REVISED TOKEN TEST IN KANNADA

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Abstract

Aphasia is a many faceted problem as the complexity of the problem accounts for the diversity of approaches among investigators from various specialities. It has been defined differently and classified differently. But most of them agree upon the facts that aphasia is a language disorder due to brain damage. Likewise there are many tests to test aphasia. But objections have always been made to these tests. It has been frequently reported that aphasic responses are inconsistent and so test results are not reliable. Criticisms have been levelled against plus—minus scoring system and quantification of data. Some clinicians consider that the test procedures are traumatic to patients. The most frequent complaint is that comprehensive testing is economically unfeasible because it requires too much time.

, Schuell .(1968) feels that testing can be a therapeutic rather than traumatic procedure. As a result of testing patient feels less isolated and less anxious. By means of tests examiner leads the patient toward objectivity by helping them to understand the nature of problems and their limits. Further tests will be useful in evaluating the conditions of cases and the therapy procedures. Therefore, testing aphasics is essential.

Since 1926 several aphasia tests have been proposed to test aphasics. Few of them like Schuell (1964), MTDDA, PICA by Porch, 1971, Western Aphasia Battery-Kertesz 1979, are widely in use. Most of the tests available try to test the expressive ability of aphasics. To test the subtle receptive deficits DeRenzi and Vignolo (1962) proposed Token Test. Token test has been the subject of the study in Germany (Orgass and Porck, 1966, 1969, Porck, Kerschensteiner, and Hartje, 1972, Porck, Organs, Kerschensteiner and Hartje, 1974; Hartje *et al.* 1973; Sipos and Tagert, 1972; Orgass, 1975; Tagret *et al.* 1975), in England (Lesser R. 1974), in U.S.A. (Swisher and Sarno, 1969) in Romania (Kriendler, Gheorghira and Voirescu, 1971) in Finland (Vilkki and Laitanen, 1974), and in Italy (Boiler and Pansi and Pizzimiglio, 1970; Pizzimiglio and Appiciafuoco, 1971).

Ever since 1962, many modifications have been tried for the Token Test, (Boiler, F. and Vignolo, 1966; Spreen and Burton 1969; Noll and Berry, 1969; Noll, 1970; Noll and Lan, 1972; DeRenzi 1975; Martino *et al.,* 1976; Berry, 1976; Mack and Boiler, 1978; McNeil and Prescott, 1978).

In 1978, McNeil and Prescott gave their revised version of token test and called it as ' Revised token test.' But as it was found difficult to identify shapes in all aphasics Martino *et al.* (1976), used objects instead of shapes in their version

of Token Test. They correlated this test with many other comprehension tests and found that the concrete object form of Token Test was equally discriminative. As these two tests were simple and as R.T.T was standardized, present study was done based on the concepts of these two tests.

To select the test materials, 100 young adults, with Kannada as mother tongue were asked to give names of 5 objects which were familiar to children and adults of rural and urban areas. Another criteria was that these objects should be such that they can be represented in 2 primary colours and sizes. Depending on the frequency of occurrence these materials were selected.

The present test is developed in Kannada language. It consists of 5 objects (flower, pencil, bangle, comb and tumbler). Two sizes (big and small) and 2 colours (red and yellow). The test is made up of 10 sub-tests and 10 commands in each subject. Here to understand a command subject has to follow each word unit in the command. Presence of one word will not give any clue about other word. E.g. if the subject follows the word ' comb ' still he does not give him any clue whether he should touch red or yellow comb, big or small comb. Multi-dimension scoring system of R.T.T. (McNeil and Prescott, 1978) is made use of.

Only big objects are arranged for sub-tests I, III, V, VII, IX and all subjects are needed for II, IV, VI, VIII, and X, sub-tests. The objects are placed on the table in front of the subject in 4 rows with a distance of approximately 4 inches between rows and 4 inches distance between objects. Commands are given verbally. Object arrangements are as shown in the Fig. 1 and 2.

The description of sub-tests are given below.

The description of multidimensional scoring system of R.T.T. (McNeil and Prescott, 1978), used in this test is given below. The scores are entered in the score sheet.

The test was administered to 100 subjects 52 children (I std. to IV std. age range 5- 9 years). 37 adults, and 11 brain damaged cases (with and without aphasia).

The following table gives the details of subjects:

TABLE A

Subject	Age		Sex distribution		Total
	Range	Mean	M	F	
Group I	5-6	5.5	8	5	13
	6-7	6.5	8	5	13
	7-8	7.5	8	5	13
	8-9	8.5	8	5	13
Group II	20-60	40	19	18	37
Group III	15-50	32.5	7	4	11

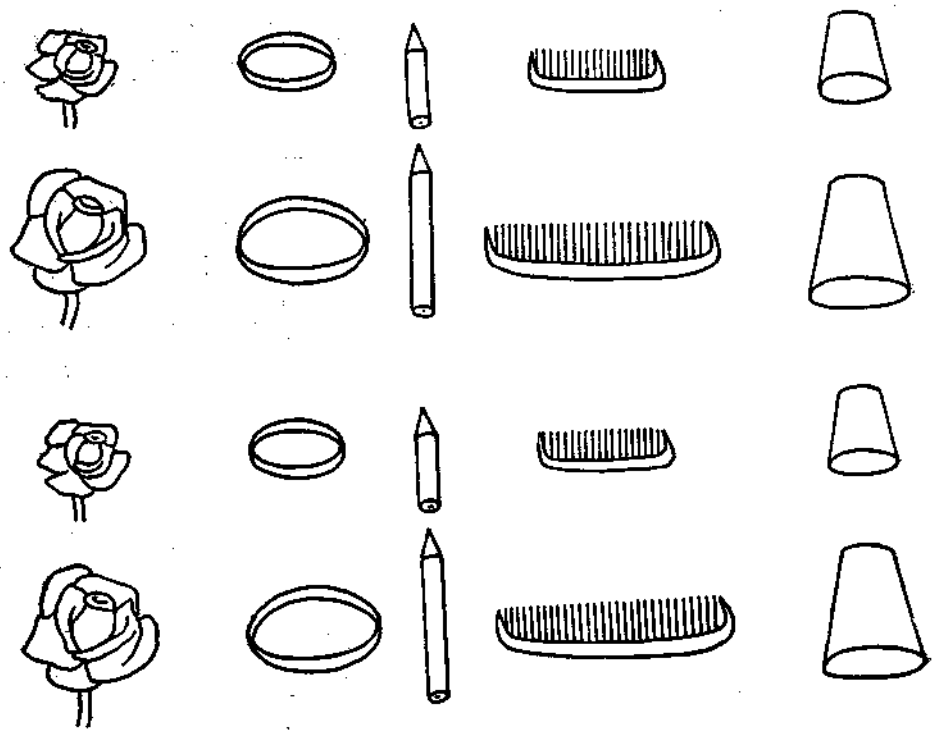


FIG. 1

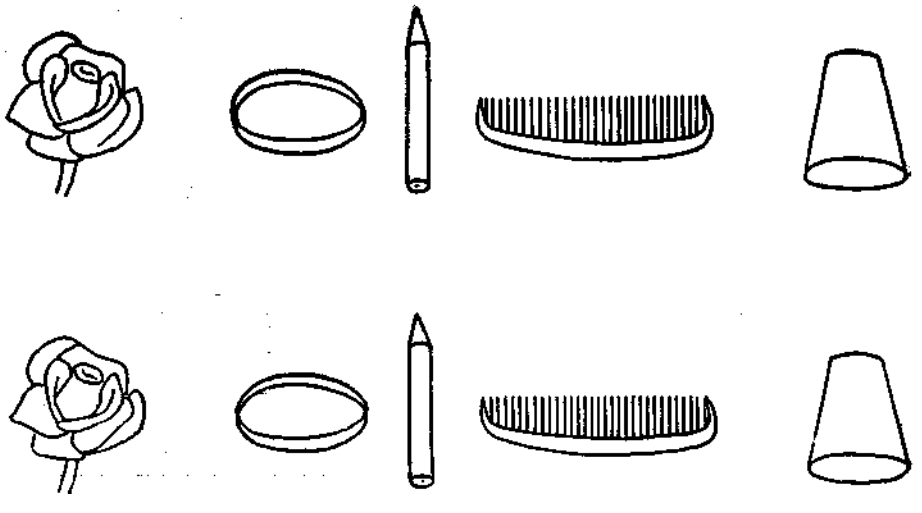
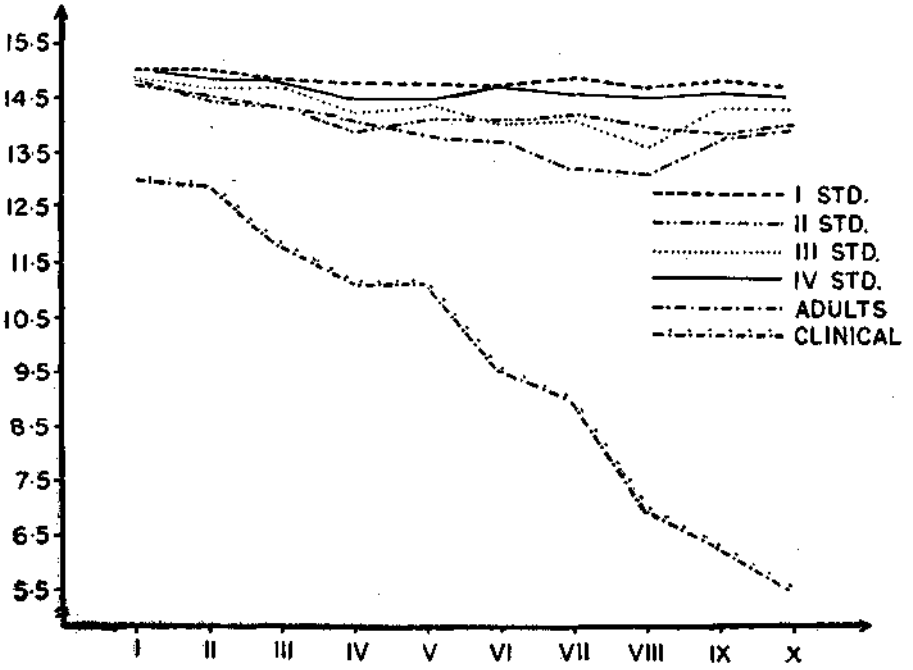
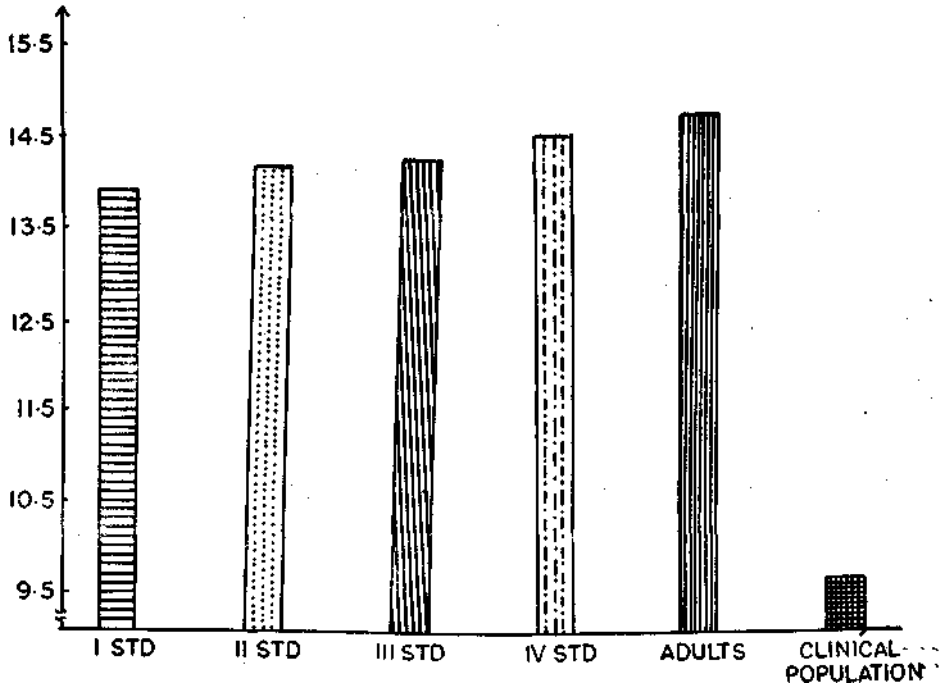


FIG. 2

Graph showing comparison of performance of subjects on sub-tests



Graph showing comparison of means



The following table shows the mean and S.D. scores, subjects obtained on this test:

TABLE B showing means and S.D. scores of subjects

	I Std.	II Std.	III Std.	IV Std.	Adults	Clinical population
Mean	13.94	14.22	14.32	14.65	14.80	9.7
S.D.	0.55	0.49	0.24	0.19	0.17	2.7

The results were analysed.

1. To find out the performance of males and females in each group.

2. To determine the sensitivity of the test to determine the various levels of comprehension; in other words, ability of the test to identify the comprehension levels in different age groups,

3. To find out its ability to distiinguish normal population from clinical population.

4. To find out the ability of the test to differentiate between brain damaged cases with language deficit and brain damaged case with no language deficit.

Performance of males and females

The results of the present study indicted that there is no difference between the sexes in terms of performance on this art or comprehension. *Ability of the test to identify the comprehension levels in, different age groups.*

For this purpose performance of each age group was compared with other groups.

TABLE C showing the comparison of performance of children and adults

	I Std.	II Std.	III std.	IV Std.	Adults
I Std.	—	Not significant KD=5	Significant LD=8	Significant KD=10	Significant P-=. 00006
II Std.	—	—	Not Si);c-tficant KD=.:i	Significant KD=7	Significant P=,00032
Ill Std.	—	—	—	Significant KD=9	Significant P=.0001
IV Std.	—	—		—	Significant p=.0001

Results indicated that there is no significant difference when I Standard was compared with II Std., but there is significant difference when it is compared with III Std., and IV Std., and adult group there is significant difference. The results showed that there is no significant difference between II Std., and III Std., but between II Std., and IV Std., and adult group there is significant difference. Performance of III Std., children differ significantly from IV Std., and adult group. Std., IV children differed significantly in their performance from adult group. The performance of these groups are represented in the graph. The study of the graph indicates that the scores are increasing gradually from I Std., to adults i.e., from Mean 13.94 to 14.80 and it was also found that variability decreases with age.

3. *Comparison of performance of clinical population* (aphasics) *and normals {adults and children):* The mean scores obtained by clinical population is 9.7 which is far lower than mean score of I Std., children (mean score is 13.94) and S.D. for clinical population was the greatest. So results showed that the clinical population i.e., aphasics differed significantly from normal population and that among clinical population receptive aphasics scored much lower (M=7.39) than expressive aphasics (M=12.18).

4. *Comparison of performance of brain damaged aphasics with brain damaged non-aphasics:* The brain damaged non-aphasic was diagnosed as ' cerebral dysarthria' with no language disturbance. This case obtained a mean score of 14.95 which is equivalent to mean socres of normal adults.

So the results of the present study indicates that—

1. There is no difference between performance of males and females. This in support to the findings of: Berko, 1958, Templin, 1957, Winitz, 1959; O'Donnell, Griffin and Norris, 1967; Moore, 1967; Graves and Koziol, 1971; Cherry, 1975, Marotool, 1976; Fair Weather, 1976; Bliss and Allen, 1977; Wells, 1979; Prema, 1979, who say that there is no significant difference between boys and girls in language development.

2. The test was capable of identifying the level of comprehension in different age groups. This is in accordance with the studies of Orgass and Porck (1966), Wertz, Keith and Custer (1971,) Hartji *et al.* (1973); DeRenzi (1978); Lass, J.N. and Noll, D.J. (1978).

3. The test could identify comprehension disability due to brain damage. This is in agreement with the findings of Orgass and Porck, 1966; Swisher and Sarno, 1969; Van Dongen and Van Harskamp, 1972; Fusilier and Lass, 1973; Lass and Gorden, 1974; Cartwright and Lass 1974; Robb and Lass 1974; who found out the validity and reliability of the test. Thus the test has served its purpose.

4. The test differentiated receptive aphasics from non-aphasics. Same thing has been foiund with token Test and Revised Token Test (DeRenzi, 1978, Mc Neil and Prescott, 1978, and others). Thus the test has proved itself as capable of differentiating different types of aphasia.

5. The test isolated brain damaged non-aphasics. It has been reported by DeRenzi(1975, 1978), McNeil and Prescott, 1978, that Token Test and Revised Token Test differentiates brain damaged aphasics from non-aphasics. Thus the test is discriminative.

6. The test can be used to assess the level of comprehension development as it proved itself as capable of assessing the comprehension ability in children. Orgass and Porck, 1966; Wertz et al. , 1969; DeRenzi, 1975; Noll 1970; Noll and Lass 1972; Hohn and Weiss 1973; has also found that the Token Test is capable of assessing the levels of comprehension ability.

DeRenzi and Vignolo, 1962; Noll and Berry, 1969; Noll, 1970 has stated that a test of reciptive damage should meet certain criteria :

(a) It should specifically test for receptive language abilities and not intellectual or conceptual abilities.
(b) It should contain various level of difficulty in order to discover subtle language disturbances without the use of obscure vocabulary and syntax.
(c) It should not involve tasks or commands necessitating extensive memorization.
(d) It should require a short period of time to administer.

The present test meets all the criteria stated by above. Thus the present test is capable of finding the levels of comprehension ability in adults, children and clinical population. It has also proved itself capable of discriminating various types of aphasics and aphasics from other brain damaged non-aphasics. Thus it has clinical utility.

PRE-TEST INSTUCTIONS

1 F mÉÃ§¯ï ªÉÄÃ¯É EIûgÉÆÃzÉ¯Á¢ K£ÀÆAvÀ UÉÆvÁÛ? [Pointing at all objecs]

2 AiÀiÁªÀ¼zÁzÀgÀÆ §¼É ªÀÄÄnÛÃgÁ ?/AiÀiÁ? [If the subject does not do it or does the wrong task] say: Eªɯ® §¼ÉUÀ¼ÀÄ. FUÀ AiÀiÁªÀ¼zÁzÀgÀÆ MAzÀÄ §¼ÉÃ£À ªÀÄÄnÛÃgÁ?/AiÀiÁ? [Like this the subjects were asked to touch all the objects one by one]

3 FUÀ EªÉgÀqÀgÀ°è AiÀiÁªÀ¼zÄÄ zÉÆqÀ¼zÀÄ AiÀiÁªÀ¼zÄÄ aPÀ¼zÀÄ vÉÆÃj¹ÛÃgÁ?/AiÀiÁ? [Show big and small bangles or any objects] "aPÀ¼zÀÄ vÉÆÃj¹/¸ÀÄ" "zÉÆqÀ¼zÀÄ vÉÆÃj¹/¸ÀÄ."

4. EzÀgÀ°è ‘PÉA¥ÀÄ’ §t À AiÀiÁªÀÅzÀÄ vÉÆÃj¹ÛÃgÁ?/AiÀiÁ?’.

5. EzÀgÀ°è ‘ºÀ¼À¢ §tÚ’ AiÀiÁªÀÅzÀÄ vÉÆÃj¹ÛÃgÁ?/AiÀiÁ?’.

If any part is not performed correctly, instructions are repeated. This is done to make sure that the subject is familiar with objects, colours and sizes.

Sub Test I

1. PÉA¥ÀÄ ¨ÁZÀÄU ªÀÄnÖ
2. PÉA¥ÀÄ §¼É ªÀÄnÖ
3. ºÀ¼À¢ ¥É£Àï ªÀÄnÖ
4. ºÀ¼À¢ ºÀÆ ªÀÄnÖ
5. PÉA¥ÀÄ ¯ÉÃl ªÀÄnÖ
6. PÉA¥ÀÄ ºÀÆ ªÀÄnÖ
7. ºÀ¼À¢ ¨ÁZÀÄUÉ ªÀÄnÖ
8. ºÀ¼À¢ ¯ÉÃl ªÀÄnÖ
9. PÉA¥ÀÄ ¥É¤ì¯ï ªÀÄnÖ
10. ºÀ¼À¢ §¼É ªÀÄnÖ

Sub Test II

1. zÉÆqÀØ PÉA¥ÀÄ ºÀÆ ªÀÄnÖ
2. zÉÆqÀØ PÉA¥ÀÄ ¨ÁZÀÄUÉ ªÀÄnÖ
3. aPÀÌ ºÀ¼À¢ ¥É¤ì¯ï ªÀÄnÖ
4. zÉÆqÀØ ºÀ¼À¢ §¼É ªÀÄnÖ
5. .aPÀÌ PÉA¥ÀÄ §¼É ªÀÄnÖ
6. aPÀÌ ºÀ¼À¢ ºÀÆ ªÀÄnÖ
7. aPÀÌ ºÀ¼À¢ ¯ÉÃl ªÀÄnÖ
8. zÉÆqÀØ PÉA¥ÀÄ ¯ÉÃl ªÀÄnÖ
9. zÉÆqÀØ PÉA¥ÀÄ ¥É¤ì¯ï ªÀÄnÖ
10. aPÀÌ ºÀ¼À¢ ¨ÁZÀÄUÉ ªÀÄnÖ

Sub Test III

1. ºÀ¼À¢ ºÀÆªÀ£ÀÄß ªÀÄvÀÄÛ ºÀ¼À¢ ¨ÁZÀÄUÉ£ÀÄß ªÀÄnÖ
2. PÉA¥ÀÄ ¥É¤ì¯ï£ÀÄß ªÀÄvÀÄÛ ºÀ¼À¢ ºÀÆªÀ£ÀÄß ªÀÄnÖ
3. PÉA¥ÀÄ ¯ÉÃl£ÀÄß ªÀÄvÀÄÛ ºÀ¼À¢ ¥É¤ì¯ï£ÀÄß ªÀÄnÖ
4. PÉA¥ÀÄ ¨ÁZÀÄUÉ£ÀÄß ªÀÄvÀÄÛ ºÀ¼À¢ ¯ÉÃl£ÀÄß ªÀÄnÖ
5. PÉA¥ÀÄ ºÀÆªÀ£ÀÄß ªÀÄvÀÄÛ ºÀ¼À¢ §¼É£ÀÄß ªÀÄnÖ

6. º¹ÀÀ¢ §¼ÃÉ£Àª ÀvÀÛ¥ÉÃ¥À ¯ÉÃ I£Àª ÀÄnÖ
7. º¹ÀÀ¢ ¯ÉÃ I£Àª ÀvÀÛ¥ÉÃ¥À ºÀ ª£ÀÀª ÀÄnÖ
8. º¹ÀÀ¢ ¨ÁZÀ¼UÉ£Àª ÀvÀÛ¥ÉÃ¥À §¼ÃÉ£Àª ÀÄnÖ
9. PÉ¥À §¼ÃÉ£Àª ÀvÀÛ¥ÉÃ¥À ¥É¤¯ï£Àª ÀÄnÖ
10. º¹ÀÀ¢ ¥É¤¯ï£Àª ÀvÀÛ¥ÉÃ¥À ¨ÁZÀ¼UÉ£Àª ÀÄnÖ

Sub Test IV

1. zÉÆqÀØ º¹À¢ ºÀÆªÀ£Àß ªÀÄvÉÛ aPÀÌ º¹À¢ ¨ÁZÀ tUÉÃ£À ªÀÄÄnÖ
2. zÉÆqÀØ º¹À¢ ¨ÁZÀ tUÉÃ£À ªÀÄvÉÛ aPÀÌ PÉA¥ÀÄ §¼ÉÃ£À ªÀÄÄnÖ
3. zÉÆqÀØ PÉA¥ÀÄ ¥É¤¯ï£À ªÀÄvÉÛ aPÀÌ º¹À¢ ºÀÆªÀ£Àß ªÀÄÄnÖ
4. zÉÆqÀØ PÉA¥ÀÄ ¯ÉÆÃ I£À ªÀÄvÉÛ aPÀÌ º¹À¢ ¥É¤¯ï£À ªÀÄÄnÖ
5. aPÀÌ º¹À¢ ¥É¤¯ï£À ªÀÄvÉÛ zÉÆqÀØ PÉA¥ÀÄ ¨ÁZÀ tUÉ£À ªÀÄÄnÖ
6. aPÀÌ PÉA¥ÀÄ ºÀÆªÀ£Àß ªÀÄvÉÛ zÉÆqÀØ º¹À¢ §¼ÉÃ£À ªÀÄÄnÖ
7. aPÀÌ PÉA¥ÀÄ ¨ÁZÀ tUÉ£À ªÀÄvÉÛ aPÀÌ º¹À¢ ¯ÉÆÃ I£À ªÀÄÄnÖ
8. aPÀÌ º¹À¢ ¯ÉÆÃ I£À ªÀÄvÉÛ zÉÆqÀØ PÉA¥ÀÄ ºÀÆªÀ£Àß ªÀÄÄnÖ
9. aPÀÌ PÉA¥ÀÄ §¼ÉÃ£À ªÀÄvÉÛ zÉÆqÀØ PÉA¥ÀÄ ¥É¤¯ï£À ªÀÄÄnÖ
10. zÉÆqÀØ º¹À¢ §¼ÉÃ£À ªÀÄvÉÛ zÉÆqÀØ PÉA¥ÀÄ ¯ÉÆÃ I£À ªÀÄÄnÖ

Sub Test V

1. º¹À¢ ¨ÁZÀ tUÉÃ£À PÉA¥ÀÄ §¼É ¥ÀPÀÌzÀ°è Er
2. PÉA¥ÀÄ ¨ÁZÀ tUÉÃ£À º¹À¢ ¯ÉÆÃ IzÀ ªÉÄÃ¯É Er
3. º¹À¢ ¥É¤ß¯ï£À PÉA¥ÀÄ ¨ÁZÀ tUÉ ªÀÄÄAzÉ Er
4. PÉA¥ÀÄ §¼ÉÃ£À PÉA¥ÀÄ ¥É¤¯ï ªÉÄÃ¯É Er
5. PÉA¥ÀÄ ¥É¤¯ï£À º¹À¢ ºÀÆ«£À »AzÉ Er
6. º¹À¢ ºÀÆ£À º¹À¢ ¨ÁZÀ tUÉ PÉ¼ÀUÉ Er
7. PÉA¥ÀÄ ¯ÉÆÃ I£À º¹À¢ ¥É¤¯ï PÉ¼ÀUÉ Er
8. º¹À¢ ¯ÉÆÃ I£À PÉA¥ÀÄ ºÀÆ«£À »AzÉ Er
9. º¹À¢ §¼ÉÃ£À PÉA¥ÀÄ ¯ÉÆÃ IzÀ ªÀÄÄAzÉ Er
10. PÉA¥ÀÄ ºÀÆ£À º¹À¢ §¼É ¥ÀPÀÌzÀ°è Er

Sub Test VI

1. zÉÆqÀØ º¹À¢ §¼ÉÃ£À zÉÆqÀØ PÉA¥ÀÄ ¯ÉÆÃ IzÀ ªÀÄÄAzÉ Er
2. zÉÆqÀØ PÉA¥ÀÄ ¥É¤¯ï£À aPÀÌ º¹À¢ ºÀÆ«£À ªÀÄÄAzÉ Er
3. aPÀÌ PÉA¥ÀÄ ºÀÆªÀ£Àß zÉÆqÀØ º¹À¢ §¼É PÉ¼ÀUÉ Er
4. zÉÆqÀØ º¹À¢ ¨ÁZÀ tUÉ£À aPÀÌ PÉA¥ÀÄ §¼É ªÉÄÃ¯É Er
5. aPÀÌ PÉA¥ÀÄ ¨ÁZÀ tUÉÃ£À aPÀÌ º¹À¢ ¯ÉÆÃ IzÀ PÉ¼ÀUÉ Er
6. aPÀÌ º¹À¢ ¥É¤¯ï£À zÉÆqÀØ PÉA¥ÀÄ ¨ÁZÀ tUÉ »AzÉ Er

7. zÉÆqÀØ ºÀ¼À¢ ºÀÆªÀ£Àß aPÀÌ ºÀ¼À¢ ¨ÁZÀtUÉ ¥ÀPÀÌzÀ°è Er
8. zÉÆqÀØ PÉA¥ÀÄ ¯ÉÆÃI£À aPÀÌ ºÀ¼À¢ ¥É¤ì¯ï »AzÉ Er
9. aPÀÌ PÉA¥ÀÄ §¼ÉÃ£À zÉÆqÀØ PÉA¥ÀÄ ¥É¤ì¯ï ¥ÀPÀÌzÀ°è Er
10. aPÀÌ ºÀ¼À¢ ¯ÉÆÃIzÀ zÉÆqÀØ PÉA¥ÀÄ ºÀÆ«£À ªÉÄÃ¯É Er

Sub Test VII

1. PÉA¥ÀÄ ¨ÁZÀtUÉÃ£À ºÀ¼À¢ ¯ÉÆÃIzÀ JqÀUÀqÉ Er
2. ºÀ¼À¢ §¼ÉÃ£À PÉA¥ÀÄ ¯ÉÆÃIzÀ JqÀUÀqÉ Er
3. ºÀ¼À¢ ¨ÁZÀtUÉÃ£À PÉA¥ÀÄ §¼ÉAiÀÄ §®UÀqÉ Er
4. PÉA¥ÀÄ ¥É¤ì¯ï£À ºÀ¼À¢ ºÀÆ«£À JqÀUÀqÉ Er
5. PÉA¥ÀÄ ºÀÆ£À ºÀ¼À¢ §¼ÉAiÀÄ JqÀUÀqÉ Er
6. ºÀ¼À¢ ¯ÉÆÃI£À PÉA¥ÀÄ ºÀÆ«£À §®UÀqÉ Er
7. PÉA¥ÀÄ §¼ÉÃ£À PÉA¥ÀÄ ¥É¤ì¯ï §®UÀqÉ Er
8. PÉA¥ÀÄ ¯ÉÆÃI£À ºÀ¼À¢ ¥É¤ì¯ï §®UÀqÉ Er
9. ºÀ¼À¢ ¥É£Àì¯ï£À PÉA¥ÀÄ ¨ÁZÀtUÉ §®UÀqÉ Er
10. ºÀ¼À¢ ºÀÆ£À ¨ÁZÀtUÉ §®UÀqÉ Er

Sub Test VIII

1. aPÀÌ PÉA¥ÀÄ ºÀÆ£À zÉÆqÀØ ºÀ¼À¢ §¼ÉAiÀÄ JqÀUÀqÉ Er
2. zÉÆqÀØ PÉA¥ÀÄ ¯ÉÆÃI£À aPÀÌ ºÀ¼À¢ ¥É¤ì¯ï JqÀUÀqÉ Er
3. zÉÆqÀØ ºÀ¼À¢ ºÀÆ£À aPÀÌ ºÀ¼À¢ ¨ÁZÀtUÉ §®UÀqÉ Er
4. aPÀÌ ºÀ¼À¢ ¯ÉÆÃI£À zÉÆqÀØ PÉA¥ÀÄ ºÀÆ£À §®UÀqÉ Er
5. zÉÆqÀØ ºÀ¼À¢ §¼ÉÃ£À zÉÆqÀØ PÉA¥ÀÄ ¯ÉÆÃIzÀ JqÀUÀqÉ Er
6. aPÀÌ PÉA¥ÀÄ ¨ÁZÀtUÉÃ£À aPÀÌ ºÀ¼À¢ ¯ÉÆÃIzÀ §®UÀqÉ Er
7. aPÀÌ PÉA¥ÀÄ §¼ÉÃ£À zÉÆqÀØ PÉA¥ÀÄ ¥É¤ì¯ï §®UÀqÉ Er
8. zÉÆqÀØ ºÀ¼À¢ ¨ÁZÀtUÉÃ£À aPÀÌ PÉA¥ÀÄ §¼ÉAiÀÄ §®UÀqÉ Er
9. zÉÆqÀØ PÉA¥ÀÄ ¥É¤ì¯ï£À aPÀÌ ºÀ¼À¢ ºÀÆ«£À JqÀUÀqÉ Er
10. aPÀÌ ºÀ¼À¢ ¥É¤ì¯ï£À zÉÆqÀØ PÉA¥ÀÄ ¨ÁZÀtUÉ JqÀUÀqÉ Er

Sub Test IX

1. ºÀ¼À¢ ºÀÆ«£À §zÀ¯ÁV ºÀ¼À¢ ¨ÁZÀtUÉ ªÀÄÄnÖ
2. ºÀ¼À¢ ¯ÉÆÃI£À ªÀÄÄIÖzÀgÉ ªÀiÁvÀä PÉA¥ÀÄ ºÀÆªÀ£Àß ªÀÄÄnÖ
3. PÉA¥ÀÄ ¯ÉÆÃI£À ªÀÄÄIÖzÉ EzÀÝgÉ ºÀ¼À¢ ¥É¤ì¯ï ªÀÄÄnÖ
4. ºÀ¼À¢ §¼ÉÃ£À ªÀÄÄIÖzÉ EzÀÝgÉ PÉA¥ÀÄ ºÀÆªÀ£Àß ªÀÄÄnÖ

5. ºÀ½¸À¢ §½¸ÉÃ£ÀÀ CxÀªÁ PÉA¥ÀÄ ¯ÉÆÃl£À ªÀÄÄnÛ
6. PÉA¥ÀÄ ¥É¤ì¯ï£À ºÀ½¸À¢ ºÀÆ«£À §zÀ¯ÁV ªÀÄÄnÛ

7. PÉA¥ÀÄ §½¸ÉÃ£ÀÀ CxÀªÁ PÉA¥ÀÄ ¥É¤ì¯ï£À ªÀÄÄnÛ
8. PÉA¥ÀÄ §½¸É C°¢zÀ¼gÉ ºÀ½¸À¢ ¨ÁZÀtÚÉÃ£ÀÀ ªÀÄÄnÛ
9. PÉA¥ÀÄ ¨ÁZÀtÚÉ ªÀÄÄnÛzÀgÉ ªÀ¿ÁvÀ ºÀ½¸À¢ ¥É¤ì¯ï ªÀÄÄnÛ
10. C°¢ PÉA¥ÀÄ ¨ÁZÀtÚÉ Ezà¼gÉ ºÀ½¸À¢ ¯ÉÆÃl£À ªÀÄÄnÛ

Sub Test X

1. aPÀÌ PÉA¥ÀÄ §½¸ÉÃ£ÀÀ ªÀÄÄAlÛzÀgÉ ªÀ¿ÁvÀ zÉÆqÀ¼ ºÀ½¸À¢ ¨ÁZÀtÚÉÃ£ÀÀ ªÀÄÄnÛ
2. zÉÆqÀ¼ PÉA¥ÀÄ ¨ÁZÀtÚÉ C°¢zÀ¼gÉ aPÀÌ ºÀ½¸À¢ ¥É¤ì¯ï ªÀÄÄnÛ
3. aPÀÌ ºÀ½¸À¢ ¯ÉÆÃl£À ªÀÄÄnÛzÀgÉ ªÀ¿ÁvÀ zÉÆqÀ¼ PÉA¥ÀÄ ºÀÆªÀ£À¼ ªÀÄÄnÛ
4. C°¢ zÉÆqÀ¼ PÉA¥ÀÄ ¯ÉÆÃl Ezà¼gÉ, aPÀÌ ºÀ½¸À¢ ¥É¤ì¯ï ªÀÄÄnÛ
5. aPÀÌ ºÀ½¸À¢ ºÀÆ«£À §zÀ¯ÁV zÉÆqÀ¼ PÉA¥ÀÄ ¥É¤ì¯ï ªÀÄÄnÛ
6. zÉÆqÀ¼ ºÀ½¸À¢ §½¸ÉÃ£ÀÀ ªÀÄÄnÛzÀ¼gÉ ZÀPÀÌ PÉA¥ÀÄ ºÀÆªÀ£À¼ ªÀÄÄnÛ
7. zÉÆqÀ¼ ºÀ½¸À¢ ºÀÆªÀ£À¼ CxÀªÁ aPÀÌ PÉA¥ÀÄ ¨ÁZÀtÚÉÃ£ÀÀ ªÀÄÄnÛ
8. zÉÆqÀ¼ PÉA¥ÀÄ ¯ÉÆÃmÁ£À zÉÆqÀ¼ ºÀ½¸À¢ §½¸ÉAiÀÄ §zÀ¯ÁV ªÀÄÄnÛ
9. aPÀÌ PÉA¥ÀÄ ¨ÁZÀtÚÉÃ£ÀÀ ªÀÄÄAlÛ¢zÀ¼gÉ aPÀÌ ºÀ½¸À¢ ¯ÉÆÃl£À ªÀÄÄnÛ
10. aPÀÌ ºÀ½¸À¢ §½¸ÉÃ£ÀÀ CxÀªÁ zÉÆqÀ¼ PÉA¥ÀÄ ¯ÉÆÃl£À ªÀÄÄnÛ

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