



SERVICE PERFORMANCE IN INDIAN POSTAL SERVICE VIS-A-VIS THE EXPECTATIONS AND PERCEPTIONS OF POSTAL EMPLOYEES AND CUSTOMERS - A CASE STUDY

Kumud Chandra Goswami * Sarah Yasmin Hussain**

*Professor, Department of Commerce, Dibrugarh University, Assam, email.

**Research Scholar, Centre for Management Studies, Dibrugarh University, Assam.

Abstract

The Indian postal system has been facing some problems recently. This study aims to investigate the problems faced by the postal system and to assess the performance/quality of postal service in Tinsukia Head Post Office. A structured questionnaire (based on SERVQUAL AND SERVPERF) has been used to assess the performance of postal service in the study area. The total sample size is 125, with 65 postal employees and 60 customers. Census study has been done for the employees and systematic sampling has been done for the customers. A difference of mean ranks has been found between postal employees and customers in their expectations in the tangible, responsiveness, assurance and empathy dimensions of postal service in Tinsukia H.O. No difference in mean ranks has been found in the reliability dimension between the two groups in their expectations of postal service. A difference of mean ranks has been found between the postal employees and customers in their perceptions of performance in reliability, responsiveness, assurance and empathy dimensions of postal service in Tinsukia H.O. In the case of tangible dimension there is no difference of mean ranks between the two groups in their perception of performance in postal service.

Key Words: Service Performance, Quality Of Service, Indian Postal Service.

Introduction

Postal service is one of the important services that can be availed by the customers. "As countries are members of the Universal Postal Union (UPU) and follow universal service obligations (USO) conventions, they are obliged to provide basic services with acceptable quality at affordable prices. The social obligation of the postal sector goes beyond merely offering universal services. As information is a powerful instrument in enhancing the development of a society, the role of the postal sector is significant."[i]

Statement of the Problem

The customers and the employees of the postal service have been facing problems as link failure and slow service. It is a common sight to see a long queue with disgruntled customers and equally helpless postal employees in post offices. This is a rising issue which needs to be investigated and a solution found at the earliest, as valuable time, effort and resources of the nation and customers are lost.

Objective

- To determine the service quality/performance of the Indian Postal service in Tinsukia Head Post office.

Hypotheses

The following ten (10) hypotheses are formulated for significance testing p value less than .05.

First hypothesis

H₀ : There is no difference of mean ranks between the postal employees and the customers in their expectations in the tangible dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their expectations in the tangible dimension of postal service in Tinsukia H.O.

Second hypothesis

H₀ : There is no difference of mean ranks between the postal employees and the customers in their expectations in the reliability dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their expectations in the reliability dimension of postal service in Tinsukia H.O.

Third hypothesis

H₀ : There is no difference of mean ranks between the postal employees and the customers in their expectations in the responsiveness dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their expectations in the responsiveness dimension of postal service in Tinsukia H.O.



Fourth hypothesis

H_0 : There is no difference of mean ranks between the postal employees and the customers in their expectations in the assurance dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their expectations in the assurance dimension of postal service in Tinsukia H.O.

Fifth hypothesis

H_0 : There is no difference of mean ranks between the postal employees and the customers in their expectations in the empathy dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their expectations in the empathy dimension of postal service in Tinsukia H.O.

Sixth hypothesis

H_0 : There is no difference of mean ranks between the postal employees and the customers in their perception of performance in the tangible dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their perception of performance in the tangible dimension of postal service in Tinsukia H.O.

Seventh hypothesis

H_0 : There is no difference of mean ranks between the postal employees and the customers in their perception of performance in the reliability dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their perception of performance in the reliability dimension of postal service in Tinsukia H.O.

Eight hypothesis

H_0 : There is no difference of mean ranks between the postal employees and the customers in their perception of performance in the responsiveness dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their perception of performance in the responsiveness dimension of postal service in Tinsukia H.O.

Ninth hypothesis

H_0 : There is no difference of mean ranks between the postal employees and the customers in their perception of performance in the assurance dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their perception of performance in the assurance dimension of postal service in Tinsukia H.O.

Tenth hypothesis

H_0 : There is no difference of mean ranks between the postal employees and the customers in their perception of performance in the empathy dimension of postal service in Tinsukia H.O.

H_a : There is a difference of mean ranks between the postal employees and the customers in their perception of performance in the empathy dimension of postal service in Tinsukia H.O.

Methodology

This study is an empirical case study to determine the service performance of the Indian postal service in Tinsukia HO. The data used is mainly primary data. Secondary data (relating to vacancies) have been collected as required.

Tools used for data collection

A questionnaire has been used for eliciting the respondents' (consisting of postal employees and customers) views about the performance/quality of the postal service. The work of Parasuraman & Zeithaml (1988) and Cronin & Taylor (1992) have been consulted. The questionnaire consists of 22-items each for measuring the expectations and performance/perceptions of service.

Tools for analysis

SPSS (version 16) has been used for analysing the data. Mann-Whitney U test has been used for testing hypotheses. As the sample size [ii] is more than 41, z- values are used for accepting/rejecting the hypotheses.

Sample size

There are 87 [iii] postal employees in Tinsukia Head Post office as on 15.05.2016. For them a census study has been done. 65

filled questionnaires were received back. For the customers a systematic random sampling has been done. The sample size for the customers is 60 (that is 3000/50). The total sample size is 125, with 65 postal employees and 60 customers availing service at the post office.

Review of Literature

Parasuraman[iv], Valarie, Zeithaml, & Berry (1985) have attempted an extensive exploratory investigation of quality in four service businesses (retail banking, credit card, securities brokerage, and product repair and maintenance) by developing a model of service quality. They opine that though the substance and the determinants of quality may be undefined, its importance to firms and its consumers is of paramount importance.

Parasuraman[v], Zeithaml & Berry (1988) made further study on measuring service quality and put forward the SERVQUAL model using five dimensions – tangibles, reliability, responsiveness, assurance, and empathy.

Cronin & Taylor put forward the SERVPERF model for measuring the service perceptions of customers. They used 22-items for measuring performance of service.

Analysis and Interpretation of Data

Expectations and perceptions of the postal employees about the postal service

The views of the postal employees regarding postal service in terms of their expectations and perception of performance is illustrated in Table-1 and Table-2.

Table-1 shows that 67.69% of the postal employees have extremely high expectations in the tangible dimension of postal service. 30.77% of them have very high expectations in this dimension (tangible). 1.54% of them have high expectations in this dimension. This means that 100% (67.69% + 30.77% + 1.54% = 100%) of the employees have great expectations in the tangible dimension of postal service. Again, 83.08% of the employees have extremely high expectations in the reliability dimension of postal service. 16.92% of them have very high expectations in this dimension. This together forms 100% of the employees who have great expectations in the reliability dimension of postal service. 89.23% of the employees have extremely high expectations in the assurance dimension of postal service. 7.69% of them have very high expectations in this dimension. 3.08% of them have high expectations in this dimension. This means that 100% (89.23% + 7.69% + 3.08% = 100%) of the employees have great expectations in the assurance dimension of postal service. 32.31% of the employees have extremely high expectations in the responsiveness dimension. 26.15% of them express very high expectations in this dimension. 33.85% of them have high expectations in this dimension. Only 7.69% of them are neutral in their expectations in this dimension. This means that 92.31% (32.31% + 26.15% + 33.85% = 92.31%) of the employees have great expectations in the responsiveness dimension of postal service. 64.62% of the employees have extremely high expectations in the empathy dimension. 16.92% of them have very high expectations in this dimension. 15.38% have high expectations in this dimension. This means that 96.92% (64.62% + 16.92% + 15.38% = 96.92%) of the employees have great expectations in the empathy dimension of postal service.

Table-2 shows that 53.85% of the postal employees have very high perception, 32.31% have high perception and 10.77% have extremely high perception. This means that 96.93% of the employees have high perception of performance in the tangible dimension of postal service. 63.08% of them have very high perception, 27.69% have extremely high perception and 9.23% have high perception of performance in the reliability dimension of postal service. This means that 100% of the employees believe that the postal service is up to the mark in reliability and dependability of its services. 38.46% of them have very high perception, 32.31% have high perception and 12.31% have extremely high perception of performance in the responsiveness dimension of postal service. 63.08% of them have extremely high perception, 33.85% have very high perception and 3.08% have high perception of performance in assurance dimension of postal service. This means that 100% of the employees perceive that a high standard in assurance dimension of postal service. 47.69% of them have extremely high perception, 33.85% have very high perception and 12.31% have high perception of performance in the empathy dimension of postal service. This means that 93.85% of the postal employees have a good perception of performance in the empathy dimension of postal service.

Table-1: Expectations of the postal employees in the five (5) dimensions of postal service in Tinsukia Head Post Office.

Sl. No.	Five domains of expectations in postal service by the employees	Neutral	High expectations	Very high expectations	Extremely high expectations	Total
1.	Tangible dimension	0	1(1.54%)	20(30.77%)	44(67.69%)	65(100%)
2.	Reliability dimension	0	0	11(16.92%)	54(83.08%)	65(100%)

3.	Responsiveness dimension	5(7.69%)	22(33.85%)	17(26.15%)	21(32.31%)	65(100%)
4.	Assurance dimension	0	2(3.08%)	5(7.69%)	58(89.23%)	65(100%)
5.	Empathy dimension	2(3.08%)	10(15.38%)	11(16.92%)	42(64.62%)	65(100%)

Source: Field survey.

Table-2: Perception of postal performance by the employees in the five (5) dimensions of postal service in Tinsukia Head Post Office.

Sl.No.	Five domains of perception of postal service by the	Very low perception	Low perception	Neutral	High perception	Very high perception	Extremely high perception	Total
1.	Tangible dimension	0	0	2 (3.08%)	21 (32.31%)	35(53.85%)	7 (10.77%)	65 (100%)
2.	Reliability dimension	0	0	0	6 (9.23%)	41 (63.08%)	18 (27.69%)	65 (100%)
3.	Responsiveness dimension	1 (1.54%)	4 (6.15%)	6 (9.23%)	21 (32.31%)	25 (38.46%)	8 (12.31%)	65 (100%)
4.	Assurance dimension	0	0	0	2 (3.08%)	22 (33.85%)	41 (63.08%)	65 (100%)
5.	Empathy dimension	0	0	4 (6.15%)	8 (12.31%)	22 (33.85%)	31 (47.69%)	65 (100%)

Source: Field survey.

Expectations and perceptions of the customers about the postal service

The views of the customers regarding postal service in terms of their expectations and perception of performance is illustrated in Table-3 and Table-4.

Table-3: Expectations of the customers in the five (5) dimensions of postal service in Tinsukia Head Post Office.

Sl.No.	Expectations in the five dimensions of postal service	High expectations	Extremely high	Total
1.	Tangible	0	60(100%)	60(100%)
2.	Reliability	0	60(100%)	60(100%)
3.	Responsiveness	0	60(100%)	60(100%)
4.	Assurance	0	60(100%)	60(100%)
5.	Empathy	60(100%)	0	60(100%)

Source: Field survey.

Table-4: Perceptions of the customers in the five (5) dimensions of postal service in Tinsukia Head Post Office.

Sl.No.	Perceptions in the five domains of postal service by the customers	Extremely low perception	Very low perception	Low perception	Neutral	High perception	Very high perception	Extremely high perception	Total
1.	Tangible	0	0	0	0	1 (1.67%)	59 (98.33%)	0	60 (100%)
2.	Reliability	0	0	6(10%)	40(66.67%)	12(20%)	2(3.33%)	0	60(100%)
3.	Responsiveness	41 (68.33%)	2 (3.33%)	16 (26.67%)	1 (1.67%)	0	0	0	60 (100%)
4.	Assurance	0	0	0	0	59(98.33%)	1(1.67%)	0	60(100%)

Sl.No.	Perceptions in the five domains of postal service by the customers	Extremely low perception	Very low perception	Low perception	Neutral	High perception	Very high perception	Extremely high perception	Total
1.	Tangible	0	0	0	0	1 (1.67%)	59 (98.33%)	0	60 (100%)
2.	Reliability	0	0	6(10%)	40(66.67%)	12(20%)	2(3.33%)	0	60(100%)
5.	Empathy	0	24(40%)	20(33.33%)	0	16(26.67%)	0	0	60(100%)

Source: Field survey.

Table-3 shows that in the four dimensions - tangible, reliability, responsiveness and assurance, all (100%) the customers have extremely high expectations from postal service. In the empathy dimension all (100%) the customers have high expectations from postal service.

Table-4 shows that 98.33% of the customers have very high perception and 1.67% has high perception of performance in the tangible dimension of postal service. This means that 100% of them believe that the postal service is doing well in the tangible dimension. Similarly, 100% (98.33% -high perception and 1.67%- very high perception) of the customers also believe that the performance is good in the assurance dimension. 66.67% of the customers have neutral perception, 20% have high perception, 3.33% have very high perception and 10% have low perception of performance in the reliability dimension of postal service. This implies that the customers do not feel that the postal service is very reliable. 33.33% of them have low perception and 40% have very low perception of performance in empathy dimension. Only, 26.67% of them have high perception of performance in the empathy dimension of postal service. This means that 73.33% (33.33% + 40% = 73.33%) of the customers do not have a good perception of postal service in the empathy dimension. Table-4 shows that barring the tangible and assurance dimension most of the data falls towards the lower end. This means that the customers are not happy with the service they are receiving from the post office.

Table-1 to 4 shows a difference in the views of the postal employees and the customers. However, in order to determine whether this difference is significant, further test is required. Mann-Whitney U test has been selected to test the formulated hypotheses.

Hypotheses testing

Mann-Whitney U test has been done to test the ten (10) hypotheses. In Table- 5 to 8 the results are presented for analysis.

Table-5: Mean ranks and sum of ranks for the postal employees and the customers of postal service in the expectations of the five dimensions of service

Sl.No.	Expectations in five	Groups	N	Mean Ranks	Sum of Ranks
1.	Tangible	Postal employees	65	44.51	2893.00
		Customers	60	83.03	4982.00
		Total number	125		
2.	Reliability	Postal employees	65	57.15	3714.50
		Customers	60	69.34	4160.50
		Total number	125		
3.	Responsiveness	Postal employees	65	35.27	2292.50
		Customers	60	93.04	5582.50
		Total number	125		
4.	Assurance	Postal employees	65	51.85	3370.50
		Customers	60	75.08	4504.50
		Total number	125		
5.	Empathy	Postal employees	65	87.00	5655.00
		Customers	60	37.00	2220.00
		Total number	125		

Source: Field survey.

Table-5 shows that there is a marked difference in the mean ranks in the tangible dimension for the postal employees and the customers. The difference in their mean ranks is 38.52 which is 1.87 times more than the mean rank of the postal employees. In the case of difference in the mean ranks in the responsiveness dimension between the two groups the difference is 57.77 which is 2.64 times more than the mean rank of the postal employees. The difference of the mean ranks in the assurance dimension between the two groups is 23.23 which is 1.45 times more than the mean rank of postal employees. The difference in the mean ranks in the empathy dimension between the two groups is 50 which is 2.53 times more than the mean rank of the customers. In case of the difference of mean ranks in the reliability dimension between the two groups the difference is 12.19 which is 1.21 times more than the mean rank of the postal employees. This is comparatively low to the other dimensions as stated above. The differences are also reflected in the Sum of ranks. The differences are - tangible (2089), reliability (446), responsiveness (3290), assurance (1134) and empathy dimensions (3435) dimensions.

Table-6 shows the Mann-Whitney U test results. The z-values for the four dimensions does not fall between the critical value ± 1.96 , $p < .05$, ($z = -6.97, -9.105, -5.052, \text{ and } -8.265$). This leads to the rejection of the null hypotheses for the four (4) hypotheses – first, third, fourth and fifth and the research hypotheses are accepted for $p < .05$. The z value for the expectations of reliability is -1.959, which is less than -1.96. As such for the second hypothesis the null hypothesis is accepted and the research hypothesis is rejected. There is a difference of mean ranks between the two groups (postal employees and customers) in their expectations in the tangible, responsiveness, assurance and empathy dimensions of postal service in Tinsukia H.O. Only in the case of reliability dimension there is no difference of mean ranks between the two groups in their expectations of postal service.

Table-6: Mann-Whitney U test for the 5 dimensions of expectations for the postal employees and the customers

Sl.No.	Test	Expectations of tangible dimension	Expectations of reliability dimension	Expectations of responsiveness dimension	Expectations of assurance dimension	Expectations of empathy dimension
1.	Mann-Whitney U	748.000	1569.500	147.500	1225.500	390.000
2.	Z	-6.970	-1.959	-9.105	-5.052	-8.265
3.	Asymptotic significance (2-tailed)	.000	.050	.000	.000	.000

Source: Field survey.

Table-7 shows that there is a marked difference in the mean ranks in the reliability dimension for the postal employees and the customers. The difference in their mean ranks is 60.58 which is 2.92 times more than the mean rank of the customers. The difference in the mean ranks in the responsiveness dimension between the two groups is 60.83 which is 2.94 times more than the mean rank of the customers. The difference in mean ranks in the assurance dimension between the two groups is 61.89 which is 3.01 times more than the mean rank of the customers. The difference in the mean ranks in the empathy dimension between the two groups is 59.23 which is 2.84 times more than the mean rank of the customers. The difference in the mean ranks between the two groups in the tangible dimension is 4.54 which is 1.07 times more than the mean rank of the postal employees. This is comparatively low to the other dimensions as stated above. The differences are also reflected in the Sum of ranks. The differences are - tangible (32), reliability (4095), responsiveness (4111), assurance (4177) and empathy dimensions (4011) dimensions.

Table-7: Mean ranks and sum of ranks for the postal employees and the customers of postal service in the performance of the five dimensions of service

Sl.No.	Performance/quality in the five	Groups	N	Mean Ranks	Sum of Ranks
1.	Tangible	Postal employees	65	60.82	3953.50
		Customers	60	65.36	3921.50
		Total number	125		
2.	Reliability	Postal employees	65	92.08	5985.00
		Customers	60	31.50	1890.00
		Total number	125		

3.	Responsiveness	Postal employees	65	92.20	5993.00
		Customers	60	31.37	1882.00
		Total number	125		
4.	Assurance	Postal employees	65	92.71	6026.00
		Customers	60	30.82	1849.00
		Total number	125		
5.	Empathy	Postal employees	65	91.43	5943.00
		Customers	60	32.20	1932.00
		Total number	125		

Source: Field survey.

Table-8 shows that the Mann Whitney U test values and the z values for the 4 dimensions (reliability, responsiveness, assurance and empathy) in performance for the two groups does not lie in the critical area ± 1.96 , $p < .05$, $z = -9.406, -9.567, -9.932, -9.208$. As such it leads to the rejection of the 4 null hypotheses (seventh, eighth, ninth and tenth) and acceptance of the research hypotheses. The z value is $-.725$ for performance of tangible dimension. This value is less than -1.96 . As such the null hypothesis is accepted and the research hypothesis is rejected for the sixth hypothesis. This means that there is a difference of mean ranks between the two groups (postal employees and customers) in their perceptions of performance in reliability, responsiveness, assurance and empathy dimensions of postal service in Tinsukia H.O. Only in the case of tangible dimension there is no difference of mean ranks between the postal employees and the customers in their perception of performance in postal service.

Table-8: Mann-Whitney U test for the 5 dimensions of performance for the postal employees and customers

Sl.No.	Test	Performance/q uality of tangible dimension	Performance / Quality of reliability dimension	Performance / Quality of responsiveness dimension	Performance / Quality of assurance dimension	Performance / Quality of empathy dimension
1.	Mann-Whitney U	1808.500	60.000	52.000	19.000	102.000
2.	Z	-.725	-9.406	-9.567	-9.932	-9.208
3.	Asymptotic significance (2- tailed)	.469	.000	.000	.000	.000

Source: Field survey.

Views of the postal employees about postal service:

A chunk(52.31%) of the employees feel that postal services can be improved by better improvement in 'Finacle' (CBS), modern communication and technology, modern equipment. 23.08% of the employees feel that improvement is required in both CBS and staffing personnel.10.77% of the postal employees feel that the postal service can be improved by recruiting staff at the proper time. There are only 87 postal employees in Tinsukia Head post office as against 104 sanctioned^{vi} posts. This means that 16.35% of the sanctioned posts are vacant. Some employees have also expressed their view that indexing should be used to store data and files for quick access. 47.69% of the employees feel that there is some improvement in service quality, but due to 'link failure' issue much improvement is desired for actual improvement in service quality in the postal service.

Views of the customers about postal service

91.67% of the customers feel that there should be more counters with adequate staff, proper internet link for processing their transactions, adequate number of printing machines to update their account books, shorter queue lines with separate lines for females and senior citizens, proper seating facility with drinking water.83.33% of the customers feel that there is no improvement in the service quality of postal service since the introduction of CBS (core banking solution).

Findings, Summary and Conclusion:-

The first, third, fourth, fifth, seventh, eighth, ninth and tenth null hypotheses are rejected and the research hypotheses are accepted for $p < .05$ ($z = -6.97; -9.105; -5.052; -8.265; -9.406; -9.567; -9.932; -9.208$ respectively). The second and sixth null hypotheses are accepted and the research hypotheses are rejected for $p < .05$ ($z = -1.959; -.725$ respectively).



A difference of mean ranks has been found between postal employees and customers in their expectations in the tangible, responsiveness, assurance and empathy dimensions of postal service in Tinsukia H.O. Only in the case of reliability dimension there is no difference of mean ranks between the two groups in their expectations of postal service.

Also a difference of mean ranks has been found between the postal employees and customers in their perceptions of performance in reliability, responsiveness, assurance and empathy dimensions of postal service in Tinsukia H.O. Only in the case of tangible dimension there is no difference of mean ranks between the two groups in their perception of performance in postal service.

Based on the research study the following suggestions are forwarded to improve the present postal services:

- There are only 87 postal employees in Tinsukia Head post office as against 104 sanctioned posts. This means that 16.35% of the sanctioned posts are vacant. These vacant posts should be filled up at the earliest to improve the quality of postal service provided to the customers. Also, more counters should be opened to the customers. This with adequate staff can go a long way to quickly process customers' requests and can lead to shorter queue lines.
- There is a urgent need to upgrade the 'Finacle' which is a core banking solution (CBS). This is maintained by Infosys in Chennai. Also, the internet speed provided by the service providers is slow. These two factors are a prime cause of delay in processing accounts. This problem should be promptly dealt by the higher authorities and should be resolved at the earliest to improve the quality of postal service.
- There should be separate queue lines for ladies and senior citizens and this should be maintained strictly supervised by the postal authorities.
- There should be adequate sitting arrangements for the customers. Drinking water should be available for both the customers and postal employees.
- Latest equipment and up to date technology should be provided to the postal office for better service to the customers.
- Also, indexing of files should be followed for quick and accurate access to data and accounts.

The postal service is one of the important services available to the public. There are some problems facing it at present, specially since the introduction of CBS. If the technical issues can be resolved we can hope to achieve a better quality of postal service than at present. The Government should take up the matter and bring a resolution to this problem, which will give relief to customers who need to wait a long time to get their requests processed in time. Also, it will make work easier for the employees and help them to serve their customers in a better way.

References

- [ⁱ] Nag, B., & Mukherjee, A. (2008): Postal and Express Delivery Services (Final report), ICRIER. Report on Postal Services - India -EU BTIA.pdf. Available at <http://www.wtocentre.iift.ac.in>. Accessed on 02.May.2016.
- [ⁱⁱ] The-mann-whitney-u-test.pdf. <https://www/teorionline.files.wordpress.com/2010/03/the-mann-whitney-u-test.pdf>. Accessed on 07-June-2016.
- [ⁱⁱⁱ] APM ACCOUNTS, Tinsukia Head Post Office.
- [^{iv}] Parasuraman, A., Zeithaml, V. & Berry, L.L. (1985): A Conceptual Model Of Service Quality and its Implications for Future Research, Journal of Marketing, Vol. 49, No. 4, pp. 41- 50 . <http://www/unc.edu> accessed on 07-June-2016.
- [^v] Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988): SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, Vol.64, No. 1, pp. 12-40. [http:// Available at http://www.areas.kenan-flagler.unc.edu](http://www.areas.kenan-flagler.unc.edu). Accessed on 11.12.2013.
- [^{vi}] APM ACCOUNTS, Tinsukia Head Post Office.
- NCSS Statistical Software. Two-Sample T-Test, Chapter 206. Available at <http://www.NCSS.com>. Accessed on 07-June-2016.
- Garrett, H.E. (1966): Statistics in Psychology and Education, sixth edition, Vakils, Feffer and Simons Ltd, Bombay, India.