in life. By first year of age child starts using meaningful words. There is rapid growth in development during the first year of life. Verbal and nonverbal communication develops in parallel in the early years. Communication skills develop in conjunction with development of other related skills. Among the tools that are developed to assess the development of communication, few focuses on nonverbal communication and much fewer number focus on the development of communication skills during the first year of life. Besides all these, majority of tests are developed and standardized for Western population. Owing to socicultural and linguistic differences use of such tests for Indian population is not appropriate. Therefore there is need to develop a tool which is descriptive and incorporates both verbal and nonverbal behaviors for Indian population.

Chapter III

METHOD

The aim of the study was to develop a communication inventory for infants in the age range 6 to 12 months. It includes prelinguistic skills, comprehension of early phrases, comprehension and expression of vocabulary and non verbal communication.

Participants were selected for the study based on the following criteria:

3.1: Inclusion criteria

- a) Infants in the age range of 6 months to 12 months
- b) Infants from the urban population who are located in Mysore city
- c) Infants without any sensory problems
- d) Infants with no other associated problems
- e) Basic metric level education in parents
- f) Infants from Kannada speaking families

3.2: Number of participants

30 infants in the age range of 6 to 12 months from Mysore city were selected as participants for the study. The participants were divided into three groups in the age range of 6-8 months, 8-10 months and 10-12 months.

	Tabl	e:	7
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	oants

Age range	Sample size	Total	
	Male children	Female children	
6-8 months	5	5	10
8-10 months	5	5	10
10-12 months	7	5	12
Total	17	15	32

3.2.1. Tools for the study

3.2.1.1: Indian high risk register

Indian high risk register is developed by the All India Institute of Speech and Hearing (2000-2001). It includes pre- peri- and post- natal risk factors which affects communication development. The high risk register contains factors that affect hearing development, factors affecting motor development and communication development. It also includes the HRR for nonmedical professionals and medical professionals. The risk register has two parts- HRR for 0-28 days of birth and HRR for 29 days – 3 years.

3.3.2.1: Screening tools

Screening was done to rule out any sensory, motor and cognitive abnormalities and to make sure child was following normal developmental pattern. Screening includes general observation, auditory screening and visual screening. a) A general observation was done to make sure that children do not have any physical abnormality.

b) Hearing screening was done with calibrated noise makers that include drum and bell. Drum to check hearing sensitivity in low frequency region and bell in high frequency regions. Drum produced 50 dB sound at 2 feet distance and bell produced 45 dB sound at 2 feet distance. Name calling with soft voice was also used as part of hearing screening. Behavioral responses like searching for sound source and localization to sound source were expected.

c) Screening for vision was carried out with light from torch and use of colorful objects.

Torch light was passed on the wall in front of children in dark room setup, eye tracking was done using colorful objects like ball and doll. Eye movement of the child was observed during screening.

3.3.3: Communication Inventory

Communication Inventory for Infants (CII, described in detail in the following section) developed in the study was used to measure communication skills of infants. The CII includes three sections prelinguistic skills, vocabulary section and nonverbal communication.

3.3.3.1 Development of the inventory

An inventory is prepared based on the literature on communication development and a few models chosen from the existing tools. Keeping the framework proposed by Mac Arthur, the CII was developed with three main components that are reported be essential for communication (See Appendix II for more details).

- i. Early communication skills
- ii. Early vocabulary
- iii. Gestures and action

Section I in includes early communication skills mainly the comprehension part like attention to the speech of the others, attention to music. This part is again divided into two sections: prelinguistic skills and early phrases.

The prelinguistic skills section part it includes the basic skills that help in language development such as attention to speech, intention for communication, memory skills, perception of emotions by facial expressions and variations in voice. The section on early phrases includes phrases such as 'look here', 'are you hungry? ', 'want to go out', 'throw the ball', for which children develop comprehension early in life.

Section II includes vocabulary, the words which develop early in life. Lexical categories such as family members, body parts, food items, birds and animals, vehicles, toys, rooms and furniture, house hold items, dress materials, action verbs, words indicates time, questioning words, adjectives, pronouns, prepositions and others. Section II assesses both comprehension and expression.

Section III includes gestures and actions. The gestures such as indicating 'no', 'yes' define early communication characteristics in addition to a few actions and play behaviors such as 'peek-a-boo' using real objects and adult imitated objects.

Summary of CII developed in the study is described in the following paragraph. Communication Inventory for Infants (CII) which includes three sections. Section 1, includes few early emergent behaviors; section 2 different lexical categories; and section 3, includes nonverbal communication. Section 1 is further divided into A and B parts, Section 1 A includes prelinguistic skills and Section B includes early phrases. Section 2 includes various lexical categories like body parts, food items, vehicles, common objects, etc., Section 2 has common components for both comprehension and expression. It includes words like quantifiers, time related words and question words. Nonverbal skills in the Section 3 were divided under 4 headings, those are first communicative features; games; actions and objects and imitating adult like actions.

3.3.3.2: Translation of items from English to Kannada

As the objective of the present research includes adaptation of Mac Arthur Communicative Development Inventory for infants from Kannada speaking family, the inventory was translated to Kannada language from English language. This translated inventory was given to three native speakers of Kannada language who are qualified post graduates in speech language pathology to check for accuracy of translated items (see Appendix III for sample response sheet). The responses received from the judges showed good agreement on all the items except on /his/ and /her/ items. Modifications were made with mutual discussion with the judges and the CII was finalized.

3.3.4: Pilot study

A pilot study was conducted on two children in each age group. Inventory was given to the mothers of infants (selected for the study) to indicate the presence or absence

of communicative skills listed in the inventory. The modifications as listed in Table 8 were made after the pilot study as the majority of mothers indicated absence of development of the listed items. The items removed from the CII before finalizing the inventory are shown in Table 8.

Table 8

Sl. No	Sections	Number of Skills	Skills after
		before pilot study	pilot study
1.	Part I a- Prelinguistic skill	20	19
2.	Part I b-Early phrases	31	28
3.	Vocabulary	290	244
4.	Part III - gestures & actions	44	38

Modifications in sections of CII after pilot study¹

3.4 Procedure

Brief history of the infant (see Appendix IV for details) that include general information of the child and parents, educational status of parents, annual income of the

⁽Part I a- Prelinguistic skill: sustenance of interest for upto a full minute in looking at a person or picture when named

Part I b-Early phrases: hold still, spit it out, this little dolly

Vocabulary: boy, girl, person (family members); ears, nose, teeth (body parts); curds, ice cream (food items); sparrow, squirrel, birds, donkey, frog, honey bee (animals and birds); train, airoplane (vehicles); bubbles (toys); coat, boots (dress); photos (house hold items); draw, help me (action verbs); yesterday (words about time); how much, when (question words); dry, old (descriptive words); more, another, few (quantifiers); and farm, river (other).

Part III - gestures & actions: wipe face or hands with a towel or cloth; put on necklace, bracelet or watch; talk to toy; under the heading of actions with objects. Put key in door or lock; water plants; wash dishes;)

parents, family background, birth and medical history of the infant was collected in addition to information on communication skills with the help of CII.

3.4.1.: Scoring of data: Response from mothers on the CII was scored as 'one' for presence of the specific behavior elicited by the item and 'zero' for the absence of the skill in infants. Total number of skills present in each infant and all the participants in each of the three groups were calculated from the responses of mothers.

3.4.2.: *Ethical procedure*: A written informed consent was taken from the parents (Appendix V). A booklet of inventory was given to the mothers of the children and requested to read the whole inventory and to indicate the presence or absence of communications skills in their infant. Mothers were appraised about the different sections of the CII before collecting data on infants in order to familiarize with different items on the inventory. The data obtained was computed and coded for further analysis.

3.5: Statistical analysis

SPSS 10.0 software was used to do statistical analysis for the study. Descriptive statistics was done to find out Mean and Standard deviation of communication development in each age group. One way ANOVA was used to evaluate the group difference as well as difference, if any, in all the sections of CII across different age groups and between gender. Mann-Whitney U test was used to check for specific group differences, if any. Reliability test was administered to check for test and retest reliability using Cronbach's alpha test for reliability.

CHAPTER IV

RESULTS AND DISCUSSION

Communication includes both verbal and non verbal language. A communication inventory includes items to evaluate the development of communication with other related factors that facilitate communication development. The Communication Inventory for Infants (CII) developed in the present study includes verbal language in the form of comprehension and expression of lexical categories, nonverbal language like imitating adult activities, prelinguistic skills and play behavior related to communication development.

30 infants in the age range of 6 months to 12 months were considered as participants to the study. Participants were selected from Mysore city, part of Karnataka state. All participants were taken from Kannada speaking families. Participants were divided into three groups based on their age. The mothers were requested to compile information on the basis of presence or absence of communication behavior in their infant keeping the CII as reference. Responses obtained from mothers were tabulated and subjected to statistical analyses.

i) Descriptive statistics

Descriptive statistics was done to find out Mean and Standard deviation of communication development in each age group. Mean and standard deviation of each age group across different domains were listed below in the Table 9.

Table 9

Mean and SD across different sections of communication inventory

Sections	6 – 8 m	onths	8 – 10 n	nonths	10- 12 n	nonths
	Mean	S D	Mean	S D	Mean	S D
Section 1 A Prelinguistics	10.90	1.66	13.90	1.37	15.17	1.99
(Max=19)						
Section 1 B Early phrases	7.50	3.38	15.60	3.27	19.90	4.07
(Max=28)						
Section 2 (Max=245)						
Vocab Comp	39.80	19.50	73.00	13.85	116.92	34.98
Vocab Exp	5.70	2.16	12.50	1.84	12.92	2.90
Section 3 Nonverbal	10.40	3.68	13.60	2.32	23.00	5.64
Comm (Max=38)						

(Total number of items=330)

The Mean and SD scores indicated that the 10 - 12 month old infants showed presence of communication skills on all the sections of CII followed by 8 - 10 months group, while 6 - 8 months age group scored lowest in all domains infants was better in. In section 2 i.e., comprehension, infants Children in the 6 - 8 month age group were found to achieve around 40 words of comprehension which was lesser than the 8 - 10months group which scored 73 in comprehension vocabulary. The 10 - 12 months age group obtained the highest score 117 words in comprehension vocabulary. Standard deviation was higher in this section. Similar pattern was followed in other sections of communication inventory. In section 2 vocabulary Expression, the 10 - 12 month age and 8 - 10 month age group was scored 12.92 and 12.50 respectively. That means these two groups were not differing in turns of mean, where as standard deviation of 10 - 12 months (2.9) was more compared to 8 - 10 months age group (1.84). The 6 - 8 month age group was last with 5.7 as expressive vocabulary. Nonverbal communication part also followed similar pattern where infants in 6-8 months, 8-10 months and 10 -12 months groups showed mean scores of 10.40, 13.60 and 23.00 respectively. Figure 1 shows the development of communication skills in infants across different sections of CII. In general, high SD score for vocabulary comprehension (section 2) suggests the possibility of other factors influencing the development of comprehension skills which is discussed in the later section under relationship among demographic factors and communication development.

ii) Analysis of variance

Variance across groups and sections of CII was analyzed by employing. One way MANOVA was used to test for significant difference across age groups. Mann-Whitney U test used as Post hoc test, to find out group differences, if any, for all sections of the communication inventory. Results show that in section I A (prelinguistic skills) and section 3 (expression), the 6-8 month group differs from the other two higher groups (p > 0.9) whereas in section 3 (nonverbal communication), the 10-12 month group differs from other two lower groups, the difference being statistically significant (p > 0.9). In section 1 B (early phrases) and section 2 (comprehension), all the three groups show significant difference (p > 0.9) among each other showing a clear developmental pattern. Table 10 and Table 11 show the group-wise and skill-wise differences.

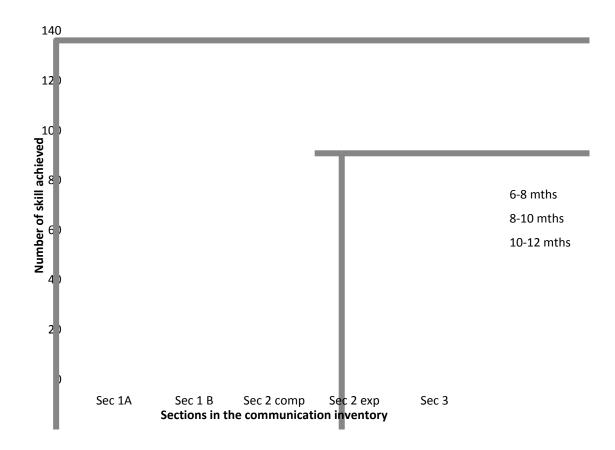
Table 10

Sections	6-8 months	8-10 months	10-12 months
Section 1 A	1.00	0.10	0.10
Section 1 B	1.00	1.00	1.00
Section 2 comprehension	1.00	1.00	1.00
Section 3 expression	1.00	0.62	0.62
Section 3	0.09	0.09	1.00

Table 11Summary of Group-wise and skill-wise differences

S.No	Sections	Significant difference noted
1.	Section 1 A	Group 1 differs from Group 2 and Group 3 (1.00)
2.	Section 1 B	All three groups are significantly different (1.00)
3.	Section 2 A	All three groups are significantly different (1.00)
4.	Section 2 B	Group 1 differs from Group 2 and Group 3 (1.00)
5.	Section 3	Group 3 differs from Group 1 and Group 2 (1.00)

Figure 1 Communication skills in three groups of infants



iii) Test-retest Reliability Assessment

To check test retest 10 percent of the population was retested on CII. Reliability was checked after one week of first administration of communication inventory. Cronbach's alpha test was used to measure reliability. Reliability test revealed that reliability coefficient of 0.98, that means high correlation was found to first and second administration of communication inventory.

Shulman & Capone (2007) mentioned eye contact, joint attention and turn taking behaviors as the prelinguistic skills which develop during perlocutionary and illocutionary stages. Which are included in section 1 A. These are the prelinguistic skills which facilitate development of communication. As we can see above is section 1 A 6 - 8 month group differ from 8- 10 and 10-12 month age groups, where 8 - 10 and 10 - 12 month age groups did not differ with respect to acquisition of prelinguistic skills. The CII communication inventory may be either inadequate to assess the prelinguistic skills that develop in 8-10 month or 10 - 12 month age group or that the development of prelinguistic skills for communication in infants reach a plateau by this age. However, the present study does not address this question as it is designed only to develop, translate and adapt an Inventory. Section 1 B (early phrases) showed normal developmental pattern where comprehension towards phrases increased along with age. Fenson et al (1993) studied communication development and reported that comprehension towards early phrases increases with increasing in age.

As part of the communication, verbal language was divided into two parts that is comprehension and expression. In comprehension there was a growth seen with age. All the groups were differing form other groups. On an average 8 month old children comprehend 40, 10 month old children comprehend 70 and 12 month old children comprehend170. Fenson et al (1993) studied vocabulary development and reported children with age of 8 months, 10 months and 12 months acquired 37, 60 and 85 words respectively. Present study is consensus with the Fenson et al (1993) in early months that are till 8 months, after 8 months there was a difference acquisition of vocabulary. Indian children acquired vocabularies faster than children in the western countries. Cultural differences is the one of factor for difference language acquisition (Battle,1998). India is a multilingual country where there is different type of child rearing practices compare to western population(Westby, 1994) and there is different type of language stimulation at families than western population (Freedman, 1974).

In section 2 B (expression) part, 6 - 8 month age group infants differ from 8 - 10and 10 - 12 months, but no difference was found between 8 - 10 and 10 - 12 month old age group. Fenson et al (1993) reported there is increase in expressive vocabulary with age. As reported by Fenson et al (1993) children of 12 months produces around 12 words. Present study is in agreement with Fenson et al (1993) as the mean scores on expressive vocabulary was 12. 96, slightly higher than reported by Fenson (1993).

Section 3 was (nonverbal communication) showed clear pattern of development and there was no significant difference between the 6 - 8 month and 8 - 10 month group whereas 10 - 12 month old infants differed from the other two lower groups. Nonverbal communication is a part of social behavior and therefore, it may be attributed to exposure to society with age that facilitates nonverbal communication (Battin and Haug, 1970). This could be one of the reasons for the significant difference seen in third group. While there is an increase in comprehension and expression of verbal skills, there is also a parallel increase in nonverbal communication skills as reported by McNeil (1992). Suggesting that both complement each other.

Table 12

Age	Section 1 A	Section 1B	Section2 Comp	Section 2 exp	Section 3
6-8 mon	0.74	0.16	0.83	0.82	0.23
8-10 mon	1.00	0.66	0.83	0.16	0.19
10-12 mon	0.8	0.56	0.87	0.93	0.51

Gender-wise differences across infant groups and sections of CII

Mann-Whitney U test was administered to find significant difference between gender across all age groups in all sections. Test result showed that there was no statistically significant difference for gender across all the age groups and the sections of CII except on section 1 A (prelinguistic skills) in the 8-10 month group (p > 0.9) and section 2 (vocabulary expression) in 10-12 month age group (p > 0.9).

Fenson et al (1993) reported that there is gender difference in language acquisition. They also said that language development is faster in female children than male children. Whereas present study is not agreeing with previous studies, which showed that there is gender difference in male and female children.

As reported earlier many factors like, education of parents, age of mother, socio economic status of the family, order of the child will influence communication development. For education of the parents, participants were divided into three groups like under graduated, graduated and post gradated. In case of age of the mother, it is divided into mother with below 25 of age an mother aged more than 25 years. For socio-economic status it is divided into 3 groups income below Rs. 10,000, between Rs.10,000 – 1,00,000 and more than Rs. 1, 00, 000. Order of the child was divided into first child and second child. Mann-Whitney U test was administered to find difference between

these groups. Results showed that there was no significant difference in any of the factors. Subgroups of each factor and number of participants were depicted in Table 13

Sl no	Influencing factors	subgroups	Number of participants
1.	Education level	Under graduated	14
	of the parents	Graduated	14
		Post graduated	4
2.	Age of the mother	< 25 years	8
		25 years and more	26
3.	Annual income	< 10,000	0
	of the family	10,000 - 1, 00,000	21
		1,00,000 and more	11
4.	Birth order of the child	First child	20
		Second child	12

Table 13	
Subgroups in demographic	parameters

Culture is communication; communication is culture (Hall, 1957). Culture has an effect on language development and intervention procedure (Battle, 1998). Many other studies reported that communication development will be influenced by many other factors like development of other skills like motor, cognitive, hearing (Boone & Plante 1993). In the present study demographic parameters did not show any effect on communication development. Reasons may include less number of participants in each group and large range of standard deviation.

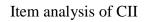
iv) Item analysis of CII

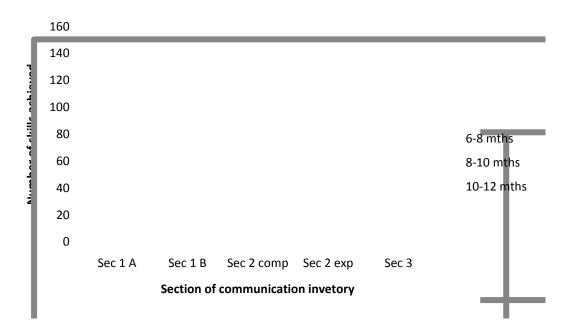
Item analysis is procedure was used to measure effectiveness of individual test item. Item analysis was done to see order of emergence of different skills during developmental period. Manual analysis method is used to do item analysis. On the basis of the scores obtained for each of the item on CII, those items which derived a positive score from more than 50% of participants in each of the age group were considered for the final list. Number of items present in each age group after item analysis is shown in Table 14. (See Appendix VI for details).

No. of items in CII after Item Analysis			
No. of items in original CII	6 - 8	8 – 10	10 – 12
No. of items after Item analysis	months	months	months
Section 1 A = 19 items	13	15	17
Section 1 B= 28 items	6	18	26
Section 2 Comp = 245 items	32	75	137
Section 2 Exp = 245 items	8	10	10
Section 3 nonverbal Comm= 38	10	22	29

Table 14

Figure 2





Chapter V

Summary

Communication is a phenomenon. When it does not happen in the oral mode, the hands, fingers and facial gestures are used for communication (Goldin-Meadow, Mordford 1985). There are two modes of communication- verbal and nonverbal. Verbal and nonverbal communication occurs simultaneously in typically developing children. Nonverbal communication is most effective in case of young children (below one year) as well as children with developmental delay. It is an area which is less researched compared to verbal communication as majority of studies are focused on verbal aspect of communication. Communication starts developing early in life i.e., as soon as the child born with birth cry and by the end of the first year a typically developing child starts verbal communication. There is a critical period for the development of communication. Studies on infants have focused on phonological development, semantic development, and on the emergence of first words.

Checklist and Tests are used to check for presence or absence of communication in children. However, these tools fail to give information on communication ability of the children. Inventory is another type of assessment tool, which gives detailed information on communication aspects of children. Most of the assessment tools focus on verbal communication skills and very few on nonverbal skills that complement communication in infants and young children. Since tools that test verbal abilities alone fail to give complete information on communication aspects of children, there is a need to incorporate component of nonverbal communication skills in any tool that is designed for infants and young children. Besides these, majority of the tools available are developed for Infants in the Western population. Direct adaptation of such tools to the Indian population is not recommended because cultural influence on verbal and nonverbal communication necessitates designing and or adaptation of the tools for the specific population and purpose. Therefore, there is an immense need to develop Inventory for assessment which gives complete information on verbal and nonverbal communication of in infants.

Present study is focused on the development of inventory which account for verbal and nonverbal communication in 6 – 12 month old children. A communication Inventory for Infants (CII) was developed, which includes three sections. Section 1, includes few early emergent behaviors; section 2 different lexical categories; and section 3, includes nonverbal communication. Section 1 is further divided into A and B parts, Section 1 A includes prelinguistic skills and Section B includes early phrases. Section 2 includes various lexical categories like body parts, food items, vehicles, common objects, etc., Section 2 has common components for both comprehension and expression. It includes words like quantifiers, time related words and question words. Nonverbal skills in the Section 3 were divided under 4 headings, those are first communicative features; games; actions and objects and imitating adult like actions.

Study includes 32 participants form the Mysore city. Participants were divided into under three age group 6 - 8 months, 8 - 10 months and 10 - 12 months. First two include five male and five female children and third group includes 7 male and 5 female children. All the participants were screened to rule sensory, neurological and cognitive deficits. For the mother of children who passed the screening, communication inventory

was given. Mothers were instructed to indicate the presence or absence of activity in their ward for the items listed in CII. Reliability check was done on 10% of the population.

Statistical analysis with SPSS version 17.0 was carried out to see significant difference in each among the three groups as well as for different sections of CII. Descriptive statistics was done to see Mean and Standard deviation. One way MANOVA was used to see significant difference in each section across age groups under study. Mann-Whitney U test was used to find group differences if any, for all the sections and age groups.

Descriptive statistics revealed that there was a difference in mean scores across the different age groups and sections of CII. It showed a developmental pattern with mean scores increasing with increase in age, which means Mean was higher for the higher age groups than lower age groups. One way MANOVA indicated a significant difference in different section across age groups. Man-Whitney U test revealed that in Variance across groups and sections of CII was analyzed by employing. Results show that in section I A (prelinguistic skills) and section 3 (expression), the 6-8 month group differs from the other two higher groups (p > 0.9) whereas in section 3 (nonverbal communication), the 10-12 month group differs from other two lower groups, the difference being statistically significant (p > 0.9). In section 1 B (early phrases) and section 2 (comprehension), all the three groups show significant difference (p > 0.9)among each other showing a clear developmental pattern. Table 10 and Table 11 show the group-wise and skill-wise differences. Present study did not show any difference in a development of communication behavior across and gender, it failed to show effects of different contributing factors on communication development like socio-economic status

of the family, education of parents and order of the children. Present study highlighted assessment of communication as a whole, than parts like verbal and non verbal communication during early childhood. It also account for the other developmental aspects of children. It also focused on usage of inventory as a tool for assessment of communication than tests and checklist.

This study is clinically relevant in terms its application on both assessment and management of children below 12 months of mental age. It helps in checking the normal developmental pattern of communication, and in identifying children with delay in communication development. This also gives guidelines to select different lexical categories in hierarchy during intervention. This can be a reference guide for the parents, pediatricians, speech language pathologists and early child educators to check communication development in infants and young children.

Further Recommendations for Research

- Study may be replicated on children above 1 year and below 6 months
- *⊯* Study may be carried out with larger population
- Study may be done on rural children and children with communication disorders

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Appendix I

The MacArthur Communicative Development inventories:

Words and Gestures

PART I EARLY WORDS

A. First Signs of Understanding

Before children begin to speak, they show signs of understanding language by responding to familiar words and phrases. Below are some common examples. Does your child do any of these?

- 1. Respond when name is called. (e.g., by turning and looking at source).
- 2. Respond to "no no" (by stopping what he/she is doing, at least for a moment).
- 3. React to "there's mummy / daddy" by looking around for them.

B. Phrases

Will the child able understand these sentences.....?

Please mark (o) in front of the sentences which child seems to be understand

1.	Are you hungry?	10. Give it to	21. Throw the ball
2.	Are you tired/	mummy	22. Give me a kiss
	sleepy?	11. Give me a hug	23. Daddy's/mummy
3.	Be careful	12. Go get	's home
4.	Clap your hands	13. Good girl/boy	24. Change diaper
5.	Come on/ come	14. Hold still	25. Be Quite
	here	15. Let's go bye bye	26. Time to go night
6.	Do you want	16. Look / look here	night
	more?	17. Open your	27. This little piggy
7.	Don't do that	mouth	28. Want to go for a
8.	Don't touch	18. Sit down	ride?
9.	Get up	19. Spit it out	
		20. Stop it	

C. Starting to talk

 Some children like to "parrot" or imitate things that they've just heard (including new words that they are just learning, and/ or parts of sentences, for example, repeating "work now" after mother says "mummy's is going to work now."). How often does your child imitate words?..... 2. Some children like to go around naming or labeling things, as though proud of knowing the names and wanting to show this. How often does your child do this?

D. Vocabulary check list.

If your child just understands the word mark (0) in front of the word. If your child understands as well as says the word then mark (\checkmark) in front of the word.

1. Sound effects and animal sounds

Baa baa Choo choo cockadoodledoo mooo	ouch quack quack grrr meow	uh oh vroom woof woof yum yum
2. Animal names		
Animal Bear Bee Bird Bug Bunny Butterfly Cat Chicken Cow Deer Dog	Donkey Duck Elephant Fish Frog Giraffe Goose Hoarse Kitty Lamb Lion Monkey	Mouse Owl Penguin Pig Pony Puppy Sheep Squirrel Teddy bear Tiger Turtle Turtle Turkey
<u>3. Vehicles</u> Airplane Bicycle Bus	Car Firetruck Stroller	Motorcycle Train Truck
<u>4. Toys</u>		
Ball Balloon Block	Book Bubbies Bubble	Doll Pen Toy

5. Food and Drink

Apple	Food	Candy
Banana	Ice cream	Chicken
Bread	Juice	Cookie
Butter	Meet	Cracker
Cake	Milk	Cheese
Cereal	Noodles	Pizza
Coffee	Orange	Peas
Drink	Water	Spaghetti
Egg	Carrots	Toast
Fish	Cherrios	Rasin

6. Clothing

Beads	Diaper	Pants
Bib	Dress	Shirt
Boots	Hat	Shoe
Button	Jacket	Socks
Coat	Necklace	Sweater
Dress	Pajamas	Zipper

7. Body parts

Arm	Foot	Leg
Belly	Finger	Mouth
Cheek	Hair	Nose
Ear	Hand	Tooth
Eye	Head	Toe
Face	Knee	Tongue

8. Furniture and Rooms

Bathroom	Drawer	Refridgerator
Bathtub	Garage	Rocking chair
Bed	High chair	Sink
Bedroom	Kitchen	Stove
Couch	Living room	Stairs
Crib	Oven	Table
Chair	Play pen	TV
Door	Potty	Window

9. Small House hold Items.

Blanket	Hammer	Purse
Bottle	Keys	Radio
Bowl	Lamp	Scissors
box	Light	Soap
Broom	Medicine	Spoon
Brush	Money	Telephone
Clock	Paper	Toothbrush
Comb	Penny	Towel
Cup	Pictures	Vaccum
Dish	Pillow	Watch
Fork	Plant	
Glass	Plate	

10. Outside Things and places

Backyard	Park	Snow
Beach	Party	Star
Church	Pool	Store
Flower	Rain	Sun
Garden	Rock	Swinf
Home	School	Tree
House	Shovel	Water
Moon	Sky	Work
Outside	Side	Zoo

<u>11. People</u>

Aunty	Grandpa	Baby sister's name
Boy	Mummy	Shopkeeper
Brother	People	Baby
Child	Person	Babysister
Daddy	Sister	Man
Girl	Teacher	Lady
Grandma	Uncle	Child's own name

12. Games and routines

Bath
Breakfast
Bye or Bye Bye
Dinner
Don't
Hello
Hi

Lunch Night night Nap No Patty cake Peekaboo Please

Shh/Hush Thank you Wait Wanna/ Want to Yes

13. Action words

Bite	Go	Say
Blow	Help	See
Break	Hit	Show
Bump	Hug	Sing
Bring	Hurry	Sleep
Clean	Jump	Smile
Close	Kick	Splash
Cry	Kiss	Stop
Dance	Look	Swim
Draw	Love	Swing
Drink	Open	Take
Drive	Play	Throw
Eat	Pull	Touch
Fall	Push	Watch
Feed	Put	Walk
Finish	Read	Wash
Get	Ride	Wipe
Give	Run	Write

14. Words about time

Day	Night	Tomorrow
Later	Now	Tonight
Morning	Today	

15. Descriptive words

All gone	Careful	Dry
Asleep	Clean	Empty
Bad	Cold	Fast
Big	Cute	Fine
Blue	Dark	Gentle
Broken	Dirty	Good
Нарру	Nice	Tired
Hard	Old	Wet
Hot	Scared	Yucky
Hungry	Sick	Pretty
Hurt	Sleepy	Red
Little	Soft	
Naughty	Thirsty	

<u> 16. Pronouns</u>

I It Her His	Me Mine My That	This You Your
<u>17. Questions words</u>		
How	When	Why
How many	Where	Which
What	Who	
<u>18. Prepositions</u> Away Back Down In	Inside Off On Out	There Under Up
<u>19. Quantifiers</u>		
All	None	Same
Another	Not	Some
More	Other	

Part II Actions and Gestures

A.First communicative features

When infants are first learning to communicate, they often use gestures to make their wishes known. For each item below, mark the line (\checkmark) that describes your childs actions right now

- 1. Extends arm to show you something he/she is holding.
- 2. Reaches out and gives you a toy or some objects that he/ she in holding.
- 3. Points (with arm and index finger extended) at some interesting object or event.
- 4. Waves bye-bye on his/her own when someone leaves.
- 5. Extends his/her upward to signal a wish to be picked up.

- 6. Shakes head "no"
- 7. Nods head "yes"
- 8. Gestures "hush" by placing finger to lips.
- 9. Requests something by extending arm and opening and closing hand.
- 10. Blows kisses from a distance.
- 11. Smacks lips in a "yum yum" gesture ti indicate that something taste good.
- 12. Shrugs to indicate "all gone" or "where'd it go".

B.Games and routines

Does your child do any of the following?

- 1. Play peekaboo
- 2. Play patty cake
- 3. Play "so big"
- 4. Play chasing games
- 5. Sing
- 6. Dance

C.Actions with objects

Does your child do/try any of the following?

- 1. Eat with a spoon or fork
- 2. Drink from a cup containing of liquid
- 3. Comb or brush his/her own hair.
- 4. Brush teeth.
- 5. Wipe face or hands with a towel or cloth.
- 6. Put on hat
- 7. Put on shoe/socks
- 8. Put on necklace, bracelet or watch
- 9. Lay head on hands and squeeze eyes shut as if sleeping.
- 10. Blow to indicate something is hot.
- 11. Hold vehicle object and make it move.
- 12. Put telephone to ear.
- 13. Throw ball
- 14. Pour pretend liquid from one container to another
- 15. Stir pretend liquid in a cup or pan with a spoon.
- 16. Shiff flowers
- 17. Talk to toy.

D. Pretending to be a Parent

How are some things that young children sometimes do with stuffed animals or dolls. Please mark the actions that you have seen your child to do.

- 1. Put to bed
- 2. Cover with blancket
- 3. Feed with bottle
- 4. Feed with spoon
- 5. Brush/comb its hair
- 6. Pat or burp it
- 7. Push in stroller/buggy
- 8. Rock it
- 9. Kiss or hug it
- 10. Try to put shoe/socks/hat on it
- 11. Talk to it
- 12. Try to put diaper on it.

E. Imitating other Adult actions (using real or toy implements).

Does your child do/try any of the following?

- 1. Sweep with broom or mop
- 2. Put key in door or lock
- 3. Pound with hammer or mallet
- 4. Attempt to use saw
- 5. "Type" at a typewriter or computer keyboard
- 6. Vaccum
- 7. Water plants
- 8. Play musical instruments
- 9. "Drive car by turning steering wheel
- 10. Wash dishes
- 11. Write with a pen, pencil, or marker
- 12. Clean with cloth or duster
- 13. Read
- 14. Dig with a showel
- 15. Put on glasses

F. Pretend objects

During play, children sometimes use an object as a replacement for other. For example, a child wishing to feed a teddy bear might pretend that a block is an apple. A child might pretend that a bowl is a hat. Have you seen your child make substitutions of this kind?

If yes, Please give several examples

Other comments

Appendix II

Communication Inventory for Infants - CII (6 – 12 months)

Name:

Date:

Age/sex:

DOB:

<u>Instructions:</u> Please tick skills which your children can able to do in section 1 A and in section 1 B please the phrases which your children able to understand. If the child is not able to do the activity keep it empty.

Section 1

A. Early skills

Sl no	Skills	Comprehends
1.	Appears to be able to distinguish general meanings of warning, anger	
	and/or friendly voice pattern by facial and bodily gestures.	
2.	Responds with appropriate gestures to words such as "come", "bye-	
	bye"etc.	
3.	Gives some attention to music or singing.	
4.	Frequently appears to listen to whole conversation around him/her.	
5.	Regularly stops activity when his/her name called.	
6.	Reacts to loudness changes in voice of a others.	
7.	Regularly stops activity in response to "No".	
8.	Reacts differently to familiar people and strangers.	
9.	Appears to enjoy listening to new words.	
10.	Generally able to listen to speech without being distracted by others.	
11.	Mimes when action is named. Ex. When you ask "How to eat?" Child will	
	make action to show how to eat.	
12.	Enjoys listening stories.	
13.	Responds to rhythmic music by bodily or hand movements	
14.	Understands words like up, down	
15.	Feels happy when the child is praised for looks/ neat dress	
16.	Child is possessive about his/her clothes, toys.	
17.	Responds when name called. Ex. Turning back, searching for the person	
	who called etc.	
18.	Child get angry when her objects are taken/used or broken by someone and	
	start fighting with them	
19.	Child enjoy watching TV, looking at comics or listening to music.	

B.	Early phrase	S
----	--------------	---

Sl	Phrases	Comprehends
no		
1.	Are you hungry?	
2.	Are you	
	tired/sleepy?	
3.	Be quiet!	
4.	Clap your hands	
5.	Come on/ come	
	here	
6.	Do you want more?	
7.	Don't do that	
8.	Don't touch	
9.	Get up	
10.	Give it to mummy	
11.	Give me a hug/kiss	
12.	Go get	
13.	Good girl/boy!	
14.	Let's go bye bye	

Sl	Phrases	Comprehends
no		
15.	Look / look here	
16.	Open your mouth	
17.	Sit down	
18.	Stop it	
19.	Throw the ball	
20.	Want to go out?	
21.	Do you want it?	
22.	Say bye bye	
23.	Sleep now?	
24.	Don't cry	
25.	Don't go outside.	
26.	Walk slowly.	
27.	This dress is not	
	nice	
28.	Give me some	

Part 2: Early vocabulary

Instructions: Please tick items which your children can able to do. If your child is able to understand mark in comprehends part and if child uses that word/tell that word mark in expresses part. If the child is not able to do the activity keep it empty.

1. Different sound effects

Sl no	Items	Expresses
1.	Ba ba	
2.	Wa wa	
3.	Ba ba va va ta ta	
4.	Ta da va ma	
5.	ambaa ambaa	
6.	ko ko	
7.	o ho	
8.	Vroom	
9.	woof woof	
10.	umm	
11.	Аууо	
12.	amma	

2. Family members

Sl	Items	Comp	Exp
no			
1.	Mummy		
2.	Daddy		
3.	Grandma		
4.	Grandpa		
5.	Brother		

Sl	Items	Comp	Exp
no			
6.	Sister		
7.	Uncle		
8.	Aunty		
9.	Child		
10.	People		

3. Body parts

Sl	Items	Comprehends	Expresses
no			
1.	Head		
2.	Eye		
3.	Mouth		
4.	Face		
5.	Hand		

Sl	Items	Comprehends	Expresses
no			
6.	Leg		
7.	Tummy		
8.	Cheek		
9.	Finger		
10.	Tongue		
11.	Hair		

4. Food items

Sl	Items	Comp	Exp
no			
1.	Rice		
2.	Mudde		
3.	Sambar		
4.	idli		
5.	Dosa		
6.	Chappati		
7.	Water		
8.	Apple		
9.	Banana		
10.	Orange		
11.	Grapes		

Sl	Items	Comp	Exp
no			
12.	Milk		
13.	Butter		
14.	Bread		
15.	Cake		
16.	Chocolates		
17.	Juice		
18.	Egg		
19.	Meat/ Fish		
20.	Coffee/tea		
21.	Food		

5. Animals

Sl	Items	Comp	Exp
no			
1.	Cat		
2.	Dog		
3.	Cow		
4.	Chicken		
5.	Crow		
6.	Sheep		
7.	Butterfly		

Sl	Items	Comp	Exp
no			
8.	Elephant		
9.	Animal		
10.	Monkey		
11.	Mouse		
12.	Fish		
13.	Snake		
14.	Tiger/Loin		

6. Vehicles

7. Toys

Sl	Items	Comp	Exp
no			
1.	Bus		
2.	Bicycle		
3.	Motorcycle		
4.	Car		
5.	Tempo		

Sl	Items	Comp	Exp
no			
1.	Ball		
2.	Balloon		
3.	Book		
4.	Doll		
5.	Pen		
6.	Тоу		

8. Clothing

Sl	Items	Comp	Exp
no			
1.	Cloth/Dress		
2.	Shirt		
3.	Dothi		
4.	Pants		
5.	Nikker		
6.	Hat		
7.	Socks		
8.	Belt		
9.	Watch		

Sl	Items	Comp	Exp
no			
10.	Ring		
11.	Necklace/C		
	hain		
12.	Bangles		
13.	Ear rings		
14.	Saree		
15.	Skirt		
16.	Ankle lace		
17.	Sweater		

9. Furniture and Rooms.

Sl	Items	Comp	Exp
no			
1.	Kitchen		
2.	Bed		
	Bedroom		
3.	Bathroom		
4.	Cot		

S1	Items	Comp	Exp
no			
5.	Chair		
6.	Door		
7.	Stairs		
8.	Table		
9.	Window		

10. House hold objects

S1	Items	Comp	Exp
no			
1.	Blanket		
2.	Bottle		
3.	Bowl		
4.	box		
5.	Broom		
6.	Brush		
7.	Clock		
8.	Comb		
9.	Dish		
10.	Dustbin		
11.	Glass		
12.	Key		
13.	Lamp		
14.	Medicine		
15.	Money		
16.	Paper		

Sl	Items	Comp	Exp
no			
17.	Coins		
18.	Pillow		
19.	Bed		
20.	Plate		
21.	Purse		
22.	Scissors		
23.	Soap		
24.	Spoon		
25.	Towel		
26.	TV		
27.	Radio		
28.	Telephone		
29.	Fan		
30.	Plant		
31.	Umbrella		

11. Action words

Sl no	Items	Comprehends	Expresses
1.	Bite		
2.	Blow		
3.	Break		
4.	Bring		
5.	Clean		
6.	Close		
7.	Cry		
8.	Dance		
9.	Drink		
10.	Eat		
11.	Fall		
12.	Feed		
13.	Finish		
14.	Give		
15.	Go		
16.	Hit		
17.	Hug		
18.	Jump		
19.	Kick		
20.	Kiss		

Sl no	Items	Comprehends	Expresses
21.	Look		
22.	Open		
23.	Play		
24.	Pull		
25.	Push		
26.	Put		
27.	Read		
28.	Ride		
29.	Run		
30.	Say		
31.	Show		
32.	Sing		
33.	Sleep		
34.	Smile		
35.	Stop		
36.	Take		
37.	Throw		
38.	Touch		
39.	Walk		
40.	Write		

12. Descriptive words

Sl	Items	Comp	Exp
no			
1.	All gone		
2.	Bad		
3.	Big		
4.	Broken		
5.	Careful		
6.	Cold		
7.	Cute		
8.	Dark		
9.	Dirty		
10.	Empty		
11.	Fast		
12.	Fine		
13.	Good		

Sl	Items	Comp	Exp
no			
14.	Нарру		
15.	Hard		
16.	Hot		
17.	Hungry		
18.	Hurt		
19.	Little		
20.	Naughty		
21.	Scared		
22.	Sleepy		
23.	Soft		
24.	Thirsty		
25.	Tired		
26.	Wet		

13. Words about time

14. Prepositions

Sl	Items	Comp	Exp
no			
1.	Day		
2.	Later		
3.	Morning		
4.	Night		
5.	Now		
6.	Today		
7.	Tomorrow		

Sl	Items	Comprehends	Expresses
no			
1.	Near		
2.	AwayFar		
3.	Back		
4.	Down		
5.	Up		
6.	Inside		
7.	Outside		

15. Pronouns

Sl	Items	Comprehends	Expresses
no			
1.	Ι		
2.	Her		
3.	His		
4.	Me		
5.	Mine		

Sl	Items	Comprehends	Expresses
no			
6.	Му		
7.	That		
8.	This		
9.	You		
10.	Your		

16. Question words

Sl no	Items	Comprehends	Expresses
1.	How		
2.	What		
3.	Where		

Sl no	Items	Comprehends	Expresses
4.	Which		
5.	Who		
6.	Why		

17. Quantifiers

Sl	Items	Comprehends	Expresses
no			
1.	All		
2.	Another		

Sl	Items	Comprehends	Expresses
no			
3.	None		
4.	Same		

18. Others

Sl	Items	Comprehends	Exp	Sl	Items	Comprehends	Exp
no				no			
1.	Bath			11.	Store		
2.	Flower			12.	Sun		
3.	Garden			13.	Swing		
4.	Home			14.	Tree		
5.	Moon			15.	Work		
6.	Pool			16.	Mud		
7.	Rock			17.	Wound/		
8.	School				Injury		
9.	Sky			18.	Temple		
10.	Star			19.	Hospital/		
					Doctor		

Section 3.

Actions and Gestures

<u>Instructions:</u> Please tick activity that your child can perform. If the child is not able to do the activity keep it empty.

a. First communicative features

Sl	Skills	Performs the
no		activity
1.	Extends arm to show you something he/she is holding.	
2.	Reaches out and gives you a toy or some objects that he/ she in	
	holding.	
3.	Points (with arm and index finger extended) at some interesting	
	object or event.	
4.	Waves bye-bye on his/her own when someone leaves.	
5.	Extends his/her upward to signal a wish to be picked up.	
6.	Shakes head "no"	
7.	Nods head " yes"	
8.	Gestures "hush" by placing finger to lips.	
9.	Requests something by extending arm and opening and closing	
	hand.	
10.	Blows kisses from a distance.	
11.	Smacks lips in a "yum yum" gesture ti indicate that something	
	taste good.	

b. Games and routines

Sl	Skills	Performs the
no		activity
1.	Play peekaboo	
2.	Play chasing games	
3.	Play with a toys	
4.	Sing	
5.	Dance	

c. Actions with objects

Sl no	Skills	Performs the activity
1.	Eat with a spoon.	
2.	Drink from a cup.	
3.	Comb his/her own hair.	
4.	Brush teeth.	
5.	Put on hat	
6.	Put on sandals	
7.	Lay head on hands and squeeze eyes shut as if sleeping.	
8.	Blow to indicate something is hot.	
9.	Hold vehicle object and make it move.	
10.	Put telephone to ear.	
11.	Throw ball	
12.	Pour liquid from one container to another	
13.	Stir pretend liquid in a cup or pan with a spoon.	
14.	Kiss or hug a toy.	
15.	Put on glasses.	

d. Imitating adult like actions

Sl no	Skills	Performs the activity
1.	Sweep with broom or mop	
2.	Pound with hammer or mallet.	
3.	Read (open book and turn pages)	
4.	Try to ride bicycle.	
5.	Clean with cloth	
6.	Write with pen or pencil	
7.	Dig with any object	

$\underline{\dot{A}A^{a}A^{o}A \pm \dot{A} vA \mp \dot{A}^{2}A \otimes \ddot{A} \pm \dot{A}n \ddot{O} (6 - 12)}{\underline{WAU \dot{A}^{1} / \dot{A} \ddot{A}}}$

^{...}sÁUÀ 1: A. ªÀÄÄAa£À _.ÀA¥ÀPÀð P˱À®åUÀ¼ÀÄ

<u>ÀÆZÀ£ÉUÀ¼ÀÄ</u>: PɼÀUÉ ªÀÄPÀ̼ÀÄ ªÀiÁqÀ§°ÀÄzÁAvÀ°À PÉ®ªÀÅ P˱À®åUÀ¼À£ÀÄß ¤ÃqÀ⁻ÁVzÉ. "sÁUÀ 1 A gÀ°è, ¤ªÀÄä ªÀÄUÀÄ ªÀiÁqÀ§°ÀÄzÁAvÀ°À P˱À®åUÀ¼À ªÀÄÄAzÉ UÀÄgÀÄvÀÄ °ÁQ, "sÁUÀ gÀ°è ¤ªÀÄä ªÀÄUÀÄ CxÀðªÀiÁrPÉÆ¼ÀÄĩªÀ ªÁPÀåUÀ¼À ªÀÄÄAzÉ UÀÄgÀÄvÀÄ °ÁQ. ¤ªÀÄä ªÀÄUÀÄ ªÀiÁqÀ⁻ÁUÀ¢gÀĪÀ P˱À®åUÀ¼À ªÀÄÄA¢gÀĪÀ eÁUÀªÀ£ÀÄß SÁ° ©r.

PÀæªÀ Ä ¸ÀASÉ å	*ÁPÀåUÀ¼ÀÄ	CxÀðªÀi Ár PÉÆ¼À ÄîvÀÛz É
1.	^a ÀÄÄR sÁ ^a À£ÀÄß CxÀð ^a ÀiÁrPÉÆ¼ÀÄîvÀÛzÉ. (PÉÆÃ¥À, ¸ÀAvÉÆÃµÀ)	
2.	PÉ®ªÀÅ ¥ÀzÀUÀ¼À£ÀÄß CxÀðªÀiÁrPÉÆAqÀÄ ¸ÀÆPÀÛªÁzÀ ¥ÀæwQæAiÉÄAiÀÄ£ÀÄß ¤ÃqÀÄvÀÛªÉ. GzÀ: ¨Á, mÁ mÁ	
3.	,ÀAVÃvÀPÉÌ UÀªÀÄ£À PÉÆqÀĪÀÅzÀÄ.	
4.	CªÀ£À/CªÀ¼À ¸ÀÄvÀÛªÀÄÄvÀÛ £ÀqÉAiÀÄĪÀ ¥ÀÇgÀ ¸ÀA¨sÁµÀuÉAiÀÄ£ÀÄß D°¹zÀAvÉ PÁtÄvÀÛzÉ.	
5.	ĊªÀ£À/ĊªÀ¼À °É,ÀgÀ£ÀÄß PÀjzÁUÀ ªÀiÁqÀÄwÛgÀĪÀ PÉ®,ÀªÀ£ÀÄß ¤°è,ÀÄvÀÛzÉ.	
6.	zsÀé¤AiÀİè£À ªÀåvÁå,ÀªÀ£ÀÄß CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.	
7.	¨ÉÃqÀ JAzÀÄ °ÉýzÀgÉ ªÀiÁqÀĪÀ PÉ®¸ÀªÀ£ÀÄß ¤°è¸ÀÄvÀÛzÉ.	
8.	¥ÀjavÀgÀÄ ªÀÄvÀÄÛ C¥ÀjavÀgÉÆA¢UÉ ¨ÉÃgÉ ¨ÉÃgÉAiÀiÁV ¥ÀæwQæ¬Ä¸ÀÄvÀÛzÉ.	
9.	°ÉÆ À ¥ÀzÀUÀ¼À£ÀÄß PÉüÀ®Ä GvÁì°À vÉÆÃjzÀAvÉ PÁtÄvÀÛzÉ.	
10.	[¨] ÉgÉAiÉÄqÉUÉ UÀªÀÄ£À ºÀj¸ÀzÉ ªÀiÁvÀ£ÀÄß ¥ÀÇtðªÁV PÉüÀÄvÀÛzÉ.	
11.	PÉ®,ÀªÀ£ÀÄß ºÉýzÁUÀ C©ü£À¬Ä¹ vÉÆÃj,ÀÄvÀÛzÉ. GzÀ; Hl ªÀiÁqÀĪÀÅzÀÄ ºÉÃUÉ?	
12.	PÀvÉ PÉüÀ®Ä RĶ¥ÀqÀÄvÀÛzÉ.	
13.	¸ÀAVÃvÀPÉÌ ªÉÄÊ PĚÊ ZÀ°¹ ¥ÀæwQæ¬Ä¸ÀÄvÀÛzÉ.	
14.	[•] ÉÄÃ ⁻ É,PɼÀUÉ (¸ÀܼÁzÁjvÀ) ¥ÀzÀUÀ¼À£ÀÄβ	

	CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.	
15.	ZÉ£ÀßV PÁtÄw¢ÃAiÀÄ JAzÀÄ °ÉýzÁUÀ	
	RĶ¥ÀqÀÄvÀÛzÉ.	
16.	vÀ£Àß ªÀ,ÀÄÛUÀ¼À£ÀÄß ¨ÉÃgÉAiÀĪÀjUÉ	
	©lÄÖPÉÆqÀĪÀÅ¢®è.	
17.	°É,ÀgÀÄ PÀgÉzÁUÀ ¥ÀæwQæ¬Ä,ÀÄvÀÛzÉ GzÀ: wgÀÄV	
	£ÉÆqÀĪÀÅzÀgÀ ªÀÄÆ®PÀ, PÀgÉzÀ ªÀåQÛUÁV	
	°ÀÄqÀÄPÀĪÀÅzÀgÀ ªÀÄÆ®PÀ	
18.	"ÉÃgÉAiÀĪÀgÀÄ vÀ£Àß ªÀ,ÀÄÛUÀ¼À£ÀÄß	
	vÉUÉzÀÄPÉÆAqÁUÀ, G¥ÀAiÉÆV¹zÁUÀ CxÀªÁ	
	°Á¼ÀĪÀiÁrzÁUÀ PÉÆÃ¦¹PÉÆ¼ÀÄîvÀÛzÉ/	
	dUÀ¼ÀªÁqÀÄvÀÛzÉ.	
19.	°ÁqÀ£ÀÄβ PÉüÀ®Ä, n. «£ÉÆÃqÀ®Ä RÄ⅔ÀqÀÄvÀÛzÉ.	

B: ªÉÆzÀ® ªÁPÀåUÀ¼ÀÄ

PÀæ ^a	ªÁPÀåUÀ¼ÀÄ	CxÀðªÀiÁr-
ÀÄ		PÉÆ¼ÀÄîv ÌŶ Ś
,ÀAS		ÀÛzÉ
Éå		
1.	°À¹ªÁUÀÄwÛzÉ	
	AiÉÄÃ?	
2.	¤zÉæ	
	§gÀÄwÛzÉAiÉ	
	Ä?/	
	,ÀÄ,ÁÛVzÉAiÀ	
	Ä?	
3.	±À§Ý	
	ªÀiẤqÀ ÉÃqÀ	
4.	ZÀ¥Á¼É °ÉÆr	
5.	Á E°è	
6.	E£ÀÄß	
	ÉÃPÉÃ?	
7.	CzÀ£ÀÄß	
	ªÀiÁqÀ¨ÉÃqÀ/	
	, ÀĪÀÄä¤gÀÄ	
8.	ªÀÄÄlÖ ÉÃqÀ	
9.	K¼ÀÄ ªÉÄïÉ	
10.	CªÀÄä¤UÉ	
	PÉÆqÀÄ	
11.	£À£ÀUÉÆAzÀ	
	Ä ªÀÄÄvÀÄÛ	

	PÉÆqÀÄ	
12.	°ÉÆÃV	
	vÉUÉzÀÄPÉÆA	
	qÀÄ Á	
13.	eÁt	
	°ÀÄqÀÄUÀ/°ÀÄ	
	qÀÄV	
PÀæ ^a	^a ÁPÀåUÀ¼ÀÄ	CxÀðªÀiÁr-
ÀÄ		₽ÉÆ¼ÀÄîv
ှÀAS Éå		ÀÛzÉ
Éå		
14.	£Ér °ÉÆUÉÆÃt	
	mÁ mÁ	
15.	E°è £ÉÆqÀÄ	
16.	Á¬Ä vÉV	
17.	PÀÄ ¹ ⁄2vÀÄPÉÆ	
18.	¤°è,ÀÄ	
19.	ZÉAqÀ£ÀÄß J ¹	
20.	⁰ÉÆgÀUÉ	
	⁰ÉÆÃUÀ	
	ÉÃPÁ?	
21.	¤£ÀUÉ "ÉÃPÁ?	
22.	mÁ mÁ	
	°ÉüÀÄ	
23.	FUÀ ªÀÄ®UÀÄ	
24.	C¼À¨ÉÃqÀ	

25.	°ÉÆgÀUÉ	
	°ÉÆÃUÀ¨ÉÃqÀ	
26.	¤zÁ£ÀªÁV £Àr	
27.	F §mÉÖ	
	ZÉ£ÁßV®è	

28.	£À£ÀUÉ ¸Àé®à	
	PÉÆqÀÄ	

["]sÁUÀ 2 : ^aÀÄÄAa£À ¥ÀzÀ¥ÀnÖ

<u>ÀÆZÀ£ÉUÀ¼ÀÄ</u>: PɼÀUÉ PÉÆnÖgÀĪÀ ¥ÀzÀUÀ¼À£ÀÄß ¤ªÀÄä ªÀÄUÀÄ CxÀð ªÀiÁrPÉÆAqÀ°è, CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ JA§°èAiÀÄÄ; °ÉüÀÄwÛzÀÝgÉ, °ÉüÀÄvÀÛzÉ JA§°è UÀÄgÀÄvÀÄ °ÁQ. ¤ªÀÄä ªÀÄUÀÄ ªÀiÁqÀ⁻ÁUÀ¢gÀĪÀ P˱À®åUÀ¼À ªÀÄÄA¢gÀĪÀ eÁUÀªÀ£ÀÄß SÁ° ©r.

°ÉüÀÄvÀÛz PÀæ^aÀ ¥ÀzÀUÀ¼À É Ä Ä **ÀASÉ** å "Á "Á 1. ªÁ ªÁ 2. "Á "Á ªÁ ªÁ 3. vÀ vÀ vÀ zÀ ªÀ 4. ªÀÄ CA"Á CA"Á 5.

1. ««zÀ jÃwAiÀÄ ±À§ÝUÀ¼ÀÄ

9.	PÉÆ PÉÆ	
PÀæªÀ	¥ÀzÀUÀ¼À	°ÉüÀÄvÀÛz
Ä	Ä	É
,ÀASÉ		
å		
10.	M °ÉÆ	
11.	qÀ gïæ gïæ	
	gïæ	
12.	G¥sï G¥sï	
13.	CªÀiï	
14.	CAiÉÆÃ	

2. PÀÄlÄA§ 'ÀzÀ 'ÀågÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀUÀ¼À Ä	CxÀðªÀi Ár PÉÆ¼À ÄîvÀÛz É	⁰ÉüÀ ÄvÀÛzÉ
1.	CªÀÄä		
2.	C¥Àà		
3.	CfÓ		
4.	CdÓ/vÁvÀ		
5.	CtÚ/vÀªÀÄä		
6.	CPÀÌ/vÀAV		
7.	^a ÀiÁ ^a À/aPÀÌ		
	¥Àà/		
	zÉÆqÀØ¥À		

	à	
8.	CvÉÛ/aPÀ̪	
	ÀÄä/	
	zÉÆqÀتÀ	
	Ää	
9.	ªÀÄUÀÄ/¥	
	Á¥ÀÅ	
10.	d£À	

3. zÉðÀzÀ "sÁUÀUÀ¼ÀÄ

PÀæªÀÄ ¸ÀASÉå	¥ÀzÀUÀ¼ÀÄ	CxÀðªÀiÁr PÉÆ¼ÀÄîvÀÛzÉ	°ÉÃ
1	vÀ⁻É		
2.	PÀtÄÚ		
3.	'″Á¬Ä		
4.	ªÀÄÄR		

5.	PÉÊ	9.	"ÉgÀ	⁄4ÀÄ	
6.	P稀	10.	£Á°U	É	
7.	°ÉÆmÉÖ	11.	PÀÆ	zÀ®Ä	
8.	PÉ£Éß				

4. Hl/wAr

PÀæªÀÄ ¸ÀASÉå	¥ÀzÀUÀ¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼À	PÀæªÀÄ Ä į̀XÀŜǼa	° ¥À½ÀÜÀ¼ÌÀĤ		CxÀð ªÀiÁrPÉÆ¼ÀÄîvÀÛzI
1.	C£Àß		12.	°Á®Ä		
2.	ªÀÄÄzÉÝ		13.	ÉuÉÚ		
3.	<i></i> ,ÁA§gï/,ÁgÀÄ		14.	ÉæqÀÄØ		
4.	Erè		15.	PÉÃPï		
5.	zÉÆÃ¸É		16.	ZÉÆPÉÆÃ ⁻ ÉÂ	Ĺmï	
6.	ZÀ¥Áw		17.	dÄå¸ï		
7.	¤ÃgÀÄ		18.	ªÉÆmÉÖ		
8.	,ÉçÄ		19.	ªÀiÁA,À		
9.	¨Á¼É⁰ÀtÄÚ			/ǀ̣ˀ		
10.	QvÀۼɰÀtÄÚ		20.	PÁ¦ü∕ nÃ		
11.	zÁæQë °ÀtÄÚ		21.	Hl		

5. ¥Áæt ¥ÀQëUÀ¼ÀÄ

PÀ æ ^a À Ä ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀ ÄvÀÛz É
1.	"ÉPÀÄ Ì		
2.	£Á¬Äª ÀÄj		
3.	°À¸ÀÄ		
3. 4.	PÉÆÃ ¹∕₂ªÀÄj		
5.	PÁUÉ		
6.	PÀÄj		
7.	amÉÖ		

PÀ æ ^a À Ä ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀ ÄvÀÛz É
8.	D£É		
9.	¥ÁætÂ		
10.	PÉÆÃ		
	W		
11.	E°		
12.	«ÄãÀ		
	Ä		
13.	°ÁªÀÅ		
14.	°Àİ/1		
	A°À		

5. ªÁ°À£ÀUÀ¼ÀÄ

	¥ÀzÀUÀ¼ÀÄ	CxÀð		⁰Éù	4ÀÄvÀÛzÉ			
,ÀASÉå		^a ÀiÁrPÉÆ¼ÀÄîvÀ	Up Ka	eªÀÄ	¥ÀzÀUÀ¼	Ä	CxÀð	°É
1.	§ ¸ÀÄì			SÉå			^a ÀiÁrPÉÆ¼ÀÄîvÀÛzÉ	
2.	,ÉÊPÀ⁻ï		4.		PÁgÀÄ			
3.	¸ÀÆÌlgï∕¨ÉÊPï		5.		mÉA¥ÉÇ			

6. DlzÀ ,ÁªÀiÁ£ÀÄUÀ¼ÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀ ÄvÀÛz É
1.	ZÉAqÀ Ä		
2.	¦Ã¦∕ §®Æ£ ÀÄ		
3.	¥ÀÅ,À		

PÀæ ^a ÀÄ ¸ÀAS Éå	ÛPÀ ¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀ ÄvÀÛz É
4.	UÉÆA É		
5.	¥É£ÀÄ ß		
6.	CnPÉ		

9. PÉÆoÀr *ÀÄvÀÄÛ ¦ÃmÉÆÃ¥ÀPÀgÀt

PÀæ	¥ÀzÀUÀ	CxÀðªÀiÁ	°ÉüÀÄ
ªÀÄ	¼ÀÄ	r	vÀÛzÉ
ÀA		PÉÆ¼ÀÄ	
SÉå		îvÀÛzÉ	
1.	CqÀÄU		
	ɪÀÄ£É		
2.	ªÀÄ®UÀ		
	ĪÀ		
	PÉÆÃuÉ		
3.	ÅߣÀz		
	À ªÀÄ£É		
4.	ªÀÄAZÀ		

PÀÄað 5. °ÉüÀÄ vÀÛzÉ ¥ÀzÀUÀ CxÀðªÀiÁ PÀæ ªÀÄ ¼ÀÄ r PÉÆ¼ÀÄ ÀA ŚÉå îvÀÛzÉ ¨ÁV®Ä 6. ªÉÄnÖ® 7. Ä ªÉÄÃdÄ/ 8. mÉç⁻ï 9. QlQ

10. GqÀÄUÉ vÉÆqÀÄUÉ

PÀ æ ^a À Ä	¥ÀzÀUÀ ¼ÀÄ	CxÀðªÀiÁ r PÉÆ¼ÀÄ îvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
ÀA SÉå		IVAULE	
1.	§mÉÖ		
2.	µÀmïð		
3.	¥ÀAZÉ		
4.	¥ÁåAmï		
5.	¤PÀÌgï		
6.	mÉÆÃ¦		
7.	P稀		
	aî		
8.	‴É⁻ïÖ		
9.	PÉÊUÀr		
	AiÀiÁgÀ		
	/ ªÁZÀÄ		
PÀ	¥ÀzÀUÀ	CxÀðªÀiÁ	°ÉüÀÄ

æ ^a À Ä ¸ÀA SÉå	¼ÀÄ	r PÉÆ¼ÀÄ îvÀÛzÉ	vÀÛzÉ
10.	GAUÀÄ gÀ		
11.	,ÀgÀ		
12.	§¼É		
13.	Q«N⁻É		
14.	¹ÃgÉ		
15.	®AUÀ		
16.	PÁ⁻ÉÎeÉ		
	Ó		
17.	,Éélgï		

10. *ÀÄ£ÉAiÀİè EqÀ§°ÀÄzÁAvÀ°À *À,ÀÄÛUÀ¼ÀÄ

PÀ	¥ÀzÀUÀ¼À	CxÀðªÀi	°ÉüÀ
æªÀ Ä	Ä	Ár	ÄvÀÛz
Ą		PÉÆ¼À	É
∫ÀA SÉå		ÄîvÀÛzÉ	
	, , , , , , , , , , , , , , , , , , , ,		
1.	°ÉÆ¢PÉ/PÀ		
	A§1⁄2		
2.	A§½ ¹Ã,É/⁻ÉÆÃ mÉ⁻ï		
	mÉ⁻ï		
3.	§lÖ®Ä		
4.	qÀ§â		
5.	¥ÉÇgÀPÉ		
6.	§æµï		
7.	UÀrAiÀiÁg		
	À		
8.	ÁZÀuÉUÉ		
9.	¥ÁvÉæ		
10.	PÀ,ÀzÀ		
	§ÄnÖ		
PÀ	¥ÀzÀUÀ¼À	CxÀðªÀi	°ÉüÀ
æ ^a À Ä ÅA SÉå	Ä	Ár	ÄvÀÛz
Ä		PÉÆ¼À	É
ÀA		ÄîvÀÛzÉ	
	,		
11.	UÁè,ï		
12.	©ÃUÀzÀ		

AUUA			
	PÉÊ		
13.	¢Ã¥À		
14.	OµÀzÀ		
15.	zÀÄqÀÄØ		
16.	PÁUÀzÀ		
17.	PÁ,ÀÄ/£Át		
	å		
18.	¢A§Ä		
19.	°Á¹UÉ		
20.	vÀmÉÖ		
PÀ	¥ÀzÀUÀ¼À	CxÀðªÀi	°ÉüÀ
æªÀ	Ä	Ár	ÄvÀÛz
Ä		PÉÆ¼À	É
JÀA		ÄîvÀÛzÉ	
SÉå			
21.	PÉÊaî/¥		
	À¸ïð		
22.	PÀwæ		
23.	,ÉÆÃ¥ÀÅ		
24.	ZÀªÀÄZÀ		
25.	lªÀ ⁻ ï		
		1	1
PÀ	¥ÀzÀUÀ¼À	CxÀðªÀi	°ÉüÀ
PÀ æ ^a À Ä	¥ÀzÀUÀ¼À Ä	CxÀðªÀi Ár PÉÆ¼À	°ÉüÀ ÄvÀÛz É

ÀA SÉå		ÄîvÀÛzÉ	
26.	n. «		
27.	gÉÃrAiÉÆ Ã		

28.	¥ÉÇãÀÄ	
29.	¥sÁå£ï	
30.	VqÀ/¸À¹	
31.	bÀwæ	

11. QæAiÀiÁ ¥ÀzÀUÀ¼ÀÄ

PÀ m ^a à	¥ÀzÀUÀ¼ ÀÄ	CxÀð ªÀiÁr	⁰ÉüÀ ÄvÀÛz
æ ^a À Ä	AA	AIAF PÉÆ¼À	AVAUZ É
ÀA		ÄîvÀÛzÉ	Ľ
ÀA SÉå			
1. 2. 3. 4.	PÀZÀÄÑ		
2.	HzÀÄ		
3.	ªÀÄÄj		
4.	vÉUÉzÀÄ		
	PÉÆAqÀÄ		
	"Á		
5.	±ÀÄa		
	^a ÀiÁqÀÄ ^a ÀÄÄZÀÄ		
6.			
	Ñ		
7.	C¼ÀÄ		
8.	PÀÄtÂ		
9.	PÀÄr		
10.	w£ÀÄß		
11.	©Ã¼ÀÄ		
12.	w¤ß¸ÀÄ		
13.	ªÀÄÄÄV¸À		
	Ä		
14.	PÉÆqÀÄ		
15.	°ÉÆÂUÀÄ		
16.	°ÉÆr		
17.	vÀ©âPÉÆ		
18.	£ÉV		
19.	M¢		

[
PÀ	¥ÀzÀUÀ¼	CxÀð	°ÉüÀ
æªÀ	ÀÄ	^a ÀiÁr	ÄvÀÛz
Ä		PÉÆ¼À	É
,ÀA		ÄîvÀÛzÉ	
SÉå	<u> </u>		
20.	ªÀÄÄwÛq		
	ÀÄ		
21.	£ÉÆÃqÀÄ		
22.	vÉUÉ		
23.	DqÀÄ		
24.	J ¹ / ₂		
25.	vÀ¼ÀÄî		
26.	EqÀÄ		
27.	NzÀÄ		
28.	Nr,ÀÄ		
29.	NqÀÄ		
30.	°ÉüÀÄ		
31.	vÉÆÃj¸ÀÄ		
32.	°ÁqÀÄ ªÀÄ®UÀÄ		
33.	ªÀÄ®UÀÄ		
34.	£ÀUÀÄ		
35.	¤°è¸ÀÄ		
36.	vÉUÉ¢PÉ		
	Æ		
37.	J1		
38.	ªÀÄÄlÄÖ		
39.	£Àr		
40.	§ j		

12. PÁ® ,ÀÆavÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	⁰ÉüÀ ÄvÀÛzÉ
1.	°ÀUÀ ®Ä		
2.	gÁwæ		
3.	ɽUÉ Î		
4.	DªÉÄÃ ⁻É		

	PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀ ÄvÀÛzÉ
Γ	5.	FUÀ		
	6.	EªÀvÀ ÄÛ		
ſ	7.	£Á¼É		

13. ¥Àæ±ÁßxÀðPÀ ¥ÀzÀUÀ¼ÀÄ

PÀ æªÀ Ä ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð *ÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀ ÄvÀÛz É
1.	⁰ÉÃUÉ		
2.	K£ÀÄ		
3.	J°è		
PÀ	¥ÀzÀU	CxÀð	°ÉüÀ

æ ^a À Ä ¸ÀA SÉå	À¼ÀÄ	^a ÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	ÄvÀÛz É
4.	AiÀiÁª		
	ÀÅzÀÄ		
5.	AiÀiÁg		
	ÀÄ		
6.	KPÉ		

14. ǻÀgÁtvÀäPÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ^a	¥ÀzÀUÀ¼	CxÀðªÀiÁ	°ÉüÀ
ÀÄ	ÀÄ	r	ÄvÀÛz
ÀAS Éå		PÉÆ¼ÀÄ	É
		îvÀÛzÉ	
1.	J®è		
	⁰ÉÆAiÀÄ		
	ÄÛ		
2.	PÉlÖzÀÄ		
3.	zÉÆqÀØ		
4.	ªÀÄÄjzÀ		
5.	°ÀĵÁgÀ		
	Ä/		
	eÁUÀgÀ		
	ÆPÀ		
6.	vÀtÚUÉ		
7.	ªÀÄÄZÁV		
8.	PÀvÀÛ®		
	Ä		
9.	PÉÆ¼É		

10.	PÁ°		
11.	ªÉÃUÀªÁ		
	V/ ÉÃUÀ		
	£É		
12.	ZÉ£ÁßV		
PÀæ^a	¥ÀzÀUÀ¼	CxÀðªÀiÁ	°ÉüÀ
ÀÄ	ÀÄ	r	ÄvÀÛz
¸ÀAS Éå		PÉÆ¼ÀÄ	É
		îvÀÛzÉ	
13.	M¼ÉîAiÀ		
	Ä		
14.	RÄ ²		
15.	UÀnÖ		
16.	©1		
17.	°À¹ªÀÅ		
18.	£ÉÆÃªÀÅ		
19.	, Àé®à		
20.	vÀgÀ⁻É		
21.	°ÉzÀjzÀ		
22.	¤zÉæAiÀ		

	Ä ªÀÄA¥Àg ÀÄ	
23.	ªÀÄÈzÀĪ	
	ÁV	
24.	ÁAiÀÄjP	

	É	
25.	, ÀÄ,ÀÄÛ	
26.	°À1	

15. ¸ÀªÀð£ÁªÀÄ

PÀæ ªÀÄ ÅA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	⁰ÉüÀ ÄvÀÛzÉ
1.	£Á£À Ä		
2.	À		
3.	CªÀ£À		
4.	£À£À UÉ		
5.	£À£Àß		

	zÀÄ		
PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀ ÄvÀÛzÉ
6.	£À£Àß		
7.	CzÀÄ		
8.	EzÀÄ		
9.	¤Ã£À		
	Ä		
10	¤£Àß		

16. ¥ÁæªÀiÁuÁzÀjvÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	⁰ÉüÀ ÄvÀÛzÉ
1.	J®è		
2.	E£ÉÆß		
	AzÀÄ		
PÀæ	¥ÀzÀU	CxÀð	°ÉüÀ

³ÀÄ ¸ÀA SÉå	À¼ÀÄ	^ª ÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	ÄvÀÛzÉ
3.	E®è		
4.	CzÉÃ		

17. ,ÀܼÁzÁjvÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	⁰ÉüÀ ÄvÀÛzÉ
1.	°ÀwÛg À		
2.	zÀÆg À		
3.	»AzÉ		
4.	PɼÀ		

- `	UÉ		~~~~
PÀæ ªÀÄ	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼	⁰ÉüÀ ÄvÀÛzÉ
ĂĂ ĴĂĂ SÉå	A*⁄4AA	ÀÄîvÀÛzÉ	AVAUZE
	ªÉÄÃ⁻		
5.	É		
6.	M¼À		
	UÉ		
7.	⁰ÉÆgÀ		

UÉ	

18. E¤ßvÀgÉ

PÀæ	¥ÀzÀUÀ¼	CxÀðªÀi	°ÉüÀ
ªÀÄ	ÀÄ	Ár	ÄvÀÛzÉ
À A		PÉÆ¼À	
SÉå		ÄîvÀÛzÉ	
1.	,ÁߣÀ		
2.	°ÀƪÀÅ		
3.	vÉÆÃl		
4.	ªÀÄ£É		
5.	ZÀAzÀæ		
6.	ªÀļÉ		
7.	PÀ®Äè		
8.	±Á⁻É		
9.	DPÁ±À		
PÀæ	¥ÀzÀUÀ¼	CxÀðªÀi	°ÉüÀ
ªÀÄ	ÀÄ	Ár	ÄvÀÛzÉ
ÀÀ		PÉÆ¼À	

SÉå		ÄîvÀÛzÉ	
10.	£ÀPÀëvÀ		
	æ		
11.	CAUÀr		
12.	<i>,</i> ÀÆAiÀÄ		
	ð		
13.	GAiÀÄå ⁻		
	É		
14.	ªÀÄgÀ		
15.	PÉ®ĴÀ		
16.	ªÀÄtÄÚ		
17.	UÁAiÀÄ		
18.	zÉêÁ®A		
	iÀÄ		
19.	qÁPÀÖgï/ D¸ÀàvÉæ		
	D _, ÀàvÉæ		

[•]sÁUÀ 3: ¸À£Éß ªÀÄvÀÄÛ QæAiÉÄUÀ¼ÀÄ

<u>ÀÆZÀ£ÉUÀ¼ÀÄ:</u> PɼÀUÉ ªÀÄPÀ̼ÀÄ ªÀiÁqÀ§°ÀÄzÁAvÀ°À PÉ®ªÀÅ P˱À®åUÀ¼À£ÀÄß ¤ÃqÀ⁻ÁVzÉ. ¤ªÀää ªÀÄUÀÄ ªÀiÁqÀ§°ÀÄzÁAvÀ°À P˱À®åUÀ¼À ªÀÄÄAzÉ UÀÄgÀÄvÀÄ °ÁQ. ¤ªÀää ªÀÄUÀÄ ªÀiÁqÀ⁻ÁUÀ¢gÀĪÀ P˱À®åUÀ¼À ªÀÄÄA¢gÀĪÀ eÁUÀªÀ£ÀÄß SÁ° ©r.

					
9	$\Lambda \Lambda \Psi \Lambda D \Lambda \Lambda Z \Lambda$	$\alpha \Lambda 4H + \Lambda$	$(\mu) \nu$	$\Delta f I \perp / \Lambda I/_{4}$	Λ Λ
а.	AA¥APAðzA	$\gamma A A + A$		15LU/A74	AA

	^a ÁPÀåUÀ¼ÀÄ	ªÀiÁqÀÄvÀÛzÉ
,ÀASÉå		
1.	CªÀ¼ÀÄ/CªÀ£ÀÄ »r¢gÀĪÀ ªÀ¸ÀÄÛªÀ£ÀÄß PÉÊ	
	ZÁa vÉÆÃj ÀĪÀÅzÀÄ.	
2.	CªÀ¼ÀÄ/CªÀ£ÀÄ »r¢gÀĪÀ CnPÉ/ªÀ¸ÀÄÛªÀ£ÀÄß	
	PÉÆqÀ®Ä ¤*ÉÄäqÉUÉ §gÀÄ*ÀÅzÀÄ	
3.	CªÀ½UÉ/CªÀ¤UÉ C,ÀQÛ¬ÄgÀĪÀ ªÀ,ÀÄÛ«£ÉqÉUÉ ¨ÉgÀ¼ÀÄ ªÀiÁr	
	ªÀ,ÀÄÛ«£ÉqÉUÉ ¨ÉgÀ¼ÀÄ ªÀiÁr	
	vÉÆÃj,ÀĪĂÅzÀÄ.	
4.	CªÀ¼À/CªÀ£À PÉÊ ªÉÄÃ⁻É JwÛ	
	CªÀ¼À£ÀÄ₿/CªÀ£À£ÀÄ₿ JwÛPÉÆ¼ÀÄîªÀAvÉ	
	,ÀÆa,ÀĪÀÅzÀÄ.	
5.	"E®è" JA§AvÉ vÀ⁻É C⁻Áèr,ऄĪÀÅzÀÄ.	
6.	"°ËzÀÄ" JA§AvÉ vÀ⁻É Dr¸ÀĪÀÅzÀÄ.	
7.	ÉgÀ¼À£ÀÄβ vÀÄnAiÀÄ ªÉÄÃ⁻É ElÄÖ	

	"±ï(¤±Àå§Ý)" JA§AvÉ vÉÆÃj¸ÀĪÀÅzÀÄ.	
8.	J£À£ÁßzÀgÀÄ PÉüÀ®Ä PÉÊAiÀÄ£ÀÄß °ÉÆgÀ	
	ZÁa vÉUÉzÀÄ ªÀÄÄaÑ ªÀiÁqÀĪÀÅzÀÄ.	
9.	zÀÆgÀzÀ°ègÀĪÀ ªÀåQÛUÉ ªÀÄÄvÀÛ£ÀÄß	
	UÁ½AiÀİè HzÀĪÀÅzÀÄ.	
10.	C ªÀ,ÀÄÛ gÀÄaAiÀiÁVzÉ JAzÀÄ vÀÄnAiÀÄ£ÀÄß	
	»AzÉ ªÀÄÄAzÉ ªÀiÁr vÉÆÃj¸ÀĪÀÅzÀÄ.	

b. DlUÀ¼ÀÄ ªÀÄvÀÄÛ ¢£ÀZÀj

	DIUÀ¼ÀÄ	ªÀiÁqÀÄvÀÛzÉ
,ÀASÉå		
1.	PÀ¼Àî §AzÀ PÀ¼Àî	
2.	¨É£ÀβnÖ ⁰ÉÆÃUÀĪÀ DIUÀ¼ÀÄ	
3.	UÉÆA¨É E¤ßvÀgÀ ªÀ ¸ÀÄÛUÀ¼À eÉÆvÉ	
	DqÀĪÀÅzÀÄ	
4.	°ÁqÀĪÀÅzÀÄ	
5.	°ÁrUÉ °ÉeÉÓ °ÁPÀĪÀÅzÀÄ	

c. ^aÀ,ÀÄÛUÀ¼ÉÆA¢UÉ ^aÀiÁqÀÄ^aÀ PÉ®,ÀUÀ¼ÀÄ

PÀæªÀÄ	^a ÁPÀåUÀ¼ÀÄ	*ÀiÁqÀÄvÀÛzÉ
,ÀASÉå		-
1.	PÉʬÄAzÀ/ZÀªÀÄZÀ¢AzÀ w£ÀÄߪÀÅzÀÄ	
2.	UÁè ¹ ¤AzÀ PÀÄrAiÀÄĪÀÅzÀÄ	
3.	¨ÁZÀtÂUɬÄAzÀ vÀ⁻É ¨ÁZÀĪÀÅzÀÄ	
4.	§æ¶¤AzÀ °À®Äè GdÄÓªÀÅzÀÄ	
5.	mÉÆÃ¦°ÁQ PÉÆ¼ÀÄîªÀÅzÀÄ	
6.	ZÀ¥Àà° °ÁQPÉÆ¼ÀÄîªÀÅzÀÄ	
7.	PÀtÄÚ ^ª ÀÄÄaÑ ¤zÉæ §AzÀªÀgÀAvÉ	
	<u>ªÀÄ®UÀĪÀÅzÀÄ</u>	
PÀæªÀÄ	^a ÁPÀåUÀ¼ÀÄ	^a ÀiÁqÀÄvÀÛzÉ
_ÀASÉå		
8.	^a ÁºÀ£ÀUÀ¼À£ÀÄß »rzÀÄPÉÆ¼ÀÄîªÀÅzÀÄ	
	^a ÀÄvÀÄÛ ZÀ°,ÀĪÀAvÉ ªÀiÁqÀĪÀÅzÀÄ.	
9.	¥ÉÇãÀ£ÀÄß Q«AiÀÄ §½ »rzÀÄ	
	^a ÀiÁvÀ£ÁqÀÄ ^a ÀªÀgÀAvÉ £Àn,ÀÄ ^a ÀÅzÀÄ	
10.	©¹AiÀiÁVzÉ JAzÀÄ ¸ÀÆa¸À®Ä HzÀĪÀÅzÀÄ	
11.	ZÉAqÀ£ÀÄßJ,ÉAiÀÄĪÀÅzÀÄ	
12.	MAzÀÄ ¥ÁvÉæ¬ÄAzÀ ªÀÄvÉÆÛAzÀÄ ¥ÁvÉæUÉ	
	¤ÃgÀÄ ¸ÀÄjAiÀÄĪÀÅzÀÄ	
13.	¥ÁvÉæAiÀİè CxÀªÀ ⁻ ÉÆÃlzÀ°è ¤ÃgÀ£ÀÄß	
	ZÀªÀÄZÀ¢AzÀ wgÀÄV,ÀÄzÀÄ	
14.	UÉÆA ÉUÉ ÀÄÄvÀÄŮ PÉÆqÀÄ ÀÅzÀÄ CxÀA	
	vÀ©âPÉÆ¼ÀÄîªÀÅzÀÄ	
15.	PÀ£ÀßqÀPÀ °ÁQ PÉÆ¼ÀÄîªÀÅzÀÄ	

	^a ÁPÀåUÀ¼ÀÄ	^a ÀiÁqÀÄvÀÛzÉ
`ÀASÉå		
1.	¥ÉÇgÀPɬÄAzÀ £É® UÀÄr¸ÀĪÀÅzÀÄ CxÀªÀ	
	PÀ,Ă °ÉÆqÉAiÀÄĪÀÅzÀÄ	
2.	PÀ®Äè CxÀªÀ ¸ÀÄwÛUɬÄAzÀ	
	ZÀZÀÄѪÀÅzÅÄ	
3.	NzÀĪÀÅzÀÄ (¥ÀŸÀÛPÀªÀ£ÀÄß vÉgÉzÀÄ ¥ÀÅIUÀ¼À£ÀÄß wgÀĪÁPÀĪÀÅzÀÄ)	
	¥ÀÅlUÀ¼À£ÀÄß wgÀĪÁPÀĪÀÅzÀÄ)	
4.	ͺÉÊPÀ⁻ï ⁰ÉÆqÉAiÀÄ®Ä ¥ÀæAiÀÄvÀβ	
	^a ÀiÁqÀÄ ^a ÀÅzÀÄ	
5.	§mÉÖ¬ÄAzÀ ªÀgɸÀĪÀÅzÀÄ	
6.	¥É£ï/¥É¤ì⁻ï/E¤ßvÀgÉ ªÀ¸ÀÄÛ«¤AzÀ	
	§gÉAiÀÄÄ ^a ÀÅzÀÄ	
7.	AiÀiÁªÀÅzÁzÀgÀÄ ªÀ¸ÀÄÛªÀŤAzÀ UÀÄAr	
	vÉUÉAiÀĮĥÀæAiĂÄw߸ÀĪÀÅzÀÄ	

d. zÉÆqÀتÀgÀ jÃwAiÀÄ PÉ®¸ÀUÀ¼À£ÀÄß C£ÀĸÀj¸ÀĪÀÅzÀÄ

Appendix III

Content validity Scoring sheet

Communication Inventory for Infants ÀAªÀºÀ£À vÀ¥À²Ã®Ä ¥ÀnÖ

Instructions: Please compare communication inventory of Kannada language with Inventory if English and tick in appropriate column. If the translation work is proper mark in $\hat{A}j E z \hat{E}$ column, if the translation is not proper please mark it $\hat{A}j E \otimes \hat{e}$ and if you think translation is happened properly and changes need please mark in $\hat{s}AU\hat{A}\pm\hat{A}B$ $\hat{A}j$

	ªÁPÀåUÀ¼ÀÄ	_Aj	,Àj	sÁUÀ±ÀB
,ÀASÉå		EzÉ	E®è	, Àj
1.	^a ÀÄÄR ¨sÁ ^a À ^a À£ÀÄß CxÀð			
	^a ÀiÁrPÉÆ¼ÀÄîvÀÛzÉ. (PÉÆÃ¥À,			
	,ÀAvÉÆÃµÀ)			
2.	PÉ®ªÀÅ ¥ÀzÀUÀ¼À£ÀÄβ			
	CxÀðªÀiÁrPÉÆAqÀÄ ¸ÀÆPÀÛªÁzÀ			
	¥ÀæwQæAiÉÄAiÀÄ£ÀÄß ¤ÃqÀÄvÀÛªÉ.			
	GzÀ: ¨Á, mÁ mÁ			
3.	ÀAVÃvÀPÉÌ UÀªÀÄ£À PÉÆqÀĪÀÅzÀÄ.			
4.	ĊªÀ£À/ĊªÀ¼À ¸ÀÄvÀÛªÀÄÄvÀÛ			
	£ÀqÉAiÀÄĪÀ¥ÀÇgÀ			
	ÀĂ sÁµÀuÉAiÀÄ£ÅÄß D°¹zÀAvÉ			
	PÁtÄvÁÛzÉ.			
5.	CªÀ£À/CªÀ¼À ºÉ ÀgÀ£ÀÄß PÀjzÁUÀ			
	^a ÀiÁqÀÄwÛgÀĪÀ PÉ® ÀªÀ£ÀÄß			
	¤°è ÀÄvÀÛzÉ.			
6.	zsÀé¤AiÀİè£À ªÀåvÁå ÀªÀ£ÀÄß			
	CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.			
7.	¨ÉÃqÀ JAzÀÄ °ÉýzÀgÉ ªÀiÁqÀĪÀ			
	PÉ® ŪÀ£ÀÄβ ¤°è ÀÄvÀÛzÉ.			
8.	avÀæzÀ(¥sÉÇÃmÉÆ)°ègÀĪÀ			
	^a ÀåQÛAiÀÄ£ÀÄß ºÉ Àj¹zÁUÀ MAzÀÄ			
	¤«ÄµÀUÀ¼À PÁ® D avÀæzÉqÉUÉ			
	UÀªÀÄ£À ºÀj,ÀÄvÀÛzÉ. GzÀ; EzÀÄ			
	C¥Àà£À ¨sÁªÀavÀæ (¥sÉÇÃmÉÆ)			
9.	¥ÀjavÀgÀÄ ªÀÄvÀÄÛ C¥ÀjavÀgÉÆA¢UÉ			
	ÉĂgÉ ÉÃgÉAiÀiÁV			
	¥ÀæwQæ¬Ä¸ÀÄvÀÛzÉ.			
10.	°ÉÆ À ¥ÀzÀUÀ¼À£ÀÄß PÉüÀ®Ä			
	GvÁiºÀ vÉÆÃjzÀAvÉ PÁtÄvÀÛzÉ.			
11.	ÉgÉAiÉÄqÉUÉ UÀªÀÄ£À ºÀj ÀzÉ		1	
	^a ÀiÁvÀ£ÀÄ̈́ߥÀÇtð ^a ÁV PÉÃ ¹ ⁄́₄ÀÄvÀÛzÉ.			
12.	PÉ® ÀªÀ£ÀÄß °ÉýzÁUÀ C©ü£À¬Ä¹			
	vÉÆĂj,ÀÄvÀÛzÉ. GzÀ; Hl			

¨sÁUÀ 1: A. ªÀÄÄAa£À ¸ÀA¥ÀPÀð P˱À®åUÀ¼ÀÄ

	^a ÀiÁqÀÄ ^a ÀÅzÀÄ °ÉÃUÉ?		
13.	PÀvÉ PÉüÀ®Ä RĶ¥ÀqÀÄvÀÛzÉ.		
14.	ÀAVÃvÀPÉÌ *ÉÄÊ PÉÊ ZÀ°1		
	¥ÀæwQæ¬Ä、ÀÄvÀÛzÉ.		
15.	^a ÉÄÃ ⁻ É,PɼÀUÉ (¸ÀܼÁzÁjvÀ)		
	¥ÀzÀUÀ¼À£ÀÄß		
	CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.		
16.	ZÉ£ÀßV PÁtÄw¢ÃAiÀÄ JAzÀÄ °ÉýzÁUÀ		
	RĶ¥ÀqÀÄvÀÛzÉ.		
17.	vÀ£Àß ªÀ,ÀÄÛUÀ¼À£ÀÄß		
	ÉÃgÉAiÀĪÀjUÉ ©lÄÖPÉÆqÀĪÀÅ¢®è.		
18.	°É,ÀgÀÄ PÀgÉzÁUÀ		
	¥ÀæwQæ¬Ä,ÀÄvÀÛzÉ GzÀ: wgÀÄV		
	£ÉÆqÀĪÀÅzÀgÀ ªÀÄÆ®PÀ, PÀgÉzÀ		
	^a ÀåQÛUÁV °ÀÄqÀÄPÀÄ ^a ÀÅzÀgÀ		
	^a ÀÄÆ®PÀ		
19.	ÉÃgÉAiÀĪÀgÀÄ vÀ£Àß		
	^a À¸ÀÄÛUÀ¼À£ÀÄß vÉUÉzÀÄPÉÆAqÁUÀ,		
	G¥ÀAiÉÆV¹zÁUÀ CxÀªÁ		
	°Á¼ÀĪÀiÁrzÁUÀ		
	PÉÆÃ¦'PÉÆ¼ÀÄîvÀÛzÉ/		
	dUÀ¼ÀªÁqÀÄvÀÛzÉ.		
20.	°ÁqÀ£ÀÄß PÉüÀ®Ä, n. « £ÉÆÃqÀ®Ä		
	RÄ ² ¥ÀqÀÄvÀÛzÉ.		

B. ªÉÆzÀ® ªÁPÀåUÀ¼ÀÄ

PÀæªÀÄ	^a ÁPÀåUÀ¼ÀÄ	`Àj	`Àj	sÁUÀ±ÀB
,ÀASÉ å		EzÉ	E®è	,Àj
1.	°À¹ªÁUÀÄwÛzÉAiÉÄÃ?			
2.	¤zÉæ			
	§gÀÄwÛzÉAiÉÄ?/¸ÀĸÁÛVzÉAiÀÄ?			
3.	±À§Ý ªÀiÁqÀ¨ÉÃqÀ			
4.	ZÀ¥Á¼É °ÉÆr			
5.	[™] Á E°è			
6.	E£ÀÄß "ÉÃPÉÃ?			
7.	CzÀ£ÀÄß ªÀiÁqÀ¨ÉÃqÀ/¸ÀĪÀÄä¤gÀÄ			
8.	*ÀÄÄlÖ¨ÉÃqÀ			
9.	K¼ÀÄ ªÉÄïÉ			
10.	CªÀÄä¤UÉ PÉÆqÀÄ			
11.	£À£ÀUÉÆAzÀÄ ªÀÄÄvÀÄÛ PÉÆqÀÄ			
12.	°ÉÆÃV vÉUÉzÀÄPÉÆAqÀÄ ¨Á			
13.	eÁt °ÀÄqÀÄUÀ/°ÀÄqÀÄV			
14.	E£ÀÄß Åé®à°ÉÆvÀÄÛ °ÁUÉ »r¢PÉÆ			
15.	£Ér °ÉÆUÉÆÃt mÁ mÁ			

16.	E°è £ÉÆqÀÄ
17.	¨Á¬Ä νÉV
18.	PÀÄ ¹ ⁄2vÀÄPÉÆ
19.	°ÉÆgÀUÉ GV
20.	¤°è,ĂÄ
21.	ZÉAqÀ£ÀÄß J¹
22.	F aPÀÌ UÉÆA É
23.	°ÉÆgÀUÉ °ÉÆÃUÀ ¨ÉÃPÁ?
24.	¤£ÀUÉ "ÉÃPÁ?
25.	mÁ mÁ °ÉüÀÄ
26.	FUÀ ªÀÄ®UÀÄ
27.	C¼À¨ÉÃqÀ
28.	°ÉÆgÀUÉ °ÉÆÃUÀ¨ÉÃqÀ
29.	¤zÁ£ÀªÁV £Àr
30.	F §mÉÖ ZÉ£ÁßV®è
31.	£À£ÀUÉ ¸Àé®à PÉÆqÀÄ

^{..}sÁUÀ 2 : ªÀÄÄAa£À ¥ÀzÀ¥ÀnÖ

1. ««zÀ jÃwAiÀÄ ±À§ÝUÀ¼ÀÄ

2. PÀÄlÄA§ ,ÀzÀ ,ÀågÀÄ

PÀæ ^a	¥ÀzÀUÀ	À	À j	sÁUÀ
ÀÄ	¼ÀÄ	j	j	±ÀB
∫ÀAS Éå		Ĕz	Ĕ	, Àj
Éå		∫À j Ez É	®è	-
1.	"Á "Á			
2.	ªÁ ªÁ			
3.	"Á "Á ªÁ			
	^a Á vÀ vÀ			
4.	vÀ zÀ ªÀ			
	ªÀÄ			
5.	CA Á			
	CA Á			
6.	ZÀÆ			
	ZÀÆ			
7.	UÀgïæ			
8.	«ÄAiÀÄ			
	Aªï			
9.	PÉÆ			
	PÉÆ			
10.	M ⁰ÉÆ			

11.	qÀ gïæ		
	gïæ gïæ		
12.	G¥sï G¥sï		
13.	CªÀiï		
14.	CAiÉÆÃ		

PÀæ ªÀÄ ¸ÀAS Éå	¥ÀzÀUÀ¼ ÀÄ	Å j E z É	À j E ® è	¨sÁUÀ ±ÀB ¸Àj
1.	CªÀÄä			
2.	C¥Àà			
3.	CfÓ			
4.	CdÓ/vÁvÀ			
5.	CtÚ/vÀªÀÄ			
	ä			
6.	CPÀÌ/vÀAV			
7.	ªÀiÁªÀ/aPÀ			

	Ì¥Àà/ zÉÆqÀØ¥À à		
8.	CvÉÛ/aPÀ̪ ÀÄä/ zÉÆqÀتÀ		
	Aä		

9.	°ÀÄqÀÄUÀ	
	°ÀÄqÀÄV	
11.	ªÀÄUÀÄ/¥	
	Á¥ÀÅ	
12.	ªÀÄ£ÀĵÀ	
	å/ªÀåQÛ	
13.	d£À	

3. zÉðÀzÀ ^{..}sÁUÀUÀ¼ÀÄ

PÀæªÀÄ ¸ÀASÉå	¥ÀzÀU À¼ÀÄ	∫À j E z É	∫À j E ℝ è	∵sÁUÀ ±ÀB ¸Àj
1.	vÀ-É			
2.	PÀtÄÚ			
3.	Q«			
4.	Q« ªÀÄÆU ÀÄ			
5.	'nÁ¬Ä			
6.	ªÀÄÄR			
7.	PÉÊ			
P À æ ^a À	¥ÀzÀU À¼ÀÄ	À j E z	∫À j E ®	∵sÁUÀ ±ÀB ¸Àj

Ä JÀ A S É å		É	è	
8.	P稀			
9.	°ÉÆmÉ			
	Ö			
10.	°À®Äè			
11.	PÉ£Éß			
12.	¨ÉgÀ¼À			
	ËgÀ¼À Ä			
13.	£Á°UÉ			
14.	PÀÆzÀ			
	®Ä			

4. Hl/wAr	l/wAr
-----------	-------

¬. III/ W/I					
PÀæ ^a	¥ÀzÀUÀ¼	٦À	<u>م</u>	sÁUÀ	
ÀÄ	ÀÄ	j	j	±ÀB	
ÀAS		Ez É	Ε	, Àj	
ֻÀAS Éå		É	®è		
1.	C£Àß				
2.	ªÀÄÄzÉÝ				
3.	,ÁA§gï∕,Ág				
	ÀÄ				
4.	Erè				
5.	zÉÆÃ¸É				
6.	ZÀ¥Áw				

r	
7.	¤ÃgÀÄ
8.	ÉçÄ ¨Á¼É°ÀtÄ
9.	Á¼É°ÀtÄ
	Ú
10.	QvÀۼɰ
	ÀtÄÚ
11.	zÁæQë
	°ÀtÄÚ
12.	°Á®Ä
13.	ªÉƸÀgÀÄ
14.	"ÉuÉÚ
15.	¨ÉæqÀÄØ
16.	PÉÃPï
17.	ZÉÆPÉÆÃ
	-ÉÃmï
18.	L _s ï QæÃªÀiï
	QæÃªÀiï

19.	dÄå,ï
20.	ªÉÆmÉÖ
21.	ªÀiÁA,À
	/ǀ̣ˀ
22.	PÁ¦ü/ nÃ
23.	HI

6. ¥Áæt ¥ÀQëUÀ¼ÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå	¥ÀzÀUÀ¼ ÀÄ	∫À j Ez É	∫À j E ®è	∵sÁUÀ ±ÀB ¸Àj
1.	ÉPÀÄÌ			
2.	£Á¬ÄªÀÄj			
3.	°À¸ÀÄ			
4.	PÉÆÃ½ªÀ			
	Äj			
5.	PÁUÉ			

5. ªÁºÀ£ÀUÀ¼ÀÄ

PÀæ	¥ÀzÀUÀ¼	∫Àj Ez É	,Àj	"sÁU
ªÀÄ	ÀÄ	Ez	E®	À±À
_, ÀA SÉå		É	è	B
SÉå				, Àj
1.	§ ,ÀÄì			
2.	ţÉÊPÀ⁻ï			
3.	ÀÆÌlgï/ É			
	ÊPï			
4.	PÁgÀÄ			
5.	gÉÊ®Ä			
6.	«ªÀiÁ£À/K			
	gÉÆÃ¥ÉèÃ			
	£ï			
7.	mÉA¥ÉÇ			

7. DlzÀ ,ÁªÀiÁ£ÀÄUÀ¼ÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå		∫À j Ez É	Å j E ®è	[∵] sÁUÀ ±ÀB ¸Àj
1.	ZÉAqÀÄ			
2.	¦Ã¦∕§®Æ£À Ä			
3.	¥ÀŸÀÛP			

6.	UÀħâaÑ
7.	PÀÄj
8.	amÉÖ
9.	C ¹ /2®Ä
10.	D£É
11.	¥ÀQë/°ÀQÌ
12.	¥ÁætÂ
13.	PÀvÉÛ
14.	PÀ¥Éà
15.	PÉÆÃw
16.	E°
17.	ǀ̣ˀ
18.	eÉãÀİÀ
	ļÀÄ
19.	°ÁªÀÅ
20.	°Àİ/¹A°À

	À		
4.	ªÉÆmïÖ/U		
	ÀļÉî		
5.	UÉÆA É		
6.	¥É£ÀÄß		
7.	CnPÉ		

9. GqÀÄUÉ vÉÆqÀÄUÉ

PÀ m ^a À	¥ÀzÀUÀ¼À Ä	À	∫Àj E®è	¨sÁU À±À
æªÀ Ä	A	J Ez É	LGe	A±A B ֻÀj
ÀA ÀA SÉå		É		
ŚÉå				
1.	μÀmïð			
2.	¥ÀAZÉ			
3.	¥ÁåAmï			
4.	¤PÀÌgï			
5.	PÉÆÃIÄ			
6.	mÉÆÃ¦			
7.	P稀 ą			
8.	§Æmïî			
9.	″É⁻ïÖ			
10.	PÉÊUÀrAiÀ			
	iÁgÀ/			

	^a ÁZÀÄ
11.	GAUÀÄgÀ
12.	,ÀgÀ
13.	_AgA
14.	Q«N ⁻ É ¹ ÃgÉ
15.	1ÃgÉ
16.	®AUÀ
17.	PÁ ⁻ ÉÎeÉÓ
18.	,Éélgï
19.	§mÉÖ

9. PÉÆoÀr ªÀÄvÀÄÛ ¦ÃmÉÆÃ¥ÀPÀgÀt

PÀæ ^a	¥ÀzÀUÀ¼	À	À	¨sÁUÀ
ÀÄ	ÀÄ	À j	ှÅ j	±ÀB
∫ÀAS Éå		Ez É	E	,Àj
Éå		É	®è	
1.	CqÀÄUɪ			
	ÀÄ£É			
2.	ªÀÄ®UÀ			
	ĪÀ			
	PÉÆÃuÉ			
3.	Ă₿£ÀzÀ ªÀÄ£É			
	ªÀÄ£É			
4.	ªÀÄAZÀ			
5.	PÀÄað			
6.	″ÁV®Ä			
7.	ªÉÄnÖ®Ä			
8.	ªÉÄÃdÄ/			
	mÉç⁻ï			
9.	QlQ			

-	
2.	1Ã,É/ ÉÆ
	ÃmÉ⁻ï
3.	§lÖ®Ä
4.	qÀ§â
5.	qÀ§â ¥ÉÇgÀPÉ
6.	8æuï
7.	UÀrAiÀiÁ
	gÀ
8.	gÀ "ÁZÀuÉU É
	É
9.	¥ÁvÉæ
10.	PÀ,ÀzÀ
	§ÄnÖ
11.	UÁÈ,ï ©ÃUÀzÀ
12.	©ÃUÀzÀ
	PÉÊ
13.	¢Ã¥À
14.	OµÀzÀ zÀÄqÀÄØ PÁUÀzÀ
15.	zÀÄqÀÄØ
16.	PÁUÀzÀ
17.	PÁ,ÀÄ/£Á
	tå
18.	avÀæUÀ¼
	ÀÄ
19.	¢A§Ä °Á¹UÉ
20.	°Á¹UÉ
21.	vÁmĚÔ
22.	PÉÊaî/¥
	À,ïð
23.	PÀwæ
24.	,ÉÆÃ¥ÀÅ
25.	ZÀªÀÄZÀ
26.	lªÀ-ï
27.	n. «
28.	n. « gÉÃrAiÉÆ Ã
	Ã
29.	¥ÉÇãÀÄ
30.	¥sÁå£ï
31.	VqÀ/¸À ¹
32.	bÀwæ

10. ªÀÄ£ÉAiÀİè EqÀ§°ÀÄzÁAvÀ°À ªÀ¸ÀÄÛUÀ¼ÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå	¥ÀzÀUÀ¼ ÀÄ	∫À j Ez É	∫À j E ®è	∵sÁUÀ ±ÀB ¸Àj
1.	°ÉÆ¢PÉ/P ÀA§½			

12. QæAiÀiÁ ¥ÀzÀUÀ¼ÀÄ

PÀæ	¥ÀzÀUÀ¼À	Å	Å	¨sÁUÀ
ªÀÄ	Ä	j	j	±ÀΒ
JÀA		Ē	E	<u>,</u> Àj
SÉå		z É	® è	
		É	è	
1.	PÀZÀÄÑ			
2.	HzÀÄ			
3.	ªÀÄÄj			
4.	vÉUÉzÀÄP			
	ÉÆAqÀÄ Á			
5.	±ÀÄa			
	^a ÀiÁqÀÄ			
6.	^a AAAZAAN			
7.	C¼ÀÄ			
8.	PÀÄtÂ			
9.	awæ¸ÀÄ			
10.				
11.				
12.	©Ã¼ÀÄ			
13.	w¤ß¸ÀÄ			
14.				
15.	PÉÆqÀÄ			
16.	°ÉÆÃUÀÄ			
17.	À°ÁAiÀÄ ªÀiÁqÀÄ			
	*ÀiÁqÀÄ			
18.	°ÉÆr			
19.				
20.	£ÉV			

12. PÁ® ,ÀÆavÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå	¥ÀzÀUÀ ¼ÀÄ	∫À j Ez É	À j E ®è	∵sÁUÀ ±ÀB ¸Àj
1.	°ÀUÀ®Ä			
2.	gÁwæ			
3.	"ɹ∕₂UÉÎ			
4.	DªÉÄÃ ⁻ É			
5.	FUÀ			
6.	EªÀvÀÄ Û			
	£Á¼É			
7.				
8.	£É£Éß			

PÀæ	¥ÀzÀUÀ¼À	JÀ J E	À	sÁUÀ
ªÀÄ	Ä	j	Ĵ	±ÀB ¸Àj
ÀA		E	E	"Aj
SÉå		z É	®	
		E	è	
21.	M¢			
22.	^a ÀÄÄwÛqÀ Ä			
	A			
23.	£ÉÆÂqÀÂ			
24.	£ÉÆÃqÀÄ vÉUÉ			
25.	DqAA			
26.	J ¹ /2			
27.	vÀ¼ÀÄî			
28.	EqÀÄ NzÀÄ			
29.	NzÀÄ			
30.	Nr,ÀÄ			
31.	NqÀÄ °ÉüÀÄ			
32.	°ÉüÀÄ			
33.	vÉÆÃj¸ÀÄ			
34.	°ÁqÀÄ			
35.	ªÀÄ®UÀÄ			
36.				
	¤°è,ÀÄ			
38.	vÉUÉ¢PÉÆ			
39.				
40.				
-	£Àr			
42.	§j æ+ÁßxÀðPÀ ¥			

13. ¥Àæ±ÁßxÀðPÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ^a	¥ÀzÀUÀ	À ٍ	٫À	sÁUÀ
ÀÄ	¼ÀÄ	j Ez É	j	±ÀB ¸Àj
ÀAS Éå		Ez	E	<u>,</u> Àj
Éå		É	ૃΑ j E ®è	
1.	°ÉÃUÉ			
2.	KµÀÄÖ			
3.	K£ÀÄ			
4.	AiÀiÁªÁ			
	UÀ			
5.	J°è			
6.	AiÀiÁªÀ			
	ÅzÀÄ			
7.	AiÀiÁgÀ			
	Ä			
8.	KPÉ			

14. «^aÀgÁtvÀäPÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ	¥ÀzÀUÀ¼À	<u>م</u>	ۣÀ	sÁUÀ
ªÀÄ	Ä	i	i	±ÀB
∫ÀA SÉå		E	Ε	<u>`</u> Àj
SÉå		z É	®	
		E	è	
1.	J®è			
	°ÉÆAiÀÄÄ Û			
2.	PÉlÖzÀÄ			
3.	zÉÆqÀØ ªÀÄÄjzÀ °ÀĵÁgÀÄ/			
4.	AAAJZA			
5.	•AAµAgAA/ eÁUÀgÀÆP			
	à			
6.	vÀtÚUÉ			
7.	vÀtÚUÉ ªÀÄÄzÁV			
8.	PÀvÀÛ®Ä			
9.	PÉÆ¼É			
10.	MtV			
11.				
12.				
	ÉÃUÀ£É			
13.	ZÉ£ÁßV			
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.	vÀgÀ ⁻ É		ļ	
22.	°À¼ÉAiÀÄ			
23.	°ÉzÀjzÀ		ļ	
24.	¤zÉæAiÀÄ			
	ªÀÄA¥ÀgÀ ï			
	Ä			
25.	ªÀÄÈzÀĪÁ V			
26	v "ÁAiÀÄjPÉ			
26.	ÀÄ ÀÄÛ			
27. 28.	JAAJAAU °À1			
28.	Λ^-	1		

15. ¸ÀªÀð£ÁªÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå	¥ÀZÀUÀ ¼ÀÄ	∫À j Ez É	Å j E ®è	∵sÁUÀ ±ÀB ¸Àj
1.	£Á£ÀÄ			
2.	CªÀ¼À			
3.	CªÀ£À			
4.	£À£ÀUÉ			
5.	£À£ÀßzÀ			
	Ä			
6.	£À£Àß			
7.	CzÀÄ			
8.	EzÀÄ			
9.	¤Ã£ÀÄ			
10.	¤£Àß			

16. ¥ÁæªÀiÁuÁzÀjvÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ^a ÀÄ	¥ÀzÀUÀ ¼ÀÄ	∫À j Ez É	À i	∵sÁUÀ ±ÀB
¸ÀAS Éå		J Ez	Б Е	` Àj
Éå		É	®è	
1.	J®è			
2.	E£ÉÆßA			
	zÀÄ			
3.	eÁ¹Û			
4.	E®è			
5.	ÉÃgÉ			
6.	CzÉÃ			
7.	PÉ®ªÀÅ			

17. ,ÀܼÁzÁjvÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ^a	¥ÀzÀUÀ	ۣÀ	٫À	sÁUÀ
ÀÄ	¹∕₄ÀÄ	j	j	±ÀB
JÀAS		Ez	Ε	, Àj

Éå		É	®è	
1.	°ÀwÛgÀ			
2.	zÀÆgÀ			
3.	»AzÉ			
4.	PɼÀUÉ			

5.	ªÉÄÃ⁻É		
6.	M¼ÀUÉ		
7.	⁰ÉÆgÀU		
	É		

18. E¤ßvÀgÉ

PÀæ ^a	¥ÀzÀUÀ¼	٦À	٦À	¨sÁUÀ
ÀÄ	ÀÄ	∫À j Ez É	∫A j	±ÀB ,Àj
ÀAS Éå		Éz	\mathbf{E}	`Àj
Eå		Е	®	
			è	
1.	ֻÁߣÀ ⁰ÉÆ®/UÀz			
2.	°ÉÆ®/UÀz			
	ÉÝ			
3.	°ÀƪÀÅ			
4.	vÉÆÃl			
5.	ªÀÄ£É			
6.	ZÀAzÀæ			
7.	£À¢/PÉÆ¼			
	À			
8.	ªÀļÉ		_	
9.	PÀ®Äè			
10.	±Á ⁻ É			

PÀæ ^a	¥ÀzÀUÀ¼	ۣÀ	ۣÀ	¨sÁUÀ
ÀÄ	ÀÄ	Å j	∫A j	±ÀB
_, ÀAS Éå		Ez É	E	`Àj
Éå		É	R	
			è	
11.	DPÁ±À			
12.	£ÀPÀëvÀæ			
13.	CAUÀr			
14.	<i></i> ,ÀÆAiÀÄð			
15.	GAiÀÄå⁻É			
16.	ªÀÄgÀ			
17.	PÉ®¸À			
18.	ªÀÄtÄÚ			
19.	UÁAiÀÄ			
20.	zÉêÁ®Ai			
	ÀÄ			
21.	qÁPÀÖgï/D			
	ÀàvÉæ			

[¨]sÁUÀ 3: ¸À£Éß ªÀÄvÀÄÛ QæAiÉÄUÀ¼ÀÄ ªÉÆzÀ® ¸ÀA¥ÀPÀðzÀ gÀÆ¥À/®PÀëtUÀ¼ÀÄ

	^a ÁPÀåUÀ¼ÀÄ	,Àj	_Àj	¨sÁUÀ±ÀB
,ÀASÉå		EzÉ	E®è	, Àj
1.	CªÀ¼ÀÄ/CªÀ£ÀÄ »r¢gÀĪÀ			
	^a À,ÀÄÛ ^a À£ÀÄß PÉÊ ZÁa			
	vÉÆÃj,ÀĪÀÅzÀÄ.			
2.	CªÀ¼ÀÄ/CªÀ£ÀÄ »r¢gÀĪÀ			
	CnPÉ/ªÀ,ÀÄÛªÀ£ÀÄß PÉÆqÀ®Ä			
	¤ ^ª ÉÄäqÉUÉ §gÀĪÀÅzÀÄ			
3.	CªÀ½UÉ/CªÀ¤UÉ C,ÀQÛ¬ÄgÀĪÀ ªÀ,ÀÄÛ«£ÉqÉUÉ ¨ÉgÀ¼ÀÄ ªÀiÁr			
	^a À¸ÀÄÛ«£ÉqÉUÉ ¨ÉgÀ¼ÀÄ ^a ÀiÁr			
	vÉÆÃj,ÀĪĂÅzÀÄ.			
4.	CªÀ¼Ă/CªÀ£À PÉÊ ªÉÄÃ ⁻ É JwÛ			
	CªÀ¼À£ÀÄ₿/CªÀ£À£ÀÄ₿			
	JwÛPÉÆ¼ÀÄîªÀAvÉ ¸ÀÆa¸ÀĪÀÅzÀÄ.			
5.	"E®è" JA§AvÉ vÀ⁻É C⁻Áèr,ÀĪÀÅzÀÄ.			

6.	"°ËzÀÄ" JA§AvÉ vÀ ⁻ É Dr¸ÀĪÀÅzÀÄ.	
7.	¨ÉgÀ¼À£ÀÄβ vÀÄnAiÀÄ ªÉÄÃ¯É ElÄÖ	
	"±ï(¤±Àå§Ý)" JA§AvÉ vÉÆÃj ÅĪÀÅzÀÄ.	
8.	J£À£ÁßzÀgÀÄ PÉüÀ®Ä PÉÊAiÀÄ£ÀÄß	
	°ÉÆgÀ ZÁa vÉUÉzÀÄ ªÀÄÄaÑ	
	^a ÀiÁqÀÄ ^a ÀÅzÀÄ.	
9.	zÀÆgÀzÀ°ègÀĪÀ ªÀåQÛUÉ	
	^a ÀÄÄvÀÛ£ÀÄß UÁ½AiÀİè	
	HzÀĪÀÅzÀÄ.	
10.	C ªÀ,ÀÄÛ gÀÄaAiÀiÁVzÉ JAzÀÄ	
	vÀÄnAiÀÄ£ÀÄß »AzÉ ªÀÄÄAzÉ ªÀiÁr	
	vÉÆÃj¸ÀĪÀÅzÀÄ.	

DIUÀ¼ÀÄ ªÀÄvÀÄÛ ¢£ÀZÀj

PÀæªÀÄ ¸ÀASÉå	DIUÀ¼ÀÄ	_, Àj EzÉ	¸Àj E®è	¨sÁUÀ±ÀB ¸Àj
6.	PÀ¼Àî §AzÀ PÀ¼Àî			
7.	"É£ÀβnÖ ⁰ÉÆÃUÀĪÀ DlUÀ¼ÀÄ			
8.	UÉÆA¨É E¤ßvÀgÀ ªÀ¸ÀÄÛUÀ¼À eÉÆvÉ DqÀĪÀÅzÀÄ			
9.	°ÁqÀĪÀÅzÀÄ			
10.	°ÁrUÉ °ÉeÉÓ °ÁPÀĪÀÅzÀÄ			

^aÀ,ÀÄÛUÀ¼ÉÆA¢UÉ ^aÀiÁqÀÄ^aÀ PÉ®,ÀUÀ¼ÀÄ

PÀæªÀÄ	^a ÁPÀåUÀ¼ÀÄ	<u>`</u> Àj	,Àj	¨sÁUÀ±ÀB
,ÀASÉå		EzÉ	E®è	, Àj
1.	PÉʬÄAzÀ/ZÀªÀÄZÀ¢AzÀ w£ÀÄߪÀÅzÀÄ			
2.	UÁè ¹ ¤AzÀ PÀÄrAiÀÄĪÀÅzÀÄ			
3.	¨ÁZÀtÂUɬÄAzÀ vÀ⁻É ¨ÁZÀĪÀÅzÀÄ			
4.	§æ¶¤AzÀ °À®Äè GdÄÓªÀÅzÀÄ			
5.	PÉÊ PÁ®Ä/ªÀÄÄRªÀ£ÀÄβ lªÀ⁻ï¤AzÀ			
	MgɸÀĪÀÅzÀÄ			
6.	mÉÆÃ¦°ÁQ PÉÆ¼ÀÄîªÀÅzÀÄ			
7.	ZÀ¥Àà° °ÁQPÉÆ¼ÀÄîªÀÅzÀÄ			
8.	,ÀgÀ, PÉÊ UÀrAiÀiÁgÀ			
	°ÁQPÉÆ¼ÀÄîªÀÅzÀÄ			
9.	PÀtÄÚ ªÀÄÄaÑ ¤zÉæ §AzÀªÀgÀAvÉ			
	ªÀÄ®UÀĪÀÅzÀÄ			
10.	©¹AiÀiÁVzÉ JAzÀÄ ¸ÀÆa¸À®Ä			
	HzÀĪÀÅzÀÄ			
11.	ªÁºÀ£ÀUÀ¼À£ÀÄß			
	»rzÀÄPÉÆ¼ÀÄîªÀÅzÀÄ ªÀÄvÀÄÛ			
	ZÀ°,ÀĪÀAvÉ ªÀiÁqÀĪÀÅzÀÄ.			
12.	¥ÉÇãÀ£ÀÄß Q«AiÀÄ §½ »rzÀÄ			

	ªÀiÁvÀ£ÁqÀĪÀªÀgÀAvÉ £Àn¸ÀĪÀÅzÀÄ	
13.	ZÉAqÀ£ÀÄ̈́ß J ֲÉAiĂÄÄĪÀÅzÀÄ̈́	
14.	MAzÀÄ ¥ÁvÉæ¬ÄAzÀ ªÀÄvÉÆÛAzÀÄ	
	¥ÁvÉæUÉ ¤ÃgÀÄ ¸ÀÄjAiÀÄĪÀÅzÀÄ	
15.	¥ÁvÉæAiÀİè CxÀªÀ [–] ÉÆÃlzÀ°è	
	¤ÃgÀ£ÀÄß ZÀªÀÄZÀ¢AzÀ	
	wgĂÄV,ÀÄzÀÄ	
16.	UÉÆA¨ÉUÉ ªÀÄÄvÀÄÛ PÉÆqÀĪÀÅzÀÄ	
	CxÀªÀ vÀ©âPÉÆ¼ÀÄîªÀÅzÀÄ	
17.	UÉÆA ÉAiÉÆA¢UÉ	
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Appendix IV

Demographic information form

Name of the child:

age/sex:

Date of birth:

	Name	Age	Education	Occupation
Father's				
Mother's				

Annual income of the family:

Consanguinity:

Family status:

Total no of persons in the family:

Family history: (of Mental retardation, psychological problem, congenital deformity, handicapped, and any neurological problem):

Speech and language stimulation at home:

Sibling history

no. of siblings:

	Name	Age/Sex	Education
I sibling			
II sibling			

Prenatal complications:

Perinatal complications:

Postnatal complications:

Developmental pattern:

Motor:

Speech and language:

Any congenital abnormalities:

Any sensory abnormalities:

Vision:

Hearing:

Screening result:

Hearing:

Vision:

Psychological test:

Appendix V

Communication inventory for 6 – 8 months infants

Section 1 Early Communication Skills

Section 1 A, Prelinguistic skills

- 1. Appears to be able to distinguish general meanings of warning, anger and/or friendly voice pattern by facial and bodily gestures.
- 2. Responds with appropriate gestures to words such as "come", "bye-bye".....etc.
- 3. Gives some attention to music or singing.
- 4. Frequently appears to listen to whole conversation around him/her.
- 5. Regularly stops activity when his/her name called.
- 6. Reacts to loudness changes in voice of a others.
- 7. Sustain interest for up to a full minute in looking at person or picture, if they are named. Ex "look this is your daddy's picture"
- 8. Reacts differently to familiar people and strangers.
- 9. Appears to enjoy listening to new words.
- 10. Responds to rhythmic music by bodily or hand movements
- 11. Understands words like up, down.....
- 12. Responds when name called. Ex. Turning back, searching for the person who called... etc.
- 13. Child enjoys watching TV, looking at comics or listening to music.

Section 1 B, Early Phrases

- 1. Are you hungry?
- 2. Clap your hands
- 3. Come on/ come here
- 4. Get up
- 5. Look / look here
- 6. Want to go out?

Section 2 vocabulary

Comprehension

Family members: Mummy, Daddy, Grandma and Grandpa Food items: Rice, Mudde, Water, Apple and Milk Vehicles: Motorcycle and Car Toys: Doll and Toy Rooms and Furniture: Kitchen, Bedroom, Bathroom and Cot Dress: Cloth/Dress Common objects: Blanket, Bottle, Bowl, Lamp, Medicine, TV, Telephone and Fan Action verbs: Bite, Drink and Eat Other words: Bath and Home Expression:

Different sound effects: Ba ba, Wa wa, Ba ba va va ta ta, Ta da va ma, ambaa ambaa, choo choo and amma.

Family members: mummy

Section 3 nonverbal communication

First communicative features

- 1. Waves bye-bye on his/her own when someone leaves.
- 2. Blows kisses from a distance

Games and routines

- 1. Play peekaboo
- 2. Play chasing games
- 3. Play with a toys
- 4. Sing
- 5. Dance

Actions with objects

- 1. Drink from a cup.
- 2. Hold vehicle object and make it move.
- 3. Kiss or hug a toy.

Communication inventory for 8-10 months infants

Section 1 Early Communication Skills

Section 1 A, Prelinguistic skills

1. Appears to be able to distinguish general meanings of warning, anger and/or friendly voice pattern by facial and bodily gestures.

- 2. Responds with appropriate gestures to words such as "come", "bye-bye".....etc.
- 3. Gives some attention to music or singing.
- 4. Frequently appears to listen to whole conversation around him/her.
- 5. Regularly stops activity when his/her name called.
- 6. Reacts to loudness changes in voice of a others.
- 7. Regularly stops activity in response to "No".
- 8. Reacts differently to familiar people and strangers.
- 9. Appears to enjoy listening to new words.
- 10. Generally able to listen to speech without being distracted by others.
- 11. Enjoys listening stories.
- 12. Responds to rhythmic music by bodily or hand movements
- 13. Child is possessive about his/her clothes, toys.
- 14. Responds when name called. Ex. Turning back, searching for the person who called... etc.
- 15. Child enjoys watching TV, looking at comics or listening to music.

Section 1 B, Early Phrases

- 1. Are you hungry?
- 2. Are you tired/ sleepy?
- 3. Be quiet!
- 4. Clap your hands
- 5. Come on/ come here
- 6. Don't do that
- 7. Don't touch
- 8. Give me a hug/kiss
- 9. Let's go bye bye

- 10. Look / look here
- 11. Open your mouth
- 12. Sit down
- 13. Stop it
- 14. Want to go out?
- 15. Say bye bye
- 16. Sleep now?
- 17. Don't cry
- 18. Don't go outside

Section 2 vocabulary

Comprehension

Family members: Mummy, Daddy, Grandma and Aunty

Body parts: Eye and Hand

Food items: Water and Milk.

Animals: Dog

Vehicles: Bicycle, Motorcycle and Car

Toys: Ball, Book, Doll, Pen and Toy.

Clothing: Cloth/Dress, Hat and Bangles.

Rooms and furniture: Kitchen, Bedroom, Bathroom and Cot.

Common objects: Broom, Medicine, Money, Paper, Bed, Plate, Spoon, Telephone and Fan.

Action verbs: Dance, Drink, Eat, Go, Hug, Kiss, Look and Take.

Descriptive words: All gone, Hot, Hungry, and Tired.

Others: Bath, Flower, and Hospital/ Doctor

Expression

Different sound effects: Ba ba, Wa wa, Ba ba va va ta ta, Ta da va ma, Choo choo, Vroom, woof woof and umm

Family members: Mummy and Daddy.

Section 3 Nonverbal communication

First communicative features

- 1. Reaches out and gives you a toy or some objects that he/ she in holding.
- 2. Points (with arm and index finger extended) at some interesting object or event.
- 3. Waves bye-bye on his/her own when someone leaves.
- 4. Extends his/her upward to signal a wish to be picked up.
- 5. Shakes head "no"
- 6. Blows kisses from a distance.

Games and routines

- 6. Play peekaboo
- 7. Play chasing games
- 8. Play with a toys
- 9. Sing
- 10. Dance

Actions with objects

- 1. Eat with a spoon.
- 2. Drink from a cup.
- 3. Put on hat
- 4. Hold vehicle object and make it move.
- 5. Put telephone to ear.
- 6. Throw ball
- 7. Pour liquid from one container to another

8. Kiss or hug a toy.

Imitating adult like actions

- 1. Sweep with broom or mop
- 2. Read (open book and turn pages)
- 3. Write with pen or pencil

Communication inventory for 10-12 months infants

Section 1 Early Communication Skills

Section 1 A, Prelinguistic skills

- 16. Appears to be able to distinguish general meanings of warning, anger and/or friendly voice pattern by facial and bodily gestures.
- 17. Responds with appropriate gestures to words such as "come", "bye-bye".....etc.
- 18. Gives some attention to music or singing.
- 19. Frequently appears to listen to whole conversation around him/her.
- 20. Regularly stops activity when his/her name called.
- 21. Reacts to loudness changes in voice of a others.
- 22. Regularly stops activity in response to "No".
- 23. Reacts differently to familiar people and strangers.
- 24. Appears to enjoy listening to new words.
- 25. Generally able to listen to speech without being distracted by others.
- 26. Mimes when action is named. Ex. When you ask "How to eat?" Child will make action to show how to eat.
- 27. Enjoys listening stories.
- 28. Responds to rhythmic music by bodily or hand movements
- 29. Feels happy when the child is praised for looks/ neat dress
- 30. Child is possessive about his/her clothes, toys.
- 31. Responds when name called. Ex. Turning back, searching for the person who called... etc.
- 32. Child enjoys watching TV, looking at comics or listening to music.

Section 1 B, Early Phrases

- 19. Are you hungry?
- 20. Are you tired/sleepy?
- 21. Be quiet!
- 22. Clap your hands
- 23. Come on/ come here
- 24. Do you want more?
- 25. Don't do that
- 26. Don't touch
- 27. Get up
- 28. Give it to mummy
- 29. Give me a hug/kiss
- 30. Go get
- 31. Good girl/boy
- 32. Let's go bye bye
- 33. Look / look here
- 34. Open your mouth
- 35. Sit down
- 36. Stop it
- 37. Throw the ball
- 38. Want to go out?
- 39. Do you want it?
- 40. Say bye bye
- 41. Sleep now?

- 42. Don't cry
- 43. Don't go outside.
- 44. Give me some???

Comprehension

Family members: Mummy, Daddy, Grandma, Grandpa, Sister, Aunty and Child.

Body parts: Head, Eye, Mouth, Hand and Leg.

Food items: Rice, Idli, Dosa, Chappati, Water, Apple, Banana, Milk and Food items.

Animals: Cat, Dog, Cow, Crow and Animal

Vehicles: Bus, Bicycle, Motorcycle, Car and Auto

Toys: Ball, Balloon, Book, Doll, Pen and Toy.

Clothing: Cloth/Dress, Nikker, Hat, Necklace/Chain, Bangles, Ear rings, Ankle lace and Sweater.

Rooms and furniture: Kitchen, Bedroom, Bathroom, Cot, Chair, Door and Stairs.

Common objects: Blanket, Bottle, Bowl, Box, Broom, Comb, Dish, Glass, Key, Lamp, Medicine, Money, Paper, Bed, Plate, Purse, Soap, Spoon, TV, Telephone, Fan and Plant.

Action verbs: Bite, Bring, Close, Cry, Dance, Drink, Eat, Fall, Feed, Finish, Give, Go, Hit, Hug, Kiss, Look, Open, Play, Pull, Push, Put, Say, Show, Sing, Sleep, Smile, Take, Throw, Touch and Walk.

Question words: what, who and why.

Descriptive words: All gone, Dark, Empty, Fast, Fine, Happy, Hard, Hungry, Hurt, Sleepy and Tired.

Pronouns: I, Me, That, This and You.

Quantifiers: none

Others: Bath, Flower, Home, Moon, Store, Mud, Temple and Hospital/ Doctor

Expression

Different sound effects: Ba ba, Wa wa, Ba ba va va ta ta, Ta da va ma, ko ko, woof woof and umm

Family members: mommy, daddy, grandpa.

Section 3 Nonverbal communication

First communicative features

- 1. Extends arm to show you something he/she is holding.
- 2. Reaches out and gives you a toy or some objects that he/ she in holding.
- 3. Points (with arm and index finger extended) at some interesting object or event.
- 4. Waves bye-bye on his/her own when someone leaves.
- 5. Extends his/her upward to signal a wish to be picked up.
- 6. Shakes head "no"
- 7. Nods head "yes"
- 8. Blows kisses from a distance.

Games and routines

- 1. Play peekaboo
- 2. Play chasing games
- 3. Play with a toys
- 4. Sing
- 5. Dance

Actions with objects

- 1. Eat with a spoon.
- 2. Drink from a cup.
- 3. Comb his/her own hair.
- 4. Brush teeth.
- 5. Put on hat
- 6. Hold vehicle object and make it move.
- 7. Put telephone to ear.
- 8. Throw ball
- 9. Pour liquid from one container to another
- 10. Kiss or hug a toy.

Imitating adult like actions

- 1. Sweep with broom or mop
- 2. Read (open book and turn pages)
- 3. Try to ride bicycle.
- 4. Clean with cloth
- 5. Write with pen or pencil

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Appendix I

The MacArthur Communicative Development inventories:

Words and Gestures

PART I EARLY WORDS

A. First Signs of Understanding

Before children begin to speak, they show signs of understanding language by responding to familiar words and phrases. Below are some common examples. Does your child do any of these?

- 1. Respond when name is called. (e.g., by turning and looking at source).
- 2. Respond to "no no" (by stopping what he/she is doing, at least for a moment).
- 3. React to "there's mummy / daddy" by looking around for them.

B. Phrases

Will the child able understand these sentences.....?

Please mark (o) in front of the sentences which child seems to be understand

1.	Are you hungry?	10. Give it to	21. Throw the ball
2.	Are you tired/	mummy	22. Give me a kiss
	sleepy?	11. Give me a hug	23. Daddy's/mummy
3.	Be careful	12. Go get	's home
4.	Clap your hands	13. Good girl/boy	24. Change diaper
5.	Come on/ come	14. Hold still	25. Be Quite
	here	15. Let's go bye bye	26. Time to go night
6.	Do you want	16. Look / look here	night
	more?	17. Open your	27. This little piggy
7.	Don't do that	mouth	28. Want to go for a
8.	Don't touch	18. Sit down	ride?
9.	Get up	19. Spit it out	
		20. Stop it	

C. Starting to talk

 Some children like to "parrot" or imitate things that they've just heard (including new words that they are just learning, and/ or parts of sentences, for example, repeating "work now" after mother says "mummy's is going to work now."). How often does your child imitate words?..... 2. Some children like to go around naming or labeling things, as though proud of knowing the names and wanting to show this. How often does your child do this?

D. Vocabulary check list.

If your child just understands the word mark (0) in front of the word. If your child understands as well as says the word then mark (\checkmark) in front of the word.

1. Sound effects and animal sounds

Baa baa	ouch	uh oh
Choo choo	quack quack	vroom
cockadoodledoo	grrr	woof woof
mooo	meow	yum yum
2. Animal names		
Animal	Donkey	Mouse
Bear	Duck	Owl
Bee	Elephant	Penguin
Bird	Fish	Pig
Bug	Frog	Pony
Bunny	Giraffe	Puppy
Butterfly	Goose	Sheep
Cat	Hoarse	Squirrel
Chicken	Kitty	Teddy bear
Cow	Lamb	Tiger
Deer	Lion	Turtle
Dog	Monkey	Turtle
<u>3. Vehicles</u> Airplane Bicycle Bus	Car Firetruck Stroller	Motorcycle Train Truck
<u>4. Toys</u>		
Ball	Book	Doll
Balloon	Bubbies	Pen
Block	Bubble	Toy

5. Food and Drink

Food	Candy
Ice cream	Chicken
Juice	Cookie
Meet	Cracker
Milk	Cheese
Noodles	Pizza
Orange	Peas
Water	Spaghetti
Carrots	Toast
Cherrios	Rasin
	Ice cream Juice Meet Milk Noodles Orange Water Carrots

6. Clothing

Beads	Diaper	Pants
Bib	Dress	Shirt
Boots	Hat	Shoe
Button	Jacket	Socks
Coat	Necklace	Sweater
Dress	Pajamas	Zipper

7. Body parts

Arm	Foot	Leg
Belly	Finger	Mouth
Cheek	Hair	Nose
Ear	Hand	Tooth
Eye	Head	Toe
Face	Knee	Tongue

8. Furniture and Rooms

Bathroom	Drawer	Refridgerator
Bathtub	Garage	Rocking chair
Bed	High chair	Sink
Bedroom	Kitchen	Stove
Couch	Living room	Stairs
Crib	Oven	Table
Chair	Play pen	TV
Door	Potty	Window

9. Small House hold Items.

Blanket	Hammer	Purse
Bottle	Keys	Radio
Bowl	Lamp	Scissors
box	Light	Soap
Broom	Medicine	Spoon
Brush	Money	Telephone
Clock	Paper	Toothbrush
Comb	Penny	Towel
Cup	Pictures	Vaccum
Dish	Pillow	Watch
Fork	Plant	
Glass	Plate	

10. Outside Things and places

Backyard	Park	Snow
Beach	Party	Star
Church	Pool	Store
Flower	Rain	Sun
Garden	Rock	Swinf
Home	School	Tree
House	Shovel	Water
Moon	Sky	Work
Outside	Side	Zoo

<u>11. People</u>

Aunty	Grandpa	Baby sister's name
Boy	Mummy	Shopkeeper
Brother	People	Baby
Child	Person	Babysister
Daddy	Sister	Man
Girl	Teacher	Lady
Grandma	Uncle	Child's own name

12. Games and routines

Bath Breakfast Bye or Bye Bye Dinner Don't Hello Hi

Lunch Night night Nap No Patty cake Peekaboo Please

Shh/Hush Thank you Wait Wanna/ Want to Yes

13. Action words

Bite	Go	Say
Blow	Help	See
Break	Hit	Show
Bump	Hug	Sing
Bring	Hurry	Sleep
Clean	Jump	Smile
Close	Kick	Splash
Cry	Kiss	Stop
Dance	Look	Swim
Draw	Love	Swing
Drink	Open	Take
Drive	Play	Throw
Eat	Pull	Touch
Fall	Push	Watch
Feed	Put	Walk
Finish	Read	Wash
Get	Ride	Wipe
Give	Run	Write

14. Words about time

Day	Night	Tomorrow
Later	Now	Tonight
Morning	Today	

15. Descriptive words

All gone	Careful	Dry
Asleep	Clean	Empty
Bad	Cold	Fast
Big	Cute	Fine
Blue	Dark	Gentle
Broken	Dirty	Good
Нарру	Nice	Tired
Hard	Old	Wet
Hot	Scared	Yucky
Hungry	Sick	Pretty
Hurt	Sleepy	Red
Little	Soft	
Naughty	Thirsty	

16. Pronouns

I It Her His	Me Mine My That	This You Your
<u>17. Questions words</u>		
How	When	Why
How many	Where	Which
What	Who	
<u>18. Prepositions</u> Away Back Down In	Inside Off On Out	There Under Up
<u>19. Quantifiers</u>		
All	None	Same
Another	Not	Some
More	Other	

Part II Actions and Gestures

A.First communicative features

When infants are first learning to communicate, they often use gestures to make their wishes known. For each item below, mark the line (\checkmark) that describes your childs actions right now

- 1. Extends arm to show you something he/she is holding.
- 2. Reaches out and gives you a toy or some objects that he/ she in holding.
- 3. Points (with arm and index finger extended) at some interesting object or event.
- 4. Waves bye-bye on his/her own when someone leaves.
- 5. Extends his/her upward to signal a wish to be picked up.

- 6. Shakes head "no"
- 7. Nods head "yes"
- 8. Gestures "hush" by placing finger to lips.
- 9. Requests something by extending arm and opening and closing hand.
- 10. Blows kisses from a distance.
- 11. Smacks lips in a "yum yum" gesture ti indicate that something taste good.
- 12. Shrugs to indicate "all gone" or "where'd it go".

B.Games and routines

Does your child do any of the following?

- 1. Play peekaboo
- 2. Play patty cake
- 3. Play "so big"
- 4. Play chasing games
- 5. Sing
- 6. Dance

C.Actions with objects

Does your child do/try any of the following?

- 1. Eat with a spoon or fork
- 2. Drink from a cup containing of liquid
- 3. Comb or brush his/her own hair.
- 4. Brush teeth.
- 5. Wipe face or hands with a towel or cloth.
- 6. Put on hat
- 7. Put on shoe/socks
- 8. Put on necklace, bracelet or watch
- 9. Lay head on hands and squeeze eyes shut as if sleeping.
- 10. Blow to indicate something is hot.
- 11. Hold vehicle object and make it move.
- 12. Put telephone to ear.
- 13. Throw ball
- 14. Pour pretend liquid from one container to another
- 15. Stir pretend liquid in a cup or pan with a spoon.
- 16. Shiff flowers
- 17. Talk to toy.

D. Pretending to be a Parent

How are some things that young children sometimes do with stuffed animals or dolls. Please mark the actions that you have seen your child to do.

- 1. Put to bed
- 2. Cover with blancket
- 3. Feed with bottle
- 4. Feed with spoon
- 5. Brush/comb its hair
- 6. Pat or burp it
- 7. Push in stroller/buggy
- 8. Rock it
- 9. Kiss or hug it
- 10. Try to put shoe/socks/hat on it
- 11. Talk to it
- 12. Try to put diaper on it.

E. Imitating other Adult actions (using real or toy implements).

Does your child do/try any of the following?

- 1. Sweep with broom or mop
- 2. Put key in door or lock
- 3. Pound with hammer or mallet
- 4. Attempt to use saw
- 5. "Type" at a typewriter or computer keyboard
- 6. Vaccum
- 7. Water plants
- 8. Play musical instruments
- 9. "Drive car by turning steering wheel
- 10. Wash dishes
- 11. Write with a pen, pencil, or marker
- 12. Clean with cloth or duster
- 13. Read
- 14. Dig with a showel
- 15. Put on glasses

F. Pretend objects

During play, children sometimes use an object as a replacement for other. For example, a child wishing to feed a teddy bear might pretend that a block is an apple. A child might pretend that a bowl is a hat. Have you seen your child make substitutions of this kind?

If yes, Please give several examples

Other comments

Appendix II

Communication Inventory for Infants - CII (6 – 12 months)

Name:

Date:

DOB:

Age/sex:

<u>Instructions:</u> Please tick skills which your children can able to do in section 1 A and in section 1 B please the phrases which your children able to understand. If the child is not able to do the activity keep it empty.

Section 1

A. Early skills

Sl no	Skills	Comprehends
1.	Appears to be able to distinguish general meanings of warning, anger	
	and/or friendly voice pattern by facial and bodily gestures.	
2.	Responds with appropriate gestures to words such as "come", "bye-	
	bye"etc.	
3.	Gives some attention to music or singing.	
4.	Frequently appears to listen to whole conversation around him/her.	
5.	Regularly stops activity when his/her name called.	
6.	Reacts to loudness changes in voice of a others.	
7.	Regularly stops activity in response to "No".	
8.	Reacts differently to familiar people and strangers.	
9.	Appears to enjoy listening to new words.	
10.	Generally able to listen to speech without being distracted by others.	
11.	Mimes when action is named. Ex. When you ask "How to eat?" Child will	
	make action to show how to eat.	
12.	Enjoys listening stories.	
13.	Responds to rhythmic music by bodily or hand movements	
14.	Understands words like up, down	
15.	Feels happy when the child is praised for looks/ neat dress	
16.	Child is possessive about his/her clothes, toys.	
17.	Responds when name called. Ex. Turning back, searching for the person	
	who called etc.	
18.	Child get angry when her objects are taken/used or broken by someone and	
	start fighting with them	
19.	Child enjoy watching TV, looking at comics or listening to music.	

B.	Early phrases
----	---------------

Sl	Phrases	Comprehends
no		
1.	Are you hungry?	
2.	Are you	
	tired/sleepy?	
3.	Be quiet!	
4.	Clap your hands	
5.	Come on/ come	
	here	
6.	Do you want more?	
7.	Don't do that	
8.	Don't touch	
9.	Get up	
10.	Give it to mummy	
11.	Give me a hug/kiss	
12.	Go get	
13.	Good girl/boy!	
14.	Let's go bye bye	

Sl	Phrases	Comprehends
no		
15.	Look / look here	
16.	Open your mouth	
17.	Sit down	
18.	Stop it	
19.	Throw the ball	
20.	Want to go out?	
21.	Do you want it?	
22.	Say bye bye	
23.	Sleep now?	
24.	Don't cry	
25.	Don't go outside.	
26.	Walk slowly.	
27.	This dress is not	
	nice	
28.	Give me some	

Part 2: Early vocabulary

Instructions: Please tick items which your children can able to do. If your child is able to understand mark in comprehends part and if child uses that word/tell that word mark in expresses part. If the child is not able to do the activity keep it empty.

1. Different sound effects

Sl no	Items	Expresses
1.	Ba ba	
2.	Wa wa	
3.	Ba ba va va ta ta	
4.	Ta da va ma	
5.	ambaa ambaa	
6.	ko ko	
7.	o ho	
8.	vroom	
9.	woof woof	
10.	umm	
11.	аууо	
12.	amma	

2. Family members

Sl	Items	Comp	Exp
no			
1.	Mummy		
2.	Daddy		
3.	Grandma		
4.	Grandpa		
5.	Brother		

Sl	Items	Comp	Exp
no			
6.	Sister		
7.	Uncle		
8.	Aunty		
9.	Child		
10.	People		

3. Body parts

Sl	Items	Comprehends	Expresses
no			
1.	Head		
2.	Eye		
3.	Mouth		
4.	Face		
5.	Hand		

Sl	Items	Comprehends	Expresses
no			
6.	Leg		
7.	Tummy		
8.	Cheek		
9.	Finger		
10.	Tongue		
11.	Hair		

4. Food items

Sl	Items	Comp	Exp
no			
1.	Rice		
2.	Mudde		
3.	Sambar		
4.	idli		
5.	Dosa		
6.	Chappati		
7.	Water		
8.	Apple		
9.	Banana		
10.	Orange		
11.	Grapes		

Sl	Items	Comp	Exp
no			
12.	Milk		
13.	Butter		
14.	Bread		
15.	Cake		
16.	Chocolates		
17.	Juice		
18.	Egg		
19.	Meat/ Fish		
20.	Coffee/tea		
21.	Food		

5. Animals

Sl	Items	Comp	Exp
no			
1.	Cat		
2.	Dog		
3.	Cow		
4.	Chicken		
5.	Crow		
6.	Sheep		
7.	Butterfly		

6. Vehicles

Sl	Items	Comp	Exp
no			
8.	Elephant		
9.	Animal		
10.	Monkey		
11.	Mouse		
12.	Fish		
13.	Snake		
14.	Tiger/Loin		

7. Toys

Sl	Items	Comp	Exp
no			
1.	Bus		
2.	Bicycle		
3.	Motorcycle		
4.	Car		
5.	Tempo		

Sl	Items	Comp	Exp
no			
1.	Ball		
2.	Balloon		
3.	Book		
4.	Doll		
5.	Pen		
6.	Тоу		

8. Clothing

Sl	Items	Comp	Exp
no			
1.	Cloth/Dress		
2.	Shirt		
3.	Dothi		
4.	Pants		
5.	Nikker		
6.	Hat		
7.	Socks		
8.	Belt		
9.	Watch		

Sl	Items	Comp	Exp
no			
10.	Ring		
11.	Necklace/C		
	hain		
12.	Bangles		
13.	Ear rings		
14.	Saree		
15.	Skirt		
16.	Ankle lace		
17.	Sweater		

9. Furniture and Rooms.

Sl	Items	Comp	Exp
no			
1.	Kitchen		
2.	Bed		
	Bedroom		
3.	Bathroom		
4.	Cot		

Sl	Items	Comp	Exp
no			
5.	Chair		
6.	Door		
7.	Stairs		
8.	Table		
9.	Window		

10. House hold objects

Sl	Items	Comp	Exp
no			
1.	Blanket		
2.	Bottle		
3.	Bowl		
4.	box		
5.	Broom		
6.	Brush		
7.	Clock		
8.	Comb		
9.	Dish		
10.	Dustbin		
11.	Glass		
12.	Key		
13.	Lamp		
14.	Medicine		
15.	Money		
16.	Paper		

Sl	Items	Comp	Exp
no			
17.	Coins		
18.	Pillow		
19.	Bed		
20.	Plate		
21.	Purse		
22.	Scissors		
23.	Soap		
24.	Spoon		
25.	Towel		
26.	TV		
27.	Radio		
28.	Telephone		
29.	Fan		
30.	Plant		
31.	Umbrella		

11. Action words

Sl no	Items	Comprehends	Expresses
1.	Bite		
2.	Blow		
3.	Break		
4.	Bring		
5.	Clean		
6.	Close		
7.	Cry		
8.	Dance		
9.	Drink		
10.	Eat		
11.	Fall		
12.	Feed		
13.	Finish		
14.	Give		
15.	Go		
16.	Hit		
17.	Hug		
18.	Jump		
19.	Kick		
20.	Kiss		

Sl no	Items	Comprehends	Expresses
21.	Look		
22.	Open		
23.	Play		
24.	Pull		
25.	Push		
26.	Put		
27.	Read		
28.	Ride		
29.	Run		
30.	Say		
31.	Show		
32.	Sing		
33.	Sleep		
34.	Smile		
35.	Stop		
36.	Take		
37.	Throw		
38.	Touch		
39.	Walk		
40.	Write		

12. Descriptive words

Sl	Items	Comp	Exp
no			
1.	All gone		
2.	Bad		
3.	Big		
4.	Broken		
5.	Careful		
6.	Cold		
7.	Cute		
8.	Dark		
9.	Dirty		
10.	Empty		
11.	Fast		
12.	Fine		
13.	Good		

Sl	Items	Comp	Exp
no			
14.	Нарру		
15.	Hard		
16.	Hot		
17.	Hungry		
18.	Hurt		
19.	Little		
20.	Naughty		
21.	Scared		
22.	Sleepy		
23.	Soft		
24.	Thirsty		
25.	Tired		
26.	Wet		

13. Words about time

14. Prepositions

S1	Items	Comp	Exp
no			
1.	Day		
2.	Later		
3.	Morning		
4.	Night		
5.	Now		
6.	Today		
7.	Tomorrow		

Sl	Items	Comprehends	Expresses
no			
1.	Near		
2.	AwayFar		
3.	Back		
4.	Down		
5.	Up		
6.	Inside		
7.	Outside		

15. Pronouns

Sl	Items	Comprehends	Expresses
no			
1.	Ι		
2.	Her		
3.	His		
4.	Me		
5.	Mine		

Sl	Items	Comprehends	Expresses
no			
6.	Му		
7.	That		
8.	This		
9.	You		
10.	Your		

16. Question words

Sl no	Items	Comprehends	Expresses
1.	How		
2.	What		
3.	Where		

Sl no	Items	Comprehends	Expresses
4.	Which		
5.	Who		
6.	Why		

17. Quantifiers

Sl	Items	Comprehends	Expresses
no			
1.	All		
2.	Another		

Sl	Items	Comprehends	Expresses
no			
3.	None		
4.	Same		

18. Others

Sl	Items	Comprehends	Exp	Sl	Items	Comprehends	Exp
no				no			
1.	Bath			11.	Store		
2.	Flower			12.	Sun		
3.	Garden			13.	Swing		
4.	Home			14.	Tree		
5.	Moon			15.	Work		
6.	Pool			16.	Mud		
7.	Rock			17.	Wound/		
8.	School				Injury		
9.	Sky			18.	Temple		
10.	Star			19.	Hospital/		
					Doctor		

Section 3.

Actions And Gestures

<u>Instructions:</u> Please tick activity that your child can perform. If the child is not able to do the activity keep it empty.

a. First communicative features

S1	Skills	Performs the
no		activity
1	. Extends arm to show you something he/she is holding.	
2	. Reaches out and gives you a toy or some objects that he/ she in	
	holding.	
3	Points (with arm and index finger extended) at some interesting	
	object or event.	
4	. Waves bye-bye on his/her own when someone leaves.	
5	. Extends his/her upward to signal a wish to be picked up.	
6	. Shakes head "no"	
7	. Nods head " yes"	
8	Gestures "hush" by placing finger to lips.	
9	Requests something by extending arm and opening and closing	
	hand.	
1	Blows kisses from a distance.	
1	Smacks lips in a "yum yum" gesture ti indicate that something	
	taste good.	

b. Games and routines

Sl	Skills	Performs the
no		activity
1.	Play peekaboo	
2.	Play chasing games	
3.	Play with a toys	
4.	Sing	
5.	Dance	

c. Actions with objects

Sl no	Skills	Performs the activity
1.	Eat with a spoon.	
2.	Drink from a cup.	
3.	Comb his/her own hair.	
4.	Brush teeth.	
5.	Put on hat	
6.	Put on sandals	
7.	Lay head on hands and squeeze eyes shut as if sleeping.	
8.	Blow to indicate something is hot.	
9.	Hold vehicle object and make it move.	
10.	Put telephone to ear.	
11.	Throw ball	
12.	Pour liquid from one container to another	
13.	Stir pretend liquid in a cup or pan with a spoon.	
14.	Kiss or hug a toy.	
15.	Put on glasses.	

d. Imitating adult like actions

Sl no	Skills	Performs the activity
1.	Sweep with broom or mop	
2.	Pound with hammer or mallet.	
3.	Read (open book and turn pages)	
4.	Try to ride bicycle.	
5.	Clean with cloth	
6.	Write with pen or pencil	
7.	Dig with any object	

<u>,ÀAªÀºÀ£À vÀ¥À²Ã®Ä ¥ÀnÖ (6 – 12</u> <u>wAUÀ¼ÀÄ)</u>

["]sÁUÀ 1: A. ^aÀÄÄAa£À ¸ÀA¥ÀPÀð P˱À®åUÀ¼ÀÄ

<u>ÀÆZÀ£ÉUÀ¼ÀÄ</u>: PɼÀUÉ ªÀÄPÀ̼ÀÄ ªÀiÁqÀ§°ÀÄzÁAvÀ°À PÉ®ªÀÅ P˱À®åUÀ¼À£ÀÄß ¤ÃqÀ⁻ÁVzÉ. "sÁUÀ 1 A gÀ°è, ¤ªÀÄä ªÀÄUÀÄ ªÀiÁqÀ§°ÀÄzÁAvÀ°À P˱À®åUÀ¼À ªÀÄÄAzÉ UÀÄgÀÄvÀÄ °ÁQ, "sÁUÀ gÀ°è ¤ªÀÄä ªÀÄUÀÄ CxÀðªÀiÁrPÉÆ¼ÀÄĩªÀ ªÁPÀåUÀ¼À ªÀÄÄAzÉ UÀÄgÀÄvÀÄ °ÁQ. ¤ªÀÄä ªÀÄUÀÄ ªÀiÁqÀ⁻ÁUÀ¢gÀĪÀ P˱À®åUÀ¼À ªÀÄÄA¢gÀĪÀ eÁUÀªÀ£ÀÄß SÁ° ©r.

PÀæªÀÄ ¸ÀASÉå	ªÁPÀåUÀ¼ÀÄ	CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ
1.	^a ÀÄÄR ¨sÁªÀªÀ£ÀÄß CxÀð ªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.	
	(PÉÆÃ¥À, ÀAvÉÆÃµÀ)	
2.	PÉ®ªÀÅ ¥ÀzÀUÀ¼À£ÀÄß CxÀðªÀiÁrPÉÆAqÀÄ	
	¸ÀÆPÀÛªÁzÀ ¥ÀæwQæAiÉÄAiÀÄ£ÀÄß ¤ÃqÀÄvÀÛªÉ.	
	GzÀ: "Á, mÁ mÁ	
3.	,ÀAVÃvÀPÉÌ UÀªÀÄ£À PÉÆqÀĪÀÅzÀÄ.	
4.	CªÀ£À/CªÀ¼À ¸ÀÄvÀÛªÀÄÄvÀÛ £ÀqÉAiÀÄĪÀ ¥ÀÇgÀ	
	ÀA sÁµÀuÉAiÀÄ£ÀÄß D°¹zÀAvÉ PÁtÄvÀÛzÉ.	
5.	CªÀ£À/CªÀ¼À ºÉ,ÀgÀ£ÀÄß PÀjzÁUÀ	
	^a ÀiÁqÀÄwÛgÀÄ ^a À PÉ®,À ^a À£ÀÄß ¤°è,ÀÄvÀÛzÉ.	
6.	zsÀé¤AiÀİè£À ªÀåvÁå,ÀªÀ£ÀÄß	
	CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.	
7.	ĔÃąÀ JAzÀÄ °ÉýzÀgÉ ªÀiÁqÀĪÀ PÉ®¸ÀªÀ£ÀÄß	
	¤°è,ÀÄvÀÛzÉ.	
8.	¥ÀjavÀgÀÄ ªÀÄvÀÄÛ C¥ÀjavÀgÉÆA¢UÉ ¨ÉÃgÉ	
	ÉÃgÉAiÀiÁV ¥ÀæwQæ¬Ä,ÀÄvÀÛzÉ.	
9.	°ÉƸÀ ¥ÀzÀUÀ¼À£ÀÄß PÉüÀ®Ä GvÁì°À	
	vÉÆÃjzÀAvÉ PÁtÄvÀÛzÉ.	
10.	¨ÉgÉAiÉÄqÉUÉ UÀªÀÄ£À ºÀj¸ÀzÉ ªÀiÁvÀ£ÀÄβ	
	¥ÀÇtðªÁV PÉüÀÄvÀÛzÉ.	
11.	PÉ®,ÀªÀ£ÀÄß ºÉüzÁUÀ C©ü£À¬Ä¹ vÉÆÃj,ÀÄvÀÛzÉ.	
	GzÀ; HI *ÀiÁqÀÄ*ÀÅzÀÄ °ÉÃUÉ?	
12.	PÀvÉ PÉüÀ®Ä RĶ¥ÀqÀÄvÀÛzÉ.	
13.	<u>,</u> ÀAVÃvÀPÉÌ *ÉÄÊ PÉÊ ZÀ°1 ¥ÀæwQæ¬Ä,ÀÄvÀÛzÉ.	
14.	*ÉÄÃ ⁻ É,PɼÀUÉ (¸ÀܼÁzÁjvÀ) ¥ÀzÀUÀ¼À£ÀÄß	
	CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.	
15.	ZÉ£ÀßV PÁtÄw¢ÃAiÀÄ JAzÀÄ °ÉýzÁUÀ	

	RĶ¥ÀqÀÄvÀÛzÉ.	
16.	vÀ£Àß ªÀ¸ÀÄÛUÀ¼À£ÀÄß ¨ÉÃgÉAiÀĪÀjUÉ	
	©lÄÖPÉÆqÀĪÀÅ¢®è.	
17.	°É,ÀgÀÄ PÀgÉzÁUÀ ¥ÀæwQæ¬Ä,ÀÄvÀÛzÉ GzÀ:	
	wgÀÄV £ÉÆqÀĪÀÅzÀgÀ ªÀÄÆ®PÀ, PÀgÉzÀ	
	^a ÀåQÛUÁV °ĂÄqÀÄPÀÄ ^a ÀÅzÀgÀ ^a ÀÄÆ®PÀ	
18.	ĽÉÃgÉAiÀĪÀgÀÄ vÀ£Àß ªÀ¸ÀÄÛUÀ¼À£ÀÄß	
	vÉUÉZÀÄPÉÆAqÁUÀ, G¥ÀAiÉÆV¹ZÁUÀ CxÀªÁ	
	°Á¼ÀĪÀiÁrzÁUÀ PÉÆÃ¦¹PÉÆ¼ÀÄîvÀÛzÉ/	
	dUÀ¼ÀªÁqÀÄvÀÛzÉ.	
19.	°ÁqÀ£ÀÄß PÉüÀ®Ä, n. «£ÉÆÃqÀ®Ä	
	RIJ¥ÀqÀÄvÀÛzÉ.	

B: ªÉÆzÀ® ªÁPÀåUÀ¼ÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå	*ÁPÀåUÀ¼ÀÄ	CxÀðªÀiÁr- PÉÆ¼ÀÄîv ÀÛzÉ
1.	°À¹ªÁUÀÄwÛzÉ AiÉÄÃ?	
2.	¤zÉæ §gÀÄwÛzÉAiÉÄ ?/ ,ÀÄ,ÁÛVzÉAiÀ Ä?	
3.	±À§Ý ªÀiÁqÀ¨ÉÃqÀ	
4.	ZÀ¥Á¼É °ÉÆr	
5.	Á E°è	
6.	E£ÀÄß "ÉÃPÉÃ?	
7.	CzÀ£ÀÄß ªÀiÁqÀ¨ÉÃqÀ/ ¸ÀĪÀÄä¤gÀÄ	
8.	ªÀÄÄlÖ ÉÃqÀ	
9.	K¼ÀÄ ªÉÄïÉ	
10.	CªÀÄä¤UÉ PÉÆqÀÄ	
11.	£À£ÀUÉÆAzÀÄ ªÀÄÄvÀÄÛ PÉÆqÀÄ	
12.	⁰ÉÆÃV	

		
	vÉUÉzÀÄPÉÆA	
	qÀÄ "Á	
13.	eÁt	
	°ÀÄqÀÄUÀ/°ÀÄ	
	qÀÄV	
PÀæ ^a	^a ÁPÀåUÀ¼ÀÄ	CxÀðªÀiÁr-
ÀÄ	111 11a 011 /4/111	PÉÆ¼ÀÄîv
ÀAS		ÀÛzÉ
,AAS Éå		
14.	£Ér °ÉÆUÉÆÃt	
	mÁ mÁ	
15.	E°è £ÉÆqÀÄ	
16.	Á¬Ä vÉV	
17.	PÀÄ ¹ ⁄2vÀÄPÉÆ	
18.	¤°è¸ÀÄ	
19.	ZÉAqÀ£ÀÄß J¹	
20.	°ÉÆgÀUÉ	
	°ÉÆÃUÀ	
	ÉÃPÁ?	
21.	¤£ÀUÉ ÉÃPÁ?	
22.	mÁ mÁ °ÉüÀÄ	
23.	FUÀ ªÀÄ®UÀÄ	
24.	C¼À¨ÉÃqÀ	
25.	°ÉÆgÀUÉ	
	°ÉÆÃUÀ¨ÉÃqÀ	
26.	¤zÁ£ÀªÁV £Àr	
27.	F §mÉÖ	

	ZÉ£ÁßV®è	
28.	£À£ÀUÉ ¸Àé®à	

PÉÆqÀÄ

^{..}sÁUÀ 2 : ªÀÄÄAa£À ¥ÀzÀ¥ÀnÖ

<u>ÀÆZÀ£ÉUÀ¼ÀÄ:</u> PɼÀUÉ PÉÆnÖgÀĪÀ ¥ÀzÀUÀ¼À£ÀÄß ¤ªÀÄä ªÀÄUÀÄ CxÀð ªÀiÁrPÉÆAqÀ°è, CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ JA§°èAiÀÄÄ; °ÉüÀÄwÛzÀÝgÉ, °ÉüÀÄvÀÛzÉ JA§°è UÀÄgÀÄvÀÄ °ÁQ. ¤ªÀÄä ªÀÄUÀÄ ªÀiÁqÀ⁻ÁUÀ¢gÀĪÀ P˱À®åUÀ¼À ªÀÄÄA¢gÀĪÀ eÁUÀªÀ£ÀÄß SÁ° ©r.

1. ««zÀ jÃwAiÀÄ ±À§ÝUÀ¼ÀÄ

PÀæªÀ	¥ÀzÀUÀ¼À	°ÉüÀÄvÀÛz
Ä	Ä	É
,ÀASÉå		
1.	"Á "Á	
2.	ªÁ ªÁ	
3.	"Á "Á ªÁ ªÁ	
	vÀ vÀ	
4.	vÀ zÀ ªÀ	
	ªÀÄ	
5.	CA"Á CA"Á	

9.	PÉÆ PÉÆ	
PÀæªÀ	¥ÀzÀUÀ¼À	°ÉüÀÄvÀÛz
Ä	Ä	É
,ÀASÉå		
10.	M ⁰ÉÆ	
11.	qÀ gïæ gïæ	
	gïæ	
12.	G¥sï G¥sï	
13.	CªÀiï	
14.	CAiÉÆÃ	

2. PÀÄlÄA§ 'ÀzÀ 'ÀågÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀUÀ¼À Ä	CxÀðªÀi Ár PÉÆ¼À ÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
1.	CªÀÄä		
2.	C¥Àà		
3.	CfÓ		
4.	CdÓ/vÁvÀ		
5.	CtÚ/vÀªÀÄä		
6.	CPÀÌ/vÀAV		
7.	ªÀiÁªÀ/aPÀÌ ¥Àà∕ zÉÆqÀØ¥À à		
8.	CvÉÛ/aPÀ̪ ÀÄä/ zÉÆqÀتÀ		

	Ää	
9.	ªÀÄUÀÄ∕¥	
	Á¥ÀÅ	
10.	d£À	

3. zÉðÀzÀ "sÁUÀUÀ¼ÀÄ

PÀæªÀÄ ¸ÀASÉå	¥ÀzÀUÀ¼ÀÄ	CxÀðªÀiÁr PÉÆ¼ÀÄîvÀÛzÉ	°Éü
1	vÀ⁻É		
2.	PÀtÄÚ		
3.	'″Á¬Ä		
4.	ªÀÄÄR		
5.	PÉÊ		
6.	P稀		
7.	°ÉÆmÉÖ		
8.	PÉ£Éß		
9.	ÉgÀ¼ÀÄ		
10.	£Á°UÉ		
11.	PÀÆzÀ®Ä		

4. Hl/wAr

PÀæªÀÄ ¸ÀASÉå	¥ÀzÀUÀ¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ÀÄ	PÀæªÀÄ îv ÀÚzÉÉ å	ÉÃ ¥ÀŻÀÙĺÀÉ	ÀÄ	CxÀð ªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ
1.	C£Àß		12.	°Á®Ä		
2.	ªÀÄÄzÉÝ		13.	ÉuÉÚ		
3.	<i></i> ,ÁA§gï/,ÁgÀÄ		14.	"ÉæqÀÄØ		
4.	Erè		15.	PÉÃPï		
5.	zÉÆÃ¸É		16.	ZÉÆPÉÆÃ	ĔÃmï	
6.	ZÀ¥Áw		17.	dÄå¸ï		
7.	¤ÃgÀÄ		18.	ªÉÆmÉÖ		
8.	,ÉçÄ		19.	ªÀiÁA,À		
9.	¨Á¼É°ÀtÄÚ			/ǀ̣ˀ		
10.	QvÀۼɰÀtÄÚ		20.	PÁ¦ü∕ nÃ		
11.	zÁæQë °ÀtÄÚ		21.	Hl		

5. ¥Áæt ¥ÀQëUÀ¼ÀÄ

PÀæ ^a ÀÄ _, ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
1.	"ÉPÀÄÌ		
2.	£Á¬Äª		
	ÀÄj		
3.	°À¸ÀÄ		
4.	PÉÆÃ		
	¹∕₂ªÀÄj		
5.	PÁUÉ		
6.	PÀÄj		
7.	amÉÖ		
PÀæ	¥ÀzÀU	CxÀð	°ÉüÀÄ
ªÀÄ	À¼ÀÄ	^a ÀiÁrPÉÆ¼	vÀÛzÉ

ÀA		ÀÄîvÀÛzÉ	
ͺΑΑ SÉå			
8.	D£É		
9.	¥ÁætÂ		
10.	PÉÆÃ		
	W		
11.	E°		
12.	«ÄãÀ		
	Ä		
13.	°ÁªÀÅ		
14.	°Àİ/1		
	A°À		

5. ªÁºÀ£ÀUÀ¼ÀÄ

	$C_{\rm ex}\lambda$ 3 1 of $\tilde{\lambda}$ 1/ λ $ \lambda $ $\hat{\lambda}$ $\hat{\nu}$ $\lambda\lambda$ $\hat{\mu}$ $\hat{\lambda}$
PAæ ^a AA ¥AzAUA¼AA	CXAð 11. °EA ¹ /4AA§AUAE
ì tate	
ÁASÉå	$^{\text{a}}\text{AiArPE}\underline{\mathcal{A}}^{1}_{4}\text{AAîvAUzE}_{2}$
Juniona	

3.	ÀÆÌlgï/¨ÉÊPï		JÀASÉå	^a ÀiÁrPÉÆ¼ÀÄîvÀÛzÉ
	3		4. PÁgÀÄ	
PÀæªÀA	Á ¥ÀzÀUÀ¼ÀÄ	CxÀð	5. °ÉüÀÄMÁĤÆÉÇ	

6. DlzÀ ,ÁªÀiÁ£ÀÄUÀ¼ÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀUÀ ¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
1.	ZÉAqÀ Ä		
2.	¦Ã¦/§® Æ£ÀÄ		
3.	¥ÀÅ À ÛPÀ		
PÀæ ªÀÄ	¥ÀzÀUÀ ¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼	°ÉüÀÄ vÀÛzÉ

¸ÀA SÉå		ÀÄîvÀÛzÉ	
4.	UÉÆA"		
	É		
5.	¥É£ÀÄ		
	ß		
6.	CnPÉ		

9. PÉÆoÀr ªÀÄvÀÄÛ ¦ÃmÉÆÃ¥ÀPÀgÀt

PÀæª ÀÄ	¥ÀzÀUÀ¼ ÀÄ	CxÀðªÀiÁ	°ÉüÀÄ vÀÛzÉ
ÀAS	AA	r PÉÆ¼ÀÄî	VAUZE
Éå		vÀÛzÉ	
1.	CqÀÄUÉ		
	ªÀÄ£É		
2.	ªÀÄ®UÀ		
	ĪÀ		
	PÉÆÃuÉ		
3.	,ÁߣÀzÀ		
	ªÀÄ£É		
4.	ªÀÄAZÀ		

5.	PÀÄað		
PÀæ ^a	¥ÀzÀUÀ¼	CxÀðªÀiÁ	°ÉüÀÄ
ÀÄ	ÀÄ	r	vÀÛzÉ
ÀAS		PÉÆ¼ÀÄî	
Éå		vÀÛzÉ	
6.	¨ÁV®Ä		
7.	ªÉÄnÖ®		
	Ä		
8.	ªÉÄÃdÄ/		
	mÉç⁻ï		
9.	QlQ		

10. GqÀÄUÉ vÉÆqÀÄUÉ

PÀæ ¥ÀzÀUÀ¼ ªÀÄ ÀÄ ÀA ŠÉå	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀ ÄvÀÛzÉ	
------------------------------------	-------------------------------	----------------	--

1.	§mÉÖ	
2.	µÀmïð	
3.	¥ÀAZÉ	

4.	¥ÁåAmï		
5.	¤PÀÌgï		
6.	mÉÆÃ¦		
7.	P稀		
	aî		
8.	É⁻ïÖ		
9.	PÉÊUÀr		
	AiÀiÁgÀ/		
	ªÁZÀÄ		
PÀæ	¥ÀzÀUÀ¼	CxÀð	⁰ÉüÀ
ªÀÄ	ÀÄ	ªÀiÁrPÉÆ¼	ÄvÀÛzÉ
ÀA		ÀÄîvÀÛzÉ	

SÉå		
	.	
10.	GAUÀÄg	
	À	
11.	<u>,</u> ÀgÀ	
12.	§¹∕₄É	
13.	Q«N⁻É	
14.	¹ÃgÉ	
15.	®AUÀ	
16.	PÁ⁻ÉÎeÉ	
	Ó	
17.	,Éélgï	

10. ^aÀÄ£ÉAiÀİè EqÀ§°ÀÄzÁAvÀ°À ^aÀ¸ÀÄÛUÀ¼ÀÄ

PÀ æ ^a À Ä ¸ÀA SÉå	¥ÀzÀUÀ¼ÀÄ	CxÀðªÀiÁ r PÉÆ¼ÀÄî vÀÛzÉ	°ÉüÀ ÄvÀÛz É
1.	°ÉÆ¢PÉ/PÀ A§½		
2.	¹ Ã,É/ ÉÆÃ mÉ [−] ï		
3.	§lÖ®Ä		
4.	qÀ§â		
5.	¥ÉÇgÀPÉ		
6.	§æµï		
7.	UÀrAiÀiÁg À		
8.	ÁZÀuÉUÉ		
9.	¥ÁvÉæ		
10.	PÀ¸ÀzÀ §ÄnÖ		
PÀ æ ^a À Ä ¸ÀA SÉå	¥ÀzÀUÀ¼ÀÄ	CxÀðªÀiÁ r PÉÆ¼ÀÄî vÀÛzÉ	°ÉüÀ ÄvÀÛz É
11.	UÁè,ï		
12.	©ÃUÀzÀ PÉÊ		
13.	¢Ã¥À		
14.	OµÀzÀ		
15.	zÀÄqÀÄØ		
16.	PÁUÀzÀ		

A¼AA		
PÁ,ÀÄ/£Át		
å		
vÀmÉÖ		
¥ÀzÀUÀ¼ÀÄ	CxÀðªÀiÁ	°ÉüÀ
	r	ÄvÀÛz
		É
	VAUZE	
PÉÊaî/¥À		
PÀwæ		
,ÉÆÃ¥ÀÅ		
ZÀªÀÄZÀ		
lªÀ ⁻ ï		
¥ÀzÀUÀ¼ÀÄ	CxÀðªÀiÁ	°ÉüÀ
	r	ÄvÀÛz
		É
	VAUZE	
n. «		
gÉÃrAiÉÆ		1
Ã		
¥ÉÇãÀÄ		
¥sÁå£ï		
¥sÁå£ï VqÀ/¸À¹		
gÉÃrAiÉÆ Ã		
	¢A§Ä °Á¹UÉ vÀmÉÖ ¥ÀzÀUÀ¼ÀÄ PÉÊaî/¥À ,ïð PÀwæ ,ÉÆÃ¥ÀÅ ZÀªÀÄZÀ lªÀ ⁻ ï ¥ÀzÀUÀ¼ÀÄ n. « gÉÃrAiÉÆ	¢A§Ä °Á¹UÉ vÀmÉÖ ¥ÀzÀUÀ¹¼ÀÄ CxÀðªÀiÁ r PÉÆ¹¼ÀÄî PÉÊaî/¥À vÀÛzÉ PÁwæ j<

11. QæAiÀiÁ ¥ÀzÀUÀ¼ÀÄ

PÀ æªÀ Ä ¸ÀA SÉå	¥ÀzÀUÀ¼À Ä	CxÀð *ÀiÁrPÉÆ ¼ÀÄîvÀÛz É	°ÉüÀ ÄvÀÛz É
	PÀZÀÄÑ		
2.	HzÀÄ		
1. 2. 3. 4.	HzÀÄ ^a ÀÄÄj vÉUÉzÀÄ		
4.	vÉUÉzÀÄ		
	PÉÆAgÁ		
	Ä Á		
5.	Ä "Á ±ÀÄa		
	^a ÀiÁqÀÄ ^a ÀÄÄZÀÄ		
6.			
	Ñ		
7.	C¼ÀÄ		
8.	PÀÄtÂ		
9.	PÀÄr		
10.	w£ÀÄß		
11.	©Ã¼ÀÄ		
12.	w¤ß,ÀÄ		
13.	ªÀÄÄV¸À		
	Ä		
14.	PÉÆqÀÄ		
15.	°ÉÆÃUÀÄ		
16.	°ÉÆr		
17.	vÀ©âPÉÆ		
18.	£ÉV		
19.	M¢		

PÀ	¥ÀzÀUÀ¼À	CxÀð	°ÉüÀ
æªÀ Ä	Ä	*ÀiÁrPÉÆ	ÄvÀÛz É
A ÀA		¼ÀÄîvÀÛz É	E
, AA SÉå		E	
20.	ªÀÄÄwÛq		
	ÀÄ		
21.	£ÉÆÃqÀÄ		
22.	vÉUÉ		
23.	DqÀÄ		
24.	J ¹ / ₂		
25.	vÀ¼ÀÄî		
26.	EqÀÄ		
	NzÀÄ		
28.	Nr,ÀÄ NqÀÄ		
29.	NqÀÄ		
30.	°É¼ÀÄ		
31.	vÉÆÃj¸À		
	Ä		
32.	°ÁqÀÄ		
33.	ªÀÄ®UÀÄ		
34.	£ÀUÀÄ		
35.	¤°è¸ÀÄ		
36.	vÉUÉ¢PÉ		
	Æ		
37.	J1		
38.	ªÀÄÄlÄÖ		
39.	£Àr		
40.	\$j		

12. PÁ® ¸ÀÆavÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼À ÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
1.	°ÀUÀ ®Ä		

2.			
3.	∵ɽUÉ		
	Î		
4.	DªÉÄÃ		
	⁻É		
PÀæ	¥ÀzÀU	CxÀð	°ÉüÀÄ

^a ÀÄ ¸ÀA SÉå	À¼ÀÄ	^a ÀiÁrPÉÆ¼À ÄîvÀÛzÉ	vÀÛzÉ
5.	FUÀ		
6.	EªÀvÀ		

	ÄÛ	
7.	£Á¼É	

13. ¥Àæ±ÁßxÀðPÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀUÀ ¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
1.	⁰ÉÃUÉ		
2.	K£ÀÄ		
3.	J°è		
PÀæ	¥ÀzÀUÀ	CxÀð	°ÉüÀÄ
ªÀÄ	¼ÀÄ	^a ÀiÁrPÉÆ¼	vÀÛzÉ
,ÀA		ÀÄîvÀÛzÉ	

SÉå		
4.	AiÀiÁª	
	ÀÅzÀÄ	
5.	AiÀiÁg	
	ÀÄ	
6.	KPÉ	

14. ǻÀgÁtvÀäPÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå	¥ÀzÀUÀ¼À Ä	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°Éü ÀÄvÀ ÛzÉ
1.	J®è ⁰ÉÆAiÀÄ ÄÛ		
2.	PÉlÖzÀÄ		
3. 4.	zÉÆqÀØ		
4.	ªÀÄÄjzÀ		
5.	°ÀĵÁgÀ Ä/ eÁUÀgÀ ÆPÀ		
6.	vÀtÚUÉ		
7.	ªÀÄÄzÁV		
8.	PÀvÀÛ® Ä		
9.	PÉÆ¼É		
10.	PÁ°		
11.	^ª ÉÃUÀªÁ V/¨ÉÃUÀ £É		
12.	ZÉ£ÁßV		

PÀæ ^a	¥ÀzÀUÀ¼À	CxÀð	°Éü
ÀÄ	Ä	^a ÀiÁrPÉÆ ¹ /4	ÀÄvÀ
¸ÀAS Éå		ÀÄîvÀÛzÉ	ÛzÉ
13.	M¼ÉîAiÀ		
	Ä		
14.	RÄ ²		
15.	UÀnÖ		
16.	©1		
17.	°À¹ªÀÅ		
18.	£ÉÆÃªÀÅ		
19.	, Àé®à		
20.	vÀgÀ⁻É		
21.	°ÉzÀjzÀ		
22.	¤zÉæAiÀ		
	Ä		
	ªÀÄA¥Àg		
	ÀÄ		
23.	ªÀÄÈzÀĪ		
	ÁV		
24.	ÁAiÀÄjP		
	É		
25.	, ÀÄ,ÀÄÛ		
26.	°À1		

15. ¸ÀªÀð£ÁªÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼À ÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
1.	£Á£À Ä		
2.	CªÀ¼ À		
3.	CªÀ£À		
4.	£À£À UÉ		
5.	£À£Àß		

PÀæ ªÀÄ ¸ÀA SÉå	zÀÄ ¥ÀzÀU À¼ÀÄ	CxÀð °ÀiÁrPÉÆ¼À ÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
6.	£À£Àß		
7.	CzÀÄ		
8.	EzÀÄ		
9.	¤Ã£À		
	Ä		
10	¤£Àß		

16. ¥ÁæªÀiÁuÁzÀjvÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀUÀ ¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
1.	J®è		
2.	E£ÉÆß		
	AzÀÄ		
PÀæ	¥ÀzÀUÀ	CxÀð	°ÉüÀÄ

°ÀÄ ֻÀA SÉå	¹∕₄ÀÄ	^a ÀiÁrPÉÆ¼ ÀÄîvÀÛzÉ	vÀÛzÉ
3.	E®è		
4.	CzÉÃ		

17. ,ÀܼÁzÁjvÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ ªÀÄ ¸ÀA SÉå	¥ÀzÀU À¼ÀÄ	CxÀð ªÀiÁrPÉÆ¼À ÄîvÀÛzÉ	°ÉüÀÄ vÀÛzÉ
1.	°ÀwÛg À		
2.	zÀÆg À		
3.	»AzÉ		
4.	PɼÀ		
	UÉ		
PÀæ	¥ÀzÀU	CxÀð	°ÉüÀÄ

*ÀÄ ¸ÀA SÉå	À¼ÀÄ	^ª ÀiÁrPÉÆ¼À ÄîvÀÛzÉ	vÀÛzÉ
5.	ªÉÄÃ⁻		
	É		
6.	M¼À		
	UÉ		
7.	°ÉÆgÀ		
	UÉ		

18. E¤ßvÀgÉ

PÀ ¥ÀzÀUÀ¼À æ ^a À Ä À ÀA SÉå	CxÀð ªÀiÁrPÉÆ ¼ÀÄîvÀÛz É	⁰ÉüÀ ÄvÀÛz É
---	-----------------------------------	--------------------

1.	ͺÁβ£À	
2.	°ÀƪÀÅ	
3.	vÉÆÃl	
4.	ªÀÄ£É	

5.	ZÀAzÀæ		
6.	ªÀļÉ		
7.	PÀ®Äè		
8.	±Á ⁻ É		
9.	DPÁ±À		
PÀ	¥ÀzÀUÀ¼À	CxÀð	°ÉüÀ
æªÀ Ä	Ä	*ÀiÁrPÉÆ	ÄvÀÛz
Ä		¼ÀÄîvÀÛz	É
ÀA		É	2
ÀA ÀA SÉå			2
ÀA	£ÀPÀëvÀ		
ֻÀA SÉå	æ		
ֻÀA SÉå			

	ð	
13.	GAiÀÄå⁻	
	É	
14.	ªÀÄgÀ	
15.	PÉ®¸À	
16.	ªÀÄtÄÚ	
17.	UÁAiÀÄ	
18.	zÉêÁ®A	
	iÀÄ	
19.	qÁPÀÖgï/ D _. ÀàvÉæ	
	D _, ÀàvÉæ	

[•]sÁUÀ 3: ¸À£Éß ªÀÄvÀÄÛ QæAiÉÄUÀ¼ÀÄ

<u>,ÀÆZÀ£ÉUÀ¼ÀÄ:</u> PɼÀUÉ ªÀÄPÀ̼ÀÄ ªÀiÁqÀ§°ÀÄzÁAvÀ°À PÉ®ªÀÅ P˱À®åUÀ¼À£ÀÄß ¤ÃqÀ[~]ÁVzÉ. ¤ªÀÄä ªÀÄUÀÄ ªÀiÁqÀ§°ÀÄzÁAvÀ°À P˱À®åUÀ¼À ªÀÄÄAzÉ UÀÄgÀÄvÀÄ °ÁQ. ¤ªÀÄä ªÀÄUÀÄ ªÀiÁqÀ[~]ÁUÀ¢gÀĪÀ P˱À®åUÀ¼À ªÀÄÄA¢gÀĪÀ eÁUÀªÀ£ÀÄß SÁ° ©r.

a. ^aÉÆzÀ® ¸ÀA¥ÀPÀðzÀ gÀÆ¥À/®PÀëtUÀ¼ÀÄ

PÀæªÀÄ	^a ÁPÀåUÀ¼ÀÄ	ªÀiÁqÀÄvÀÛzÉ
,ÀASÉå		
1.	CªÀ¼ÀÄ/CªÀ£ÀÄ »r¢gÀĪÀ ªÀ¸ÀÄÛªÀ£ÀÄß PÉÊ	
	ZÁa vÉÆÃj ÀĪÀÅzÀÄ.	
2.	CªÀ¼ÀÄ/CªÀ£ÀÄ »r¢gÀĪÀ CnPÉ/ªÀ¸ÀÄÛªÀ£ÀÄß	
	PÉÆqÀ®Ä ¤*ÉÄäqÉUÉ §gÀÄ*ÀÅzÀÄ	
3.	CªÀ½UÉ/CªÀ¤UÉ C¸ÀQÛ¬ÄgÀĪÀ	
	ªÀ¸ÀÄÛ«£ÉqÉUÉ ¨ÉgÀ¼ÀÄ ªÀiÁr	
	vÉÆÃj,ÀĪĂÅzÀÄ.	
4.	CªÀ¼À/CªÀ£À PÉÊ ªÉÄÃ⁻É JwÛ	
	CªÀ¼À£ÀÄB/CªÀ£À£ÀÄB JwÛPÉÆ¼ÀÄîªÀAvÉ	
	,ÀÆa,ÀĪÀÅzÀÄ.	
5.	"E®è" JA§AvÉ vÀ ⁻ É C ⁻ Áèr,ÀĪÀÅzÀÄ.	
6.	"°ËzÀÄ" JA§AvÉ vÀ⁻É Dr¸ÀĪÀÅzÀÄ.	
7.	¨ÉgÀ¼À£ÀÄβ vÀÄnAiÀÄ ªÉÄÃ⁻É ElÄÖ	
	"±ï(¤±Àå§Ý)" JA§AvÉ vÉÆÃj ÅÄàÅzÀÄ.	
8.	J£À£ÁßzÀgÀÄ PÉüÀ®Ä PÉÊAiÀÄ£ÀÄß °ÉÆgÀ	
	ZÁa vÉUÉzÀÄ ªÀÄÄaÑ ªÀiÁqÀĪÀÅzÀÄ.	
9.	zÀÆgÀzÀ°ègÀĪÀ ªÀåQÛUÉ ªÀÄÄvÀÛ£ÀÄß	
	UÁ½AiÀİè HzÀĪÀÅzÀÄ.	
10.	C ªÀ,ÀÄÛ gÀÄaAiÀiÁVzÉ JAzÀÄ vÀÄnAiÀÄ£ÀÄß	

»AzÉ ªÀÄÄAzÉ ªÀiÁr vÉÆÃj¸ÀĪÀÅzÀÄ.

b. DlUÀ¼ÀÄ ªÀÄvÀÄÛ ¢£ÀZÀj

	DIUÀ¼ÀÄ	^a ÀiÁqÀÄvÀÛzÉ
,ÀASÉå		
1.	PÀ¼Àî §AzÀ PÀ¼Àî	
2.	¨É£ÀßnÖ ⁰ÉÆÃUÀĪÀ DIUÀ¼ÀÄ	
3.	UÉÆA¨É E¤ßvÀgÀ ªÀ¸ÀÄÛUÀ¼À eÉÆvÉ	
	DqÀĪÀÅzÀÄ	
4.	°ÁqÀĪÀÅzÀÄ	
5.	°ÁrUÉ °ÉeÉÓ °ÁPÀĪÀÅzÀÄ	

c. ^aÀ,ÀÄÛUÀ¼ÉÆA¢UÉ ^aÀiÁqÀÄ^aÀ PÉ®,ÀUÀ¼ÀÄ

	^a ÁPÀåUÀ¼ÀÄ	*ÀiÁqÀÄvÀÛzÉ
,ÀASÉå		
1.	PÉʬÄAzÀ/ZÀªÀÄZÀ¢AzÀ w£ÀÄߪÀÅzÀÄ	
2.	UÁ蹤AzÀ PÀÄrAiÀÄĪÀÅzÀÄ	
3.	¨ÁZÀtÂUɬÄAzÀ vÀ⁻É ¨ÁZÀĪÀÅzÀÄ	
4.	§æ¶¤AzÀ °À®Äè GdÄÓªÀÅzÀÄ	
5.	mÉÆÃ¦°ÁQ PÉÆ¼ÀÄîªÀÅzÀÄ	
6.	ZÀ¥Àà° °ÁQPÉÆ¼ÀÄîªÀÅzÀÄ	
7.	PÀtÄÚ ªÀÄÄaÑ ¤zÉæ §AzÀªÀgÀAvÉ	
	ªÀÄ®UÀĪÀÅzÀÄ	
PÀæªÀÄ	^a ÁPÀåUÀ¼ÀÄ	ªÀiÁqÀÄvÀÛzÉ
,ÀASÉå		
8.	ªÁºÀ£ÀUÀ¼À£ÀÄß »rzÀÄPÉÆ¼ÀÄîªÀÅzÀÄ	
	ªÀÄvÀÄÛ ZÀ°¸ÀĪÀAvÉ ªÀiÁqÀĪÀÅzÀÄ.	
9.	¥ÉÇãÀ£ÀÄß Q«AiÀÄ §½ »rzÀÄ	
	^a ÀiÁvÀ£ÁqÀÄ ^a ÀaÀgÀAvÉ £Àn¸ÀÄ ^a ÀÅzÀÄ	
10.	©¹AiÀiÁVzÉ JAzÀÄ ¸ÀÆa¸À®Ä HzÀĪÀÅzÀÄ	
11.	ZÉAqÀ£ÀÄß J¸ÉAiÀÄĪÀÅzÀÄ	
12.	MAzÀÄ ¥ÁvÉæ¬ÄAzÀ ªÀÄvÉÆÛAzÀÄ ¥ÁvÉæUÉ	
	¤ÃgÀÄ ¸ÀÄjAiÀÄÄåÅÅzÀÄ	
13.	¥ÁvÉæAiÀİè CxÀªÀ [–] ÉÆÃlzÀ°è ¤ÃgÀ£ÀÄß	
	ZÀªÀÄZÀ¢AzÀ wgÀÄV,ÀÄzÀÄ	
14.	UÉÆA ÉUÉ ªÀÄÄvÀÄÛ PÉÆqÀĪÀÅzÀÄ CxÀªÀ	
	vÀ©âPÉÆ¼ÀÄîªÀÅzÀÄ	
15.	PÀ£ÀßqÀPÀ °ÁQ PÉÆ¼ÀÄîªÀÅzÀÄ	

d. zÉÆqÀتÀgÀ jÃwAiÀÄ PÉ®,ÀUÀ¼À£ÀÄß C£ÀÄ,Àj,ÀĪÀÅzÀÄ

PÀæªÀÄ ¸ÀASÉå	^a ÁPÀåUÀ¼ÀÄ	^a ÀiÁqÀÄvÀÛzÉ
1.	¥ÉÇgÀPɬÄAzÀ £É® UÀÄr¸ÀĪÀÅzÀÄ CxÀªÀ	

	PÀ,À °ÉÆqÉAiÀÄĪÀÅzÀÄ
2.	PÀ®Äè CxÀªÀ ¸ÀÄwÛUɬÄAzÀ
	ZÀZÀÄѪÀÅzÅÄ
3.	NzÀĪÀÅzÀÄ (¥ÀŸÀÛPÀªÀ£ÀÄß vÉgÉzÀÄ
	¥ÀÅIUÀ¼À£ÀÄß wgÀĪÁPÀĪÀÅzÀÄ)
4.	,ÉÊPÀ ⁻ ï ^e ÉÆqÉAiÀÄ®Ä ¥ÀæAiÀÄvÀβ
	^a ÀiÁqÀÄ ^a ÀÅzÀÄ
5.	§mÉÖ¬ÄAzÀ ªÀgɸÀĪÀÅzÀÄ
6.	¥É£ï/¥É¤ì⁻ï/E¤ßvÀgÉ ªÀ¸ÀÄÛ«¤AzÀ
	§gÉAiÀÄĪÀÅzÀÄ
7.	ĂiÀiÁªÀÅzÁzÀgÀÄ ªÀ¸ÀÄÛªÀŤAzÀ UÀÄAr vÉUÉAiÀÄ®Ä ¥ÀæAiÀÄw߸ÀĪÀÅzÀÄ
	vÉUÉAiÀĮĥÀæAiÀÄw߸ÀĪÀÅzÀÄ

Appendix III

Content validity Scoring sheet Communication Inventory for Infants A^aÀ^oÀ£À vÀ¥À²îÄ ¥ÀnÖ

Instructions: Please compare communication inventory of Kannada language with Inventory if English and tick in appropriate column. If the translation work is proper mark in $\hat{Aj} EzE$ column, if the translation is not proper please mark it $\hat{Aj} E \otimes \hat{e}$ and if you think translation is happened properly and changes need please mark in $\hat{sAUA} \pm \hat{AB}$ \hat{Aj}

PÀæªÀÄ	^a ÁPÀåUÀ¼ÀÄ	,Àj	,Àj	¨sÁUÀ±ÀB
,ÀASÉå		EzÉ	E®è	, Àj
1.	^a ÀÄÄR sÁªÀªÀ£ÀÄß CxÀð			
	^a ÀiÁrPÉÆ¼ÀÄîvÀÛzÉ. (PÉÆÃ¥À,			
	,ÀAvÉÆÃµÀ)			
2.	PÉ®ªÀÅ ¥ÀzÀUÀ¼À£ÀÄß			
	CxÀðªÀiÁrPÉÆAqÀÄ ¸ÀÆPÀÛªÁzÀ			
	¥ÀæwQæAiÉÄAiÀÄ£ÀÄß ¤ÃqÀÄvÀÛªÉ.			
	GzÀ: "Á, mÁ mÁ			
3.	,ÀAVÃvÀPÉÌ UÀªÀÄ£À PÉÆqÀĪÀÅzÀÄ.			
4.	CªÀ£À/CªÀ¼À ¸ÀÄvÀÛªÀÄÄvÀÛ			
	£ÀqÉAiÀÄĪÀ¥ÀÇgÀ			
	ÀA [¨] sÁµÀuÉAiÀÄ£ÀÄß D°¹zÀAvÉ			
	PÁtÄvÀÛzÉ.			
5.	CªÀ£À/CªÀ¼À ºÉ ÀgÀ£ÀÄß PÀjzÁUÀ			
	^a ÀiÁqÀÄwÛgÀÄ ^a À PÉ®¸ÀªÀ£ÀÄß			
	¤°è,ÀÄvÀÛzÉ.			
6.	zsÀé¤AiÀİè£À ªÀåvÁå,ÀªÀ£ÀÄß			
	CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.			
7.	ÉÃqÀ JAzÀÄ °ÉýzÀgÉ ªÀiÁqÀĪÀ			
	PÉ®,ÀªÀ£ÀÄß ¤°è,ÀÄvÀÛzÉ.			
8.	avÀæzÀ(¥sÉÇÃmÉÆ)°ègÀĪÀ			
	^a ÀåQÛAiÀÄ£ÀÄß ºÉ,Àj¹zÁUÀ MAzÀÄ			
	¤«ÄµÀUÀ¼À PÁ® D avÀæzÉqÉUÉ			
	UÀªÀÄ£À ºÀj,ÀÄvÀÛzÉ. GzÀ; EzÀÄ			
	C¥Àà£À sÁªÀavÀæ (¥sÉÇÃmÉÆ)			
9.	¥Àj̯avÀgÀÄ ªÀÄvÀÄÛ C¥ÀjavÀgÉÆA¢UÉ			
	"ÉÃgÉ "ÉÃgÉAiÀiÁV			
	¥ÀæwQæ¬Ä,ÀÄvÀÛzÉ.			
10.	ºÉƸÀ ¥ÀzÀUÀ¼À£ÀÄß PÉüÀ®Ä			

[™]sÁUÀ 1: A. ªÀÄÄAa£À ¸ÀA¥ÀPÀð P˱À®åUÀ¼ÀÄ

	GvÁì°À vÉÆÃjzÀAvÉ PÁtÄvÀÛzÉ.		
11			
11.	ÉgÉAiÉÄqÉUÉ UÀªÀÄ£À ºÀj ÀZÉ		
	^a ÀiÁvÀ£ÀÄߥÀÇtðªÁV PÉüÀÄvÀÛzÉ.		
12.	PÉ®,À*À£ÀÄß °ÉýzÁUÀ C©ü£À¬Ä¹		
	vÉÆÃj ÀÄvÀÛzÉ. GzÀ; Hl		
	^a ÀiÁqÀÄ ^a ÀÅzÀÄ °ÉÃUÉ?		
13.	PÀvÉ PÉüÀ®Ä RĶ¥ÀqÀÄvÀÛzÉ.		
14.	ÀAVÃvÀPÉÌ ªÉÄÊ PÉÊ Z°1		
	¥ÀæwQæ¬Ä,ÀÄvÀÛzÉ.		
15.	^a ÉÄÃ ⁻ É,PɼÀUÉ (ÀܼÁzÁjvÀ)		
	¥ÀzÀUÀ¼À£ÀÄß		
	CxÀðªÀiÁrPÉÆ¼ÀÄîvÀÛzÉ.		
16.	ZÉ£ÀBV PÁtÄw¢ÃAiÀÄ JAzÀÄ °ÉýzÁUÀ		
	RĶ¥ÀqÀÄvÀÛzÉ.		
17.	vÀ£Àß ªÀ¸ÀÄÛUÀ¼À£ÀÄß		
	¨ÉÃgÉAiĂĪÀjUÉ ©lÄÖPÉÆqÀĪÀÅ¢®è.		
18.	°É ÀgÀÄ PÀgÉzÁUÀ		
	¥ÀæwQæ¬Ä ÀÄvÀÛzÉ GzÀ: wgÀÄV		
	£ÉÆqÀĪÀÅzÀgÀ ªÀÄÆ®PÀ, PÀgÉzÀ		
	^a ÀåQÛUÁV °ÀÄqÀÄPÀÄ ^a ÀÅzÀgÀ		
	^a ÀÄÆ®PÀ		
19.	ÉÃgÉAiÀĪÀgÀÄ vÀ£Àß		
	^a À ÄÄÛUÀ¼À£ÀÄß vÉUÉzÀÄPÉÆAqÁUÀ,		
	G¥ÀAiÉÆV ¹ zÁUÀ CxÀªÁ		
	°Á¼ÀĪÀiÁrzÁUÀ		
	PÉÆÄ ^l PÉÆ ¹ /4ÀÄîvÀÛzÉ/		
	dUÀ¼ÀªÁqÀÄvÀÛzÉ.		
20.	°ÁqÀ£ÀÄß PÉüÀ®Ä, n. «£ÉÆÃqÀ®Ä		
20.	RÄ ² ¥ÀqÀÄvÀÛzÉ.		
		1	

B. ªÉÆzÀ® ªÁPÀåUÀ¼ÀÄ

PÀæªÀÄ	^a ÁPÀåUÀ ¹ ⁄4ÀÄ	` Àj	_Àj	"sÁUÀ±ÀB
,ÀASÉå		EzÉ	E®è	,Àj
1.	°À¹ªÁUÀÄwÛzÉAiÉÄÃ?			
2.	¤zÉæ			
	§gÀÄwÛzÉAiÉÄ?/¸ÀĸÁÛVzÉAiÀÄ?			
3.	±À§Ý ªÀiÁqÀ¨ÉÃqÀ			
4.	ZÀ¥Á¼É °ÉÆr			
5.	"Á E°è			
6.	E£ÀÄß "ÉÃPÉÃ?			
7.	CzÀ£ÀÄß ªÀiÁqÀ¨ÉÃqÀ/¸ÀĪÀÄä¤gÀÄ			
8.	*ÀÄÄlÖ ÉÃqÀ			
9.	K¼ÀÄ ªÉÄÃ⁻É			
10.	CªÀÄä¤UÉ PÉÆqÀÄ			

11.	£À£ÀUÉÆAzÀÄ ªÀÄÄvÀÄÛ PÉÆqÀÄ		
12.	°ÉÆÃV vÉUÉzÀÄPÉÆAqÀÄ ¨Á		
13.	eÁt °ÀÄqÀÄUÀ/°ÀÄqÀÄV		
14.	E£ÀÄß Åé®à°ÉÆvÀÄÛ °ÁUÉ »r¢PÉÆ		
15.	£Ér °ÉÆUÉÆÃt mÁ mÁ		
16.	E°è £ÉÆqÀÄ		
17.	¨Á¬Ä vÉV		
18.	PÀÄ1⁄2vÀÄPÉÆ		
19.	°ÉÆgÀUÉ GV		
20.	¤°è,ÀÄ		
21.	ZÉAqÀ£ÀÄß J¹		
22.	F aPÀÌ UÉÆA¨É		
23.	°ÉÆgÀUÉ °ÉÆÃUÀ ¨ÉÃPÁ?		
24.	¤£ÀUÉ "ÉÃPÁ?		
25.	mÁ mÁ °ÉüÀÄ		
26.	FUÀ ªÀÄ®UÀÄ		
27.	C¼À¨ÉÃqÀ		
28.	°ÉÆgÀUÉ °ÉÆÃUÀ¨ÉÃqÀ		
29.	¤zÁ£ÀªÁV £Àr		
30.	F §mÉÖ ZÉ£ÁßV®è		
31.	£À£ÀUÉ ¸Àé®à PÉÆqÀÄ		

^{..}sÁUÀ 2 : ªÀÄÄAa£À ¥ÀzÀ¥ÀnÖ

1. ««zÀ jÃwAiÀÄ ±À§ÝUÀ¼ÀÄ

PÀæ ^a ÀÄ	¥ÀzÀUÀ	ۣÀ	ۣÀ	sÁUÀ
ÁA	¼ÀÄ	j	j	±ÀB
ֻÀAS Éå		Ĕz É	Ε	, Àj
		É	®è	
1.	"Á "Á			
2.	ªÁ ªÁ			
3.	"Á "Á ªÁ			
	^a Á vÀ vÀ			
4.	vÀ zÀ ªÀ			
	ªÀÄ			
5.	CA"Á			
	CA"Á			
6.	ZÀÆ			
	ZÀÆ			

2. PÀÄlÄA§ ,ÀzÀ ,ÀågÀÄ

7.	UÀgïæ		
8.	«ÄAiÀÄ		
	Aªï		
9.	PÉÆ		
	PÉÆ		
10.	M °ÉÆ		
11.	qÀ gïæ		
	gïæ gïæ		
12.	G¥sï G¥sï		
13.	CªÀiï		
14.	CAiÉÆÃ		

PÀæ	¥ÀzÀUÀ¼	À	À	"sÁUÀ
IAa	HALAUA /4	<u>م</u>	<u>,</u> л	SAUA

^ª ÀÄ ¸ÀAS Éå	ÀÄ	j E z É	j E ® è	±ÀB ,Àj
1.	CªÀÄä			
2.	C¥Àà			
3.	CfÓ			
4.	CdÓ/vÁvÀ			
5.	CtÚ/vÀªÀÄ			
	ä			
б.	CPÀÌ/vÀAV			
7.	ªÀiÁªÀ/aPÀ			
	Ì¥Àà/			

	zÉÆqÀØ¥À		
	à		
8.	CvÉÛ/aPÀ̪		
	ÀÄä/		
	zÉÆqÀتÀ		
	Ää		
9.	°ÀÄqÀÄUÀ		
10.	°ÀÄqÀÄV		
11.	ªÀÄUÀÄ/¥		
	Á¥ÀÅ		
12.	ªÀÄ£ÀĵÀ		
	å/ªÀåQÛ		
13.	d£À		

3. zÉðÀzÀ ^{..}sÁUÀUÀ¼ÀÄ

PÀæªÀÄ ¸ÀASÉå	¥ÀzÀU À¼ÀÄ	∫À j E z É	∫À j E ℝ è	∵sÁUÀ ±ÀB ¸Àj
1.	vÀ-É			
2.	PÀtÄÚ			
3.	Q«			
4.	Q« ^a ÀÄÆU ÀÄ			
5.	"Á¬Ä			
6.	ªÀÄÄR			
7.	PÉÊ			
P À æ ^a À	¥ÀzÀU À¼ÀÄ	À j E z	À j E ®	∵sÁUÀ ±ÀB ¸Àj

Ä Å A S É å		É	è	
8.	P稀			
9.	⁰ÉÆmÉ			
	Ö			
10.	°À®Äè			
11.	PÉ£Éß			
12.	PE£Eß ¨ÉgÀ¼À Ä			
	Ä			
13.	£Á°UÉ			
14.	PÀÆzÀ			
	®Ä			

4. Hl/	/wAr
--------	------

PÀæ ^a ÀÄ ¸ÀAS Éå	¥ÀzÀUÀ¼ ÀÄ	∫À j Ez É	∫À j E ®è	∵sÁUÀ ±ÀB ¸Àj
1.	C£Àß			
2.	ªÀÄÄzÉÝ			

3.	,ÁA§gï/,Ág
	ÀÄ
4.	Erè
5.	zÉÆÃ,É
6.	ZÀ¥Áw
7.	¤ÃgÀÄ
8.	ĹĔçÄ
9.	Á¼É°ÀtÄ
	Ú
10.	QvÀۼɰ
	ÀtÄÚ

11.	zÁæQë
	°ÀtÄÚ
12.	°Á®Ä
13.	ªÉƸÀgÀÄ
14.	"ÉuÉÚ
15.	ÉæqÀÄØ
16.	PÉÃPï
17.	ZÉÆPÉÆÃ
	⁻ ÉÃmï
18.	Ljï
	QæÃªÀiï
19.	dÄå,ï
20.	^a ÉÆmÉÖ
21.	^a ÀiÁA,À
	/«ÄãÅÄ
22.	PÁ¦ü/ nÃ
23.	HI
6 VÁm	$+\hat{\lambda} \times \hat{\lambda} \cap \hat{\partial} U \hat{\lambda} 1/2 \hat{\lambda} \ddot{\lambda}$

6. ¥Áæt ¥ÀQëUÀ¼ÀÄ

PÀæ ^a ÀÄ ¸ÀAS Éå	¥ÀzÀUÀ¼ ÀÄ	À j Ez É	Å j E ®è	∵sÁUÀ ±ÀB ¸Àj
1.	ÉPÀÄÌ			

2.	£Á¬ÄªÀÄj
3.	°À,ÀÄ
4.	PÉÆÃ ¹ ⁄2ªÀ
	Äj
5.	PÁUÉ
6.	UÀħâaÑ
7.	PÀÄj
8.	amÉÖ
9.	C ¹ /2®Ä
10.	D£É
11.	¥ÀQë/°ÀQÌ
12.	¥ÁætÂ
13.	PÀvÉÛ
14.	PÀ¥Éà
15.	PÉÆÃw
16.	E°
17.	ǀ̣ˀ
18.	eÉãÀİÀ
	ļÀÄ
19.	°ÁªÀÅ
20.	°Àİ/¹A°À

5. ªÁ°À£ÀUÀ¼ÀÄ

PÀæ	¥ÀzÀUÀ¼	<u>`</u> Àj	,Àj	¨sÁU
ªÀÄ	ÀÄ	Ez É	E®	À±À
∫ÀA SÉå		É	è	В
SÉå				, Àj
1.	§ ,ÀÄì			
2.	ţÉÊPÀ⁻ï			
2. 3.	¸ÀÆÌlgï∕¨É			
	ÊPï			
4.	PÁgÀÄ			
5.	gÉĒ®Ä			
6.	«ªÀiÁ£À/K			
	gÉÆÃ¥ÉèÃ			
	£ï			
7.	mÉA¥ÉÇ			

8. GqÀÄUÉ vÉÆqÀÄUÉ

7. DlzÀ ,ÁªÀiÁ£ÀÄUÀ¼ÀÄ

PÀæ ^a	¥ÀzÀUÀ¼	À ٍ	À ٍ	¨sÁUÀ
ÀÄ	ÀÄ	j	j	±ÀB
ÀAS Éå		Ez	Ε	` Àj
Éå		É	®è	
1.	ZÉAqÀÄ			
2.	¦Ã¦/§®Æ£À			
	Ä			
3.	¥ÀÅ,ÀÛP			
	À			
4.	ªÉÆmïÖ/U			
	ÀļÉî			
5.	UÉÆA"É			
6.	¥É£ÀÄß			
7.	CnPÉ			
ªÀÄ		À j E	À	À±ÀB
∫ÀA SÉå		j	j	À j
SÉå		Ĕ	Ĕ	
		Z	R	

		É	è	
1.	μÀmïð			
2.	¥ÀAZÉ			
3.	¥ÁåAmï			
4.	¤PÀÌgï			
5.	PÉÆÃlÄ			
6.	mÉÆÃ			
7.	P稀 ą			
8.	§Æmïî			
9.	¨É⁻ïÖ			
10.	PÉÊUÀrAiÀi			
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11.	GAUÀÄgÀ			
12.	ÀgÀ §¼É			
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14.	Q« N⁻É			
15.	1ÃgÉ			
16.	®AUÀ			
17.	PÁ⁻ÉÎeÉÓ			
18.	,Éélgï			
19.	§mÉÖ			

9. PÉÆoÀr ªÀÄvÀÄÛ ¦ÃmÉÆÃ¥ÀPÀgÀt

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8.	ªÉÄÃdÄ/			
	mÉç⁻ï			
9.	QlQ			

10. ªÀÄ£ÉAiÀİè EqÀ§°ÀÄzÁAvÀ°À ªÀ¸ÀÄÛUÀ¼ÀÄ

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21.	vÀmÉÖ DÉÊ: Ã @ N			
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31.	VqÀ/ À¹		

32. bÀwæ

12. QæAiÀiÁ ¥ÀzÀUÀ¼ÀÄ

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14.	ªÁÄÄV¸ÀÄ			
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17.	, ŰÁAįÀÄ			
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20.	£ÉV			

12. PÁ® ,ÀÆavÀ ¥ÀzÀUÀ¼ÀÄ

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13. ¥Àæ±ÁßxÀðPÀ ¥ÀzÀUÀ¼ÀÄ

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2.	KµÀÄÖ			
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	ÅzÀÄ		
7.	AiÀiÁgÀ		
	Ä		
8.	KPÉ		

14. ǻÀgÁtvÀäPÀ ¥ÀzÀUÀ¼ÀÄ

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	⁰ÉÆAiÀÄÄ Û			
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3.	zÉÆqÀØ			
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5.	^a ÀÄÄjzÀ ^o ÀĵÁgÀÄ/			
	eÁUÀgÀÆP			
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6.	vÀtÚUÉ			
7.	^a ÀÄÄzÁV PÀvÀÛ®Ä			
8.	PAVAU®A PÉÆ¼É			
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	PÁ°			
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26.	ÁAiÀÄjPÉ		
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15. ¸ÀªÀð£ÁªÀÄ

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4.	£À£ÀUÉ			
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	Ä			
6.	£À£Àß			
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9.	¤Ã£ÀÄ			
10.	¤£Àß			

16. ¥ÁæªÀiÁuÁzÀjvÀ ¥ÀzÀUÀ¼ÀÄ

PÀæ^a ¥ÀzÀUÀ À À SÁUÀ

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4.	E®è			
5.	¨ÉÃgÉ			
6.	CzÉÃ			
7.	PÉ®ªÀÅ			

PÀæª ÀÄ ¸ÀAS Éå	¥ÀzÀUÀ ¼ÀÄ	À j Ez É	À j E ®è	∵sÁUÀ ±ÀB ¸Àj
1.	°ÀwÛgÀ			
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5.	ªÉÄÃ⁻É			
6.	M¼ÀUÉ			
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	É			

17. ,ÀܼÁzÁjvÀ ¥ÀzÀUÀ¼ÀÄ

18. E¤ßvÀgÉ

PÀæ ^a	¥ÀzÀUÀ¼	∫À j Ez É	À j	sÁUÀ
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	ÉÝ			
3.	°ÀƪÀÅ			
4.	vÉÆÃl			
5.	ªÀÄ£É			
6.	ZÀAzÀæ			
7.	£À¢/PÉÆ¼			
	À			
8.	ªÀļÉ			
9.	PÀ®Äè			
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$\mathbf{P} \hat{\mathbf{A}} \hat{\mathbf{x}}^{a}$	¥ÀzÀUÀ¼ ÀÄ	À	ှÀ j	¨sÁUÀ ±ÀB
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12.	£ÀPÀëvÀæ			
13.	CAUÀr			
14.	_, ÀÆAiÀÄð			
15.	GAiÀÄå⁻É			
16.	ªÀÄgÀ			
17.	PÉ®¸À			
18.	ªÀÄtÄÚ			
19.	UÁAiÀÄ			
20.	zÉêÁ®Ai			
	ÀÄ			
21.	qÁPÀÖgï/D			
	ÀàvÉæ			

[¨]sÁUÀ 3: ¸À£Éß ªÀÄvÀÄÛ QæAiÉÄUÀ¼ÀÄ ªÉÆzÀ® ¸ÀA¥ÀPÀðzÀ gÀÆ¥À/®PÀëtUÀ¼ÀÄ

PÀæªÀÄ ¸ÀASÉå	^a ÁPÀåUÀ¼ÀÄ	∫Àj EzÉ	ֻÀj E®è	¨sÁUÀ±ÀB ¸Àj
1.	CªÀ¼ÀÄ/CªÀ£ÀÄ »r¢gÀĪÀ ªÀ¸ÀÄÛªÀ£ÀÄß PÉÊ ZÁa vÉÆÃj¸ÀĪÀÅZÀÄ.			
2.	CªÀ¼ÀÄ/CªÀ£ÀÄ »r¢gÀĪÀ CnPÉ/ªÀ¸ÀÄÛªÀ£ÀÄß PÉÆqÀ®Ä ¤ªÉÄäqÉUÉ			

	<u>§gÀĪÀÅzÀÄ</u>		
3.	CªÀ½UÉ/CªÀ¤UÉ C,ÀQÛ¬ÄgÀĪÀ		
	^a À ÀÄÛ«£ÉqÉUÉ ÉgÀ¼ÀÄ ^a ÀiÁr		
	vÉÆÃj,ÀĪÀÅzÀÄ.		
4.	CªÀ¼À/CªÀ£À PÉÊ ªÉÄÃ¯É JwÛ		
	CªÀ¼À£ÀÄB/CªÀ£À£ÀÄB JwÛPÉÆ¼ÀÄîªÀAvÉ		
	,ÀÆa,ÀĪÀÅzÀÄ.		
5.	"E®è" JA§AvÉ vÀ ⁻ É C ⁻ Áèr ÀĪÀÅzÀÄ.		
6.	"ºËzÀÄ" JA§AvÉ vÀ⁻É Dr ĂĪÀÅzÀÄ.		
7.	"ÉgÀ¼À£ÀÄβ vÀÄnAiÀÄ ^ª ÉÄÃ⁻É ElÄÖ		
	"±ï(¤±Àå§Ý)" JA§AvÉ vÉÆÃj ÅÄÅÅÅÅÅ.		
8.	J£À£ÁßzÀgÀÄ PÉüÀ®Ä PÉÊAiÀÄ£ÀÄß		
	°ÉÆgÀ ZÁa vÉUÉzÀÄ ªÀÄÄaÑ		
	^a ÀiÁqÀÄ ^a ÀÅzÀÄ.		
9.	zÀÆgÀzÀ°ègÀĪÀ ªÀåQÛUÉ ªÀÄÄvÀÛ£ÀÄß UÁ½AiÀİè HzÀĪÀÅzÀÄ.		
	UÁ½AiÀİè HzÀĪÀÅzÀÄ.		
10.	C ªÀ,ÀÄÛ gÀÄaAiÀiÁVzÉ JAzÀÄ		
	vÀÄnAiÀÄ£ÀÄß »AzÉ ªÀÄÄAzÉ ªÀiÁr		
	vÉÆÃj¸ÀĪÀÅzÀÄ.		

DlUÀ¼ÀÄ ªÀÄvÀÄÛ ¢£ÀZÀj

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6.	PÀ¼Àî §AzÀ PÀ¼Àî			
7.	^{··} É£ÀßnÖ ºÉÆÃUÀĪÀ DlUÀ¼ÀÄ			
8.	UÉÆA¨É E¤ßvÀgÀ ªÀ¸ÀÄÛUÀ¼À			
	eÉÆvÉ DqÀĪÀÅzÀÄ			
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^aÀ¸ÀÄÛUÀ¼ÉÆA¢UÉ ^aÀiÁqÀĪÀ PÉ®¸ÀUÀ¼ÀÄ

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1.	PÉʬÄAzÀ/ZÀªÀÄZÀ¢AzÀ w£ÀÄߪÀÅzÀÄ			
2.	UÁ蹤AzÀ PÀÄrAiÀÄĪÀÅzÀÄ			
3.	¨ÁZÀtÂUɬÄAzÀ vÀ⁻É ¨ÁZÀĪÀÅzÀÄ			
4.	§æ¶¤AzÀ °À®Äè GdÄÓªÀÅzÀÄ			
5.	PÉÊ PÁ®Ä/ªÀÄÄRªÀ£ÀÄß lªÀ⁻ï¤AzÀ			
	MgɸÀĪÀÅzÀÄ			
6.	mɯĦ°ÁQ PÉÆ¼ÀÄîªÀÅzÀÄ			
7.	ZÀ¥Àà° °ÁQPÉÆ¼ÀÄîªÀÅzÀÄ			
8.	,ÀgÀ, PÉÊ UÀrAiÀiÁgÀ °ÁQPÉÆ¼ÀÄîªÀÅzÀÄ			
9.	PÀtÄÚ ªÀÄÄaÑ ¤zÉæ §AzÀªÀgÀAvÉ			
	^a ÀÄ®UÀÄ ^a ÀÅzÀÄ			
10.	©¹AiÀiÁVzÉ JAzÀÄ ¸ÀÆa¸À®Ä HzÀĪÀÅzÀÄ			

11.	^a Á°À£ÀUÀ¼À£ÀÄβ »rzÀÄPÉÆ¼ÀÄîªÀÅzÀÄ		
	^a ÀÄvÀÄÛ ZÀ°,ÀÄ ^a ÀAvÉ ^a ÀiÁqÀÄ ^a ÀÅzÀÄ.		
12.	¥ÉÇãÀ£ÀÄß Q«AiÀÄ §½ »rzÀÄ		
	^a ÀiÁvÀ£ÁqÀÄ ^a ÀªÀgÀAvÉ £Àn¸ÀÄ ^a ÀÅzÀÄ		
13.	ZÉAqÀ£ÀÄß J,ÉAiĂÄĪÀÅzÀÄ		
14.	MAzÀÄ ¥ÁvÉæ¬ÄAzÀ ªÀÄvÉÆÛAzÀÄ		
	¥ÁvÉæUÉ ¤ÃgÀÄ ¸ÀÄjAiÀÄĪÀÅzÀÄ		
15.	¥ÁvÉæAiÀİè CxŪÀ ÉÆÃlzÀ°è ¤ÃgÀ£ÀÄß		
	ZÀªÀÄZÀ¢AzÀ wgÀÄV¸ÀÄzÀÄ		
16.	UÉÆA¨ÉUÉ ªÀÄÄvÀÄÛ PÉÆqÀĪÀÅzÀÄ		
	CxÀªÀ vÀ©âPÉÆ¼ÀÄîªÀÅzÀÄ		
17.	UÉÆA¨ÉAiÉÆA¢UÉ ªÀiÁvÀ£ÁqÀĪÀÅzÀÄ		
18.	PÀ£ÀßqÀPÀ °ÁQ PÉÆ¼ÀÄîªÀÅzÀÄ		

zÉÆqÀتÀgÀ jÃwAiÀÄ PÉ®¸ÀUÀ¼À£ÀÄß C£ÀĸÀj¸ÀĪÀÅzÀÄ

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	CxÀªÀ PÀ¸À ºÉÆqÉAiÀÄĪÀÅzÀÄ			
2.	PÀ®Äè CxÀªÀ ¸ÀÄwÛUɬÄAzÀ			
	ZÀZÀÄѪÀÅzÀÄ			
3.	©ÃUÀzÀ PÉÊAiÀÄ£ÀÄß ©ÃUÀPÉÌ			
	°ÁPÀĪÀÅzÀÄ			
4.	NzÀĪÀÅzÀÄ (¥ÀŸÀÛPÀªÀ£ÀÄß			
	vÉgÉzÀÄ ¥ÀÅlUÀ¼À£ÀÄß			
	wgÀĪÁPÀĪÀÅzÀÄ)			
5.	VqÀUÀ½UÉ ¤ÃgÀÄ °ÁPÀĪÀÅzÀÄ			
6.	ͺÉÊPÀ⁻ï ⁰ÉÆqÉAiÀÄ®Ä ¥ÀæAiÀÄvÀβ			
	^a ÀiÁqÀÄ ^a ÀÅzÀÄ			
7.	¥ÁvÉæ vÉÆ¼ÉAiÀÄĪÀÅzÀÄ			
8.	§mÉÖ¬ÄAzÀ ªÀgɸÀĪÀÅzÀÄ			
9.	¥É£ï/¥É¤ì⁻ï/E¤ßvÀgÉ ªÀ¸ÀÄÛ«¤AzÀ			
	§gÉAiÀÄĪÀÅzÀÄ			
10.	AiÀiÁªÀÅzÁzÀgÀÄ ªÀ¸ÀÄÛªÀŤAzÀ			
	UÀÄAr vÉUÉAiÀÄ®Ä			
	¥ÀæAiÀÄw߸ÀĪÀÅzÀÄ			

Appendix IV

Demographic information form

Name of the child:

age/sex:

Date of birth:

	Name	Age	Education	Occupation
Father's				
Mother's				

Annual income of the family:

Consanguinity:

Family status:

Total no of persons in the family:

Family history: (of Mental retardation, psychological problem, congenital deformity, handicapped, and any neurological problem):

Speech and language stimulation at home:

Sibling history

no. of siblings:

	Name	Age/Sex	Education
I sibling			
II sibling			

Prenatal complications:

Perinatal complications:

Postnatal complications:

Developmental pattern:

Motor:

Speech and language:

Any congenital abnormalities:

Any sensory abnormalities:

Vision:

Hearing:

Screening result:

Hearing:

Vision:

Psychological test:

Appendix V

Communication inventory for 6 – 8 months infants

Section 1 Early Communication Skills

Section 1 A, Prelinguistic skills

- 1. Appears to be able to distinguish general meanings of warning, anger and/or friendly voice pattern by facial and bodily gestures.
- 2. Responds with appropriate gestures to words such as "come", "bye-bye".....etc.
- 3. Gives some attention to music or singing.
- 4. Frequently appears to listen to whole conversation around him/her.
- 5. Regularly stops activity when his/her name called.
- 6. Reacts to loudness changes in voice of a others.
- 7. Sustain interest for up to a full minute in looking at person or picture, if they are named. Ex "look this is your daddy's picture"
- 8. Reacts differently to familiar people and strangers.
- 9. Appears to enjoy listening to new words.
- 10. Responds to rhythmic music by bodily or hand movements
- 11. Understands words like up, down.....
- 12. Responds when name called. Ex. Turning back, searching for the person who called... etc.
- 13. Child enjoys watching TV, looking at comics or listening to music.

Section 1 B, Early Phrases

- 1. Are you hungry?
- 2. Clap your hands
- 3. Come on/ come here
- 4. Get up
- 5. Look / look here
- 6. Want to go out?

Section 2 vocabulary

Comprehension

Family members: Mummy, Daddy, Grandma and Grandpa Food items: Rice, Mudde, Water, Apple and Milk Vehicles: Motorcycle and Car Toys: Doll and Toy Rooms and Furniture: Kitchen, Bedroom, Bathroom and Cot Dress: Cloth/Dress Common objects: Blanket, Bottle, Bowl, Lamp, Medicine, TV, Telephone and Fan Action verbs: Bite, Drink and Eat Other words: Bath and Home

Expression:

Different sound effects: Ba ba, Wa wa, Ba ba va va ta ta, Ta da va ma, ambaa ambaa, choo choo and amma.

Family members: mummy

Section 3 nonverbal communication

First communicative features

- 1. Waves bye-bye on his/her own when someone leaves.
- 2. Blows kisses from a distance

Games and routines

- 1. Play peekaboo
- 2. Play chasing games
- 3. Play with a toys
- 4. Sing
- 5. Dance

Actions with objects

- 1. Drink from a cup.
- 2. Hold vehicle object and make it move.
- 3. Kiss or hug a toy.

Communication inventory for 8-10 months infants

Section 1 Early Communication Skills

Section 1 A, Prelinguistic skills

- 1. Appears to be able to distinguish general meanings of warning, anger and/or friendly voice pattern by facial and bodily gestures.
- 2. Responds with appropriate gestures to words such as "come", "bye-bye".....etc.
- 3. Gives some attention to music or singing.
- 4. Frequently appears to listen to whole conversation around him/her.
- 5. Regularly stops activity when his/her name called.
- 6. Reacts to loudness changes in voice of a others.
- 7. Regularly stops activity in response to "No".
- 8. Reacts differently to familiar people and strangers.
- 9. Appears to enjoy listening to new words.
- 10. Generally able to listen to speech without being distracted by others.
- 11. Enjoys listening stories.
- 12. Responds to rhythmic music by bodily or hand movements
- 13. Child is possessive about his/her clothes, toys.
- 14. Responds when name called. Ex. Turning back, searching for the person who called... etc.
- 15. Child enjoys watching TV, looking at comics or listening to music.

Section 1 B, Early Phrases

- 1. Are you hungry?
- 2. Are you tired/sleepy?
- 3. Be quiet!
- 4. Clap your hands
- 5. Come on/ come here
- 6. Don't do that
- 7. Don't touch
- 8. Give me a hug/kiss
- 9. Let's go bye bye

- 10. Look / look here
- 11. Open your mouth
- 12. Sit down
- 13. Stop it
- 14. Want to go out?
- 15. Say bye bye 16. Sleep now?
- 17. Don't cry
- 18. Don't go outside

Section 2 vocabulary

Comprehension

Family members: Mummy, Daddy, Grandma and Aunty

Body parts: Eye and Hand

Food items: Water and Milk.

Animals: Dog

Vehicles: Bicycle, Motorcycle and Car

Toys: Ball, Book, Doll, Pen and Toy.

Clothing: Cloth/Dress, Hat and Bangles.

Rooms and furniture: Kitchen, Bedroom, Bathroom and Cot.

Common objects: Broom, Medicine, Money, Paper, Bed, Plate, Spoon, Telephone and Fan.

Action verbs: Dance, Drink, Eat, Go, Hug, Kiss, Look and Take.

Descriptive words: All gone, Hot, Hungry, and Tired.

Others: Bath, Flower, and Hospital/ Doctor

Expression

Different sound effects: Ba ba, Wa wa, Ba ba va va ta ta, Ta da va ma, Choo choo, Vroom, woof woof and umm

Family members: Mummy and Daddy.

Section 3 Nonverbal communication

First communicative features

- 1. Reaches out and gives you a toy or some objects that he/ she in holding.
- 2. Points (with arm and index finger extended) at some interesting object or event.
- 3. Waves bye-bye on his/her own when someone leaves.
- 4. Extends his/her upward to signal a wish to be picked up.
- 5. Shakes head "no"
- 6. Blows kisses from a distance.

Games and routines

- 6. Play peekaboo
- 7. Play chasing games
- 8. Play with a toys
- 9. Sing
- 10. Dance

Actions with objects

- 1. Eat with a spoon.
- 2. Drink from a cup.
- 3. Put on hat
- 4. Hold vehicle object and make it move.
- 5. Put telephone to ear.
- 6. Throw ball
- 7. Pour liquid from one container to another
- 8. Kiss or hug a toy.

Imitating adult like actions

- 1. Sweep with broom or mop
- 2. Read (open book and turn pages)
- 3. Write with pen or pencil

Communication inventory for 10-12 months infants

Section 1 Early Communication Skills

Section 1 A, Prelinguistic skills

- 16. Appears to be able to distinguish general meanings of warning, anger and/or friendly voice pattern by facial and bodily gestures.
- 17. Responds with appropriate gestures to words such as "come", "bye-bye".....etc.
- 18. Gives some attention to music or singing.
- 19. Frequently appears to listen to whole conversation around him/her.
- 20. Regularly stops activity when his/her name called.
- 21. Reacts to loudness changes in voice of a others.
- 22. Regularly stops activity in response to "No".
- 23. Reacts differently to familiar people and strangers.
- 24. Appears to enjoy listening to new words.
- 25. Generally able to listen to speech without being distracted by others.
- 26. Mimes when action is named. Ex. When you ask "How to eat?" Child will make action to show how to eat.
- 27. Enjoys listening stories.
- 28. Responds to rhythmic music by bodily or hand movements
- 29. Feels happy when the child is praised for looks/ neat dress
- 30. Child is possessive about his/her clothes, toys.
- 31. Responds when name called. Ex. Turning back, searching for the person who called... etc.
- 32. Child enjoys watching TV, looking at comics or listening to music.

Section 1 B, Early Phrases

- 19. Are you hungry?
- 20. Are you tired/sleepy?
- 21. Be quiet!
- 22. Clap your hands
- 23. Come on/ come here
- 24. Do you want more?
- 25. Don't do that
- 26. Don't touch
- 27. Get up
- 28. Give it to mummy
- 29. Give me a hug/kiss
- 30. Go get
- 31. Good girl/boy
- 32. Let's go bye bye
- 33. Look / look here
- 34. Open your mouth
- 35. Sit down

- 36. Stop it
- 37. Throw the ball
- 38. Want to go out?
- 39. Do you want it?
- 40. Say bye bye
- 41. Sleep now?
- 42. Don't cry
- 43. Don't go outside.
- 44. Give me some???

Comprehension

Family members: Mummy, Daddy, Grandma, Grandpa, Sister, Aunty and Child.

Body parts: Head, Eye, Mouth, Hand and Leg.

Food items: Rice, Idli, Dosa, Chappati, Water, Apple, Banana, Milk and Food items.

Animals: Cat, Dog, Cow, Crow and Animal

Vehicles: Bus, Bicycle, Motorcycle, Car and Auto

Toys: Ball, Balloon, Book, Doll, Pen and Toy.

Clothing: Cloth/Dress, Nikker, Hat, Necklace/Chain, Bangles, Ear rings, Ankle lace and Sweater.

Rooms and furniture: Kitchen, Bedroom, Bathroom, Cot, Chair, Door and Stairs.

Common objects: Blanket, Bottle, Bowl, Box, Broom, Comb, Dish, Glass, Key, Lamp, Medicine, Money, Paper, Bed, Plate, Purse, Soap, Spoon, TV, Telephone, Fan and Plant.

Action verbs: Bite, Bring, Close, Cry, Dance, Drink, Eat, Fall, Feed, Finish, Give, Go, Hit, Hug, Kiss, Look, Open, Play, Pull, Push, Put, Say, Show, Sing, Sleep, Smile, Take, Throw, Touch and Walk.

Question words: what, who and why.

Descriptive words: All gone, Dark, Empty, Fast, Fine, Happy, Hard, Hungry, Hurt, Sleepy and Tired.

Pronouns: I, Me, That, This and You.

Quantifiers: none

Others: Bath, Flower, Home, Moon, Store, Mud, Temple and Hospital/ Doctor

Expression

Different sound effects: Ba ba, Wa wa, Ba ba va va ta ta, Ta da va ma, ko ko, woof woof and umm

Family members: mommy, daddy, grandpa.

Section 3 Nonverbal communication

First communicative features

- 1. Extends arm to show you something he/she is holding.
- 2. Reaches out and gives you a toy or some objects that he/ she in holding.
- 3. Points (with arm and index finger extended) at some interesting object or event.
- 4. Waves bye-bye on his/her own when someone leaves.
- 5. Extends his/her upward to signal a wish to be picked up.
- 6. Shakes head "no"
- 7. Nods head "yes"
- 8. Blows kisses from a distance.

Games and routines

- 1. Play peekaboo
- 2. Play chasing games
- 3. Play with a toys
- 4. Sing
- 5. Dance

Actions with objects

- 1. Eat with a spoon.
- 2. Drink from a cup.
- 3. Comb his/her own hair.
- 4. Brush teeth.
- 5. Put on hat
- 6. Hold vehicle object and make it move.
- 7. Put telephone to ear.
- 8. Throw ball
- 9. Pour liquid from one container to another
- 10. Kiss or hug a toy.

Imitating adult like actions

- 1. Sweep with broom or mop
- 2. Read (open book and turn pages)
- 3. Try to ride bicycle.
- 4. Clean with cloth
- 5. Write with pen or pencil