# CHAPTER 4

## ANALYSIS OF RESULTS

It has been described earlier that the present work is an investigation into certain psychometric properties of the Verbal Interest Inventory for standardisation. The effort looks for answers to certain fundamental question of theoretical nature and practical implications of Inventory measures. Such as 'whether interest as a psychological construct is fixed and determinable.' It would result into a meaningful effective construct only when interests were stable and identifiable. Only in this way, the psychological theory of prediction of human behaviour as a function of human interests hold good and forms a good basis for planning vocational education and vocational selection.

Standardisation is a method in which the test has to be pre-administered to a population of known characteristics, viewed critically through item analysis, and where raw-scores matched with correlative derived scores may be prepared and made available to the user called 'Norms' either in terms of standard scores, or percentile ranks. The test is prepared under known and controlled conditions, the results of its use are predictable, and the significance of any measure it yields is known in advance, having a mannual which explains the test and present its norms. The full meaning of standardisation broadly involves various steps at all the three stages of its Construction, Administration and Evaluation of the results where the performance of any individual student can be easily compared with the performance of the whole group.

The empirical results obtained with the analytical methods during construction stage discussed in the third chapter are presented here. Measurement is more regarded as a basic research procedure which is directed towards description and comparison of individuals. As defined earlier it is comprised of assigning numbers to responses on logical basis, performing mathematical operations on those numbers and interpreting the resulting numbers back into a language. So far the first two aspects of standardisation of the Interest Inventory had already been described and explained in foregoing chapters, the present chapter will be dealt with the third aspect including the evaluation of earlier aspects.

The analysis with various findings of the study arrived at, by careful inspection and statistical calculations of the data at various stages of standardisation have been presented here, mainly in three sections as under:

I. Analysis of the results of Criterion group (m.i.e.)

II. Analysis of the results of Pilot group (m-i-g)

III. Analysis of the results of Norm group (m.i.g.)

## 4.1 Analysis Of The Results Of Criterion Group

4.1.1 Four hundred and fifteen graduate and post-graduate students from the ten selected disciplines were administered the relevant individual educational scale of Interest Inventory to obtain the criterion scores, on 495 items of the Interest Blank. There were ten educational scales to be measured. Each test under the scale was

scored separately on three categories (L-I-D) to obtain frequencies, keeping in mind the respective code numbers. The frequencies were transmuted into percentages for comparison as well as for further analysis.

As the 325 items were considered the valid items on the basis of item analysis for the final Interest Blank, the item counts for criterion score on 325 items have been presented as can be seen from Table - 10, upon the three categories on ten various educational scales. The alphabetically coded items on first five sub-tests of each individual scale were separated from the blank being 25 where as the items on Sixth and Seventh sub-tests remained same (50+25) for all the educational scales being 75, making the total items of each scale to be 100. For each educational scale, one hundred scores on (L-I-D) three preferences were tallied and computed for further analysis. This meant that 300 responses (100 items x 3 categories) for ten scales = 30,000 were scored by hand scoring as presented in Table - 10.

4.1.2 Mean-raw scores with the formula by Strong; were computed for establishing group differences as well as Norms for disciplines which will reported at the later stage, without scoring the blanks.

4.1.3 The criterion scores on five sub-tests were quite high among all the disciplines as presented under the 'Like' category falling under the different ranges as shown in Table - 11.

TABLE : 11

Range of Criterion-scores on Ten Disciplines under Educational Scale in Percentage

| | Disciplines | Overall Average Score | Occupation | School-subjects | Curricular Activity | Recreation | People |
|---|---|---|---|---|---|---|---|
| 1. | Agriculture | 71 | 68-100 *(68) | 48-92 (65) | 60-68 (70) | 64-76 (71) | 72-76 (81) |
| 2. | Arts | 63 | 50-71 (59) | 45-90 (60) | 65-85 (73) | 45-85 (66) | 50-15 (59) |
| 3. | Commerce | 72 | 55-85 (72) | 45-85 (64) | 65-100 (76) | 60-85 (76) | 50-85 (72) |
| 4. | Fine Arts | 74 | 40-80 (59) | 76-88 (83) | 60-92 (77) | 72-84 )78) | 68-84 )75) |
| 5. | Home-Science | 71 | 60-80 (66) | 40-80 (57) | 70-85 (76) | 60-95 (76) | 50-95 (80) |
| 6. | Medical | 63 | 40-65 (48) | 45-90 (58) | 45-85 (66) | 50-80 (69) | 55-90 (78) |
| 7. | Performing Arts | 69 | 48-68 (59) | 32-92 (68) | 44-84 (61) | 60-80 (72) | 80-100 (84) |
| 8. | Science | 69 | 40-85 (67) | 50-70 (68) | 55-80 (67) | 60-80 (68) | 65-85 (75) |
| 9. | Social Work | 68 | 56-64 (60) | 64-76 (69) | 56-88 (71) | 56-76 (67) | 68-76 (71) |
| 10. | Tech. & Engg. | 68 | 52-72 (63) | 68-84 (76) | 52-88 (74) | 48-76 (59) | 36-68 52) |
| | Overall Avg. | | 62 | 67 | 71 | 70 | 73 |

*Figures in Parenthesis indicate the Average Score on Sub-test.

The overall averages range of criterion scores in percentage including all the five sub-tests on ten disciplines varied from 63 to 74 and indicated that preference of criterion groups on Fine Arts, Commerce, Agriculture and Home Science scales had obtained above 70% of scores, whereas Medical and Arts group though had obtained 63% as the criterion scores. Seemed to be quite high scores on the respective educational scales. The sub-test-wise average range of score on ten disciplines was found to be 48% to 84% as indicated in parenthesis of Table - 11; whereas an overall average percentage for each of the five sub-tests under the ten disciplines were found to be 62%, 67%, 71%, 70% and 73% respectively. Thus it proved that criterion groups scores high scored on the individual ten educational scales of Interest Inventory.

## 4.2 Analysis Of The Results Of The Pilot Group (m-i-g)

4.2.1 Fifty five (Higher Secondary) XIIth grade students of Experimental High School formed the sample for the pilot study to whom the Interest Inventory having 495 items under the ten disciplines were administered after weighting the suitable items on the basis of rational approach of pooled judgement by panel of experts from the respective disciplines.

The preferences on Interest Inventory were coded by symbols under three categories as under :

i) Likes _/

ii) Indifference O

iii) Dislike X

These (marks) symbols were tallied sub-test-wise for each individual response sheet by hand scoring to obtain frequencies on the preferences upon three categories of the Interest Blank. It was found easy quick and simple to score 911 response sheets for one sub-test at once. The frequencies were converted into percentages and item count on three categories was prepared. For more than 50 or a large number of response sheets a hand scoring by the use of stencils is also a quick and better method of scoring, which will be explained at length at a later stage.

4.2.2 Reliability Of Interest Inventory

The frequencies on three categories were also obtained by readministering the interest test after one month interval to the same set of sample. The Pearson coefficient of correlation (r) was computed on the basis of shift method to establish reliability and validity in terms of stability. The responses on 'Like' category of two-way testing with pilot group of students (men-in-general) were calculated to compute r as given in Table - 8.

The coefficient of correlation as well as the stability on the scores on Interest items were revealed to be substantially high on

seven sub-tests ranging from 0.60 to 0.88. The constancy values derived by the formula was also revealed to be very high ranging from 0.90 to 0.95.

### 4.2.3 Item Validity

Adams and Rowe (1990) have described that the detection of test items bias (differential item performance) is an active area of psychological research that has grown in response to concerns with the possibility of bias in educational and psychological testing for evaluation, selection and placement purposes. He reported that,

> there are methods which are quick but incomplete statistical methods and misleading. The comparison of the item discrimination indices for each of the groups are usually represented as the point bi-serial correlation between the item and total test scores. The item discrimination method uses the difference between bi-serial correlation as a measure, and a weakness of this technique is that mean differences in group will give false indications of biased items. This method does not correlate well with other methods, and it is not frequently used in practice as it involves a lot of calculations.

In the present study the students from various regions constituted widely differing groups in their variability of interests it was thought not to employ the Bi-serial r, when the results would not be reliable for all groups to be tested. Instead, it was preferable to use the method of validating the items recommended by Campbell (1977).

(i) Item validity was established on the basis of percentage differences of 'Like' items between criterion group (men-in-education) and pilot group (men-in-general). The items with 10 and above percentage difference were accepted as valid items and hence selected for the final form leaving the total 325 items on Interest Inventory. (Apendix-V)

(ii) Reliability coefficients of all the ten educational scales also had revealed to be high which ranged from 0.67 to 0.87; and obtained an average reliability of 0.79 on the whole Interest Blank, proving to have a very high relationship among the two way test scores of the pilot group. (Table 9)

(iii) The internal validity was also established by intercorrelating the five sub-tests and it was revealed that all the sub-tests were in agreement with the whole Interest Blank with a positive but low association which ranged from 0.05 to 0.35 as shown in the table given below.

TABLE : 12

Inter-correlation of Five Subtests on Interest Inventory
N = 50

| | Subjects | 1 Occupa-tion | 2 School subjects | 3 Activities | 4 Amuse-ment | 5 People |
|---|---|---|---|---|---|---|
| 1 | Occupa-tion | 1.0 | .32 | .35 | .35 | .15 |
| 2 | School-subjects | .32 | 1.0 | .05 | .22 | .11 |
| 3 | Activities | .35 | .05 | 1.0 | .16 | .15 |
| 4 | Amuse-ments | .35 | .22 | .16 | 1.0 | .09 |
| 5 | People | .15 | .11 | .15 | .09 | 1.0 |

There was a positive but very low association between the preference of school subjects and Activities which reflectes the school programme and its cocurricular activities provided. This indicates that activities provided in contemporary schools do not go hand in hand with the school subjects; and more of a stereotyped education is being provided with less relevant learning experiences. There was also a low relationship found among the preference of Activities, Amusements and Peculiarity of people which again reflects to a certain extent the planning of learning experiences in relation to school subjects taught. It was felt by the investigator that the students may not have been exposed to certain kind of experiences with variour people and type of activities which need to be

relevant to the school curriculum and hence a low association was revealed among these three sub-tests as have been indicated in the Table - 12.

The closeness of association or degree of correspondence between x and y axis meant that one sub-test to another sub-test on Interest Inventory was indicated by the relative positions of these two regression lines as correlation was positive and perfect. The two regression line looked when r = 100, and correlation is perfect as Garatte described. It showed internal consistency among the items of five sub-tests. It was noted that the entries on chart above were concentrated along the diagonal from the upper right to the lower left hand section of the diagram. There was no 'scatter' of scores in the successive columns or rows, all the scores in a given array being concentrated within one cell. The above chart represented a correlation between the items on first sub-test to the second and so on upon the whole Interest Inventory which revealed to be low but quite positive relationship ranging from 0.15 to 0.35 among items on occupations, school subjects, activites and people except a negligible relationship between Amusement and people, and activities and occupation ranging from 0.05 to 0.09 respectively.

## 4.3 Analysis Of The Results Of Norm Group (m.i.g.)

The size of the sample for norm-group in relation to the total desired target of 1,000 students from various sampled schools being

25% of the total districts consisting Higher Secondary school population from the list of schools at higher secondary level, Gujarat, was as under :

825 Students took the final test.
175 Students remained absent at the time of testing.
1,000 Total desired target.

The students who had taken the pretest (pilot group) and 175 students who were absent during the time of test were eliminated from the final study, thus leaving a sample of 825 students comprising of 82.5% out of 1000 as per plan for the further analysis.

The data on 825 response sheets on 325 items under seven sub-tests on ten different educational fields were tabulated after the coding at I.C.S.S.R. data processing centre in Surat, Gujarat for (men-in-general) norm group to obtain frequency, percentages, chi-square values and intercorrelation of sub-tests. The means, standard deviaitons, standard scores, and Norms, were computed by Bansal Associates at Data Processing Centre, Sayajigunj, Vadodara on machine scoring; whereas the means of criterion scores and men-in-general scores, differential scoring weights for the development of keys for each educational scale were calculated by the investigator herself with hand scoring.

The item count in percentage of 825 students (m.i.g.) have been presented in Table - 13 for the whole Interest Blank on 325 items.

It was revealed from Table - 13 that the preferences of 825 higher secondary students (m.i.g.) on 325 items did vary not only for the various disciplines but also for each of the seven sub-test on the Interest Blank.

For occupational items being 1 to 50 on the first sub-test, the range of preference in percentage on 'Like' category was found to be varied from 22 to 80 indicating a real difference of interest in various occupations concerning the ten disciplines.

The second sub-test having 51-100 items on school subjects showed a large difference in the preference on 'Like' category from 28 to 76 percentage.

The items of the third sub-test from 101 to 150 on curricular activities revealed a large range of preference in percentage of 'Like' category being 23 to 89.

The revealed range of preference on 151-200 items on the fourth sub-test consisting of Amusement items was from 29 to 80.

The fifth sub-test contained the items from 210 to 250 on people pecularity which revealed the range of preference among norm-group

from 30 to 79 percentage.

The sixth sub-test had the items on comparative preference from 251-300 items, the preference for right hand side items ranged from 19-85, whereas the percentage of preference for left-side items varied from 5 to 57.

The percentage of preference on 'Like' category on seventh sub-test having 25 items on personality characteristics ranged from 51 to 88.

Thus viewing the item counts on Interest Blank for 825 students (Table - 13) the percentage of preferences on seven sub-tests, indicated that the students had their own choices, fixed and determinable which differed remarkebly from the choice of others, proving the Interest Blank not only a highly reliable and valid but also a discriminating one.

4.3.1 Hand Scoring For Large Sample

Hand scoring can be carried out with the help of stencils. Stencils are provided for each of the ten educational fields. Each stencil includes ten slips of cardboard, corresponding to the seven sections of items on the blank. On each slip are printed three columns of figures. To illustrate this and the method of using the scale, the first five items on the Interest Blank are given below and

TABLE - 13

ITEM COUNT (IN PERCENTAGES) OF MEN-IN-GENERAL GROUP FOR ACADEMIC INTEREST BLANK (1992)

(N = 825)

| ITEM NO. | L | I | D | ITEM NO. | L | I | D |
|---|---|---|---|---|---|---|---|
| 1. | 39 | 17 | 44 | 21. | 25 | 28 | 47 |
| 2. | 46 | 22 | 32 | 22. | 37 | 20 | 43 |
| 3. | 22 | 24 | 54 | 23. | 43 | 32 | 25 |
| 4. | 45 | 20 | 35 | 24. | 39 | 25 | 36 |
| 5. | 44 | 21 | 35 | 25. | 39 | 30 | 31 |
| 6. | 65 | 16 | 19 | 26. | 54 | 18 | 28 |
| 7. | 43 | 24 | 33 | 27. | 58 | 18 | 24 |
| 8. | 73 | 13 | 14 | 28. | 44 | 26 | 30 |
| 9. | 43 | 27 | 30 | 29. | 18 | 33 | 49 |
| 10. | 42 | 24 | 34 | 30. | 41 | 27 | 32 |
| 11. | 28 | 26 | 46 | 31. | 31 | 28 | 41 |
| 12. | 55 | 21 | 24 | 32. | 28 | 17 | 55 |
| 13. | 68 | 16 | 16 | 33. | 58 | 21 | 21 |
| 14. | 29 | 31 | 40 | 34. | 41 | 24 | 35 |
| 15. | 24 | 26 | 50 | 35. | 44 | 23 | 33 |
| 16. | 58 | 20 | 22 | 36. | 46 | 23 | 31 |
| 17. | 23 | 21 | 56 | 37. | 37 | 27 | 36 |
| 18. | 62 | 18 | 20 | 38. | 75 | 15 | 10 |
| 19. | 27 | 32 | 41 | 39. | 50 | 25 | 25 |
| 20. | 53 | 23 | 24 | 40. | 52 | 23 | 25 |

| ITEM NO. | L | I | D | ITEM NO. | L | I | D |
|---|---|---|---|---|---|---|---|
| 41. | 26 | 25 | 49 | 66. | 68 | 16 | 16 |
| 42. | 28 | 32 | 40 | 67. | 49 | 23 | 28 |
| 43. | 43 | 22 | 35 | 68. | 76 | 11 | 13 |
| 44. | 57 | 21 | 22 | 69. | 31 | 31 | 38 |
| 45. | 25 | 31 | 44 | 70. | 42 | 28 | 30 |
| 46. | 63 | 17 | 20 | 71. | 42 | 25 | 33 |
| 47. | 36 | 23 | 41 | 72. | 40 | 26 | 34 |
| 48. | 43 | 28 | 29 | 73. | 46 | 22 | 32 |
| 49. | 42 | 28 | 30 | 74. | 48 | 23 | 29 |
| 50. | 80 | 9 | 11 | 75. | 53 | 27 | 20 |
| 51. | 35 | 20 | 45 | 76. | 40 | 25 | 35 |
| 52. | 57 | 18 | 25 | 77. | 39 | 26 | 35 |
| 53. | 28 | 20 | 52 | 78. | 63 | 16 | 21 |
| 54. | 49 | 19 | 32 | 79. | 29 | 36 | 35 |
| 55. | 47 | 25 | 28 | 80. | 74 | 14 | 12 |
| 56. | 59 | 21 | 20 | 81. | 51 | 27 | 22 |
| 57. | 54 | 25 | 21 | 82. | 36 | 25 | 39 |
| 58. | 58 | 20 | 22 | 83. | 24 | 27 | 49 |
| 59. | 30 | 30 | 40 | 84. | 69 | 16 | 15 |
| 60. | 48 | 18 | 34 | 85. | 37 | 20 | 43 |
| 61. | 32 | 23 | 45 | 86. | 42 | 25 | 33 |
| 62. | 43 | 24 | 33 | 87. | 27 | 23 | 50 |
| 63. | 60 | 18 | 22 | 88. | 39 | 25 | 36 |
| 64. | 35 | 30 | 35 | 89. | 40 | 29 | 31 |
| 65. | 49 | 28 | 23 | 90. | 74 | 13 | 13 |

| ITEM NO. | L | I | D | ITEM NO. | L | I | D |
|---|---|---|---|---|---|---|---|
| 91. | 40 | 24 | 36 | 116. | 61 | 16 | 23 |
| 92. | 50 | 21 | 29 | 117. | 32 | 19 | 49 |
| 93. | 41 | 25 | 34 | 118. | 64 | 21 | 15 |
| 94. | 61 | 19 | 20 | 119. | 78 | 14 | 8 |
| 95. | 42 | 27 | 31 | 120. | 61 | 23 | 16 |
| 96. | 60 | 19 | 21 | 121. | 30 | 27 | 43 |
| 97. | 36 | 32 | 42 | 122. | 45 | 20 | 35 |
| 98. | 28 | 29 | 43 | 123. | 55 | 23 | 22 |
| 99. | 38 | 27 | 35 | 124. | 63 | 23 | 14 |
| 100. | 50 | 25 | 25 | 125. | 39 | 28 | 33 |
| 101. | 56 | 19 | 25 | 126. | 63 | 17 | 20 |
| 102. | 62 | 20 | 18 | 127. | 28 | 20 | 52 |
| 103. | 78 | 13 | 9 | 128. | 41 | 28 | 31 |
| 104. | 69 | 19 | 12 | 129. | 89 | 7 | 4 |
| 105. | 33 | 34 | 33 | 130. | 70 | 19 | 11 |
| 106. | 72 | 16 | 12 | 131. | 43 | 26 | 31 |
| 107. | 57 | 20 | 23 | 132. | 35 | 30 | 35 |
| 108. | 81 | 11 | 8 | 133. | 72 | 17 | 11 |
| 109. | 54 | 25 | 21 | 134. | 44 | 29 | 27 |
| 110. | 32 | 28 | 40 | 135. | 39 | 25 | 36 |
| 111. | 39 | 28 | 33 | 136. | 62 | 20 | 18 |
| 112. | 55 | 26 | 19 | 137. | 57 | 22 | 21 |
| 113. | 52 | 22 | 26 | 138. | 62 | 20 | 18 |
| 114. | 23 | 26 | 51 | 139. | 55 | 26 | 19 |
| 115. | 76 | 14 | 10 | 140. | 55 | 24 | 21 |

| ITEM NO. | L | I | D | ITEM NO. | L | I | D |
|---|---|---|---|---|---|---|---|
| 141. | 45 | 26 | 29 | 166. | 57 | 23 | 20 |
| 142. | 59 | 22 | 19 | 167. | 35 | 27 | 38 |
| 143. | 69 | 20 | 11 | 168. | 48 | 26 | 26 |
| 144. | 52 | 28 | 20 | 169. | 54 | 24 | 22 |
| 145. | 54 | 20 | 26 | 170. | 76 | 13 | 11 |
| 146. | 60 | 22 | 18 | 171. | 81 | 12 | 7 |
| 147. | 52 | 26 | 22 | 172. | 40 | 30 | 30 |
| 148. | 81 | 11 | 8 | 173. | 74 | 15 | 11 |
| 149. | 49 | 27 | 24 | 174. | 73 | 16 | 11 |
| 150. | 67 | 17 | 16 | 175. | 71 | 17 | 12 |
| 151. | 43 | 23 | 34 | 176. | 66 | 17 | 17 |
| 152. | 80 | 13 | 7 | 177. | 43 | 25 | 32 |
| 153. | 30 | 27 | 43 | 178. | 61 | 19 | 20 |
| 154. | 76 | 14 | 10 | 179. | 61 | 22 | 17 |
| 155. | 64 | 17 | 19 | 180. | 46 | 25 | 29 |
| 156. | 70 | 18 | 12 | 181. | 48 | 18 | 34 |
| 157. | 47 | 22 | 31 | 182. | 51 | 26 | 23 |
| 158. | 72 | 16 | 12 | 183. | 34 | 34 | 32 |
| 159. | 55 | 31 | 14 | 184. | 63 | 20 | 17 |
| 160. | 51 | 24 | 25 | 185. | 50 | 27 | 23 |
| 161. | 77 | 14 | 9 | 186. | 68 | 20 | 12 |
| 162. | 43 | 28 | 29 | 187. | 40 | 26 | 34 |
| 163. | 54 | 25 | 21 | 188. | 64 | 17 | 19 |
| 164. | 77 | 13 | 10 | 189. | 58 | 23 | 19 |
| 165. | 58 | 24 | 18 | 190. | 62 | 16 | 22 |

| ITEM NO. | L | I | D | ITEM NO. | L | I | D |
|---|---|---|---|---|---|---|---|
| 191. | 29 | 17 | 54 | 216. | 78 | 13 | 9 |
| 192. | 56 | 21 | 23 | 217. | 46 | 27 | 27 |
| 193. | 44 | 24 | 32 | 218. | 67 | 19 | 14 |
| 194. | 56 | 22 | 22 | 219. | 45 | 33 | 22 |
| 195. | 67 | 21 | 12 | 220. | 26 | 36 | 38 |
| 196. | 68 | 18 | 14 | 221. | 30 | 28 | 42 |
| 197. | 50 | 24 | 26 | 222. | 52 | 24 | 24 |
| 198. | 72 | 13 | 15 | 223. | 47 | 23 | 30 |
| 199. | 45 | 29 | 26 | 224. | 62 | 18 | 20 |
| 200. | 59 | 22 | 19 | 225. | 59 | 23 | 18 |
| 201. | 61 | 16 | 23 | 226. | 47 | 26 | 27 |
| 202. | 43 | 28 | 29 | 227. | 39 | 22 | 39 |
| 203. | 61 | 19 | 20 | 228. | 75 | 14 | 11 |
| 204. | 66 | 17 | 17 | 229. | 60 | 20 | 20 |
| 205. | 46 | 24 | 30 | 230. | 55 | 24 | 21 |
| 206. | 79 | 11 | 10 | 231. | 38 | 28 | 34 |
| 207. | 48 | 23 | 29 | 232. | 55 | 22 | 23 |
| 208. | 43 | 28 | 29 | 233. | 43 | 24 | 33 |
| 209. | 38 | 30 | 32 | 234. | 49 | 25 | 26 |
| 210. | 50 | 23 | 27 | 235. | 62 | 21 | 17 |
| 211. | 31 | 30 | 39 | 236. | 66 | 19 | 15 |
| 212. | 50 | 25 | 25 | 237. | 55 | 24 | 21 |
| 213. | 57 | 23 | 20 | 238. | 77 | 12 | 11 |
| 214. | 70 | 16 | 14 | 239. | 43 | 30 | 27 |
| 215. | 65 | 18 | 17 | 240. | 61 | 22 | 17 |

| ITEM NO. | L | I | D | ITEM NO. | L | I | D |
|---|---|---|---|---|---|---|---|
| 241. | 50 | 27 | 23 | 266. | 82 | 12 | 6 |
| 242. | 33 | 21 | 46 | 267. | 73 | 18 | 9 |
| 243. | 33 | 26 | 41 | 268. | 54 | 27 | 19 |
| 244. | 38 | 27 | 35 | 269. | 60 | 23 | 17 |
| 245. | 54 | 25 | 21 | 270. | 32 | 37 | 31 |
| 246. | 65 | 21 | 14 | 271. | 31 | 40 | 29 |
| 247. | 62 | 20 | 18 | 272. | 30 | 37 | 33 |
| 248. | 60 | 21 | 19 | 273. | 27 | 33 | 40 |
| 249. | 43 | 28 | 29 | 274. | 57 | 30 | 13 |
| 250. | 79 | 11 | 10 | 275. | 63 | 25 | 12 |
| 251. | 71 | 20 | 9 | 276. | 45 | 34 | 21 |
| 252. | 43 | 25 | 32 | 277. | 57 | 30 | 13 |
| 253. | 48 | 32 | 20 | 278. | 81 | 13 | 6 |
| 254. | 46 | 26 | 28 | 279. | 68 | 24 | 8 |
| 255. | 44 | 36 | 20 | 280. | 69 | 19 | 12 |
| 256. | 46 | 31 | 23 | 281. | 82 | 11 | 7 |
| 257. | 60 | 22 | 18 | 282. | 60 | 26 | 14 |
| 258. | 29 | 21 | 40 | 283. | 30 | 43 | 27 |
| 259. | 85 | 10 | 5 | 284. | 65 | 24 | 11 |
| 260. | 84 | 11 | 5 | 285. | 40 | 39 | 21 |
| 261. | 57 | 35 | 8 | 286. | 41 | 38 | 21 |
| 262. | 23 | 29 | 48 | 287. | 75 | 16 | 9 |
| 263. | 19 | 24 | 57 | 288. | 43 | 29 | 28 |
| 264. | 82 | 10 | 8 | 289. | 68 | 21 | 11 |
| 265. | 46 | 30 | 24 | 290. | 64 | 24 | 12 |

| ITEM NO. | L | I | D | ITEM NO. | L | I | D |
|---|---|---|---|---|---|---|---|
| 291. | 61 | 24 | 15 | 309. | 69 | 19 | 12 |
| 292. | 55 | 25 | 20 | 310. | 64 | 21 | 15 |
| 293. | 50 | 33 | 17 | 311. | 85 | 9 | 6 |
| 294. | 71 | 19 | 10 | 312. | 65 | 21 | 12 |
| 295. | 59 | 25 | 16 | 313. | 74 | 16 | 10 |
| 296. | 85 | 10 | 5 | 314. | 60 | 26 | 14 |
| 297. | 85 | 9 | 6 | 315. | 67 | 23 | 10 |
| 298. | 82 | 12 | 6 | 316. | 67 | 22 | 11 |
| 299. | 86 | 9 | 5 | 317. | 53 | 25 | 22 |
| 300. | 83 | 10 | 7 | 318. | 64 | 19 | 17 |
| 301. | 66 | 16 | 18 | 319. | 81 | 12 | 7 |
| 302. | 76 | 14 | 10 | 320. | 74 | 17 | 9 |
| 303. | 76 | 14 | 10 | 321. | 60 | 17 | 17 |
| 304. | 84 | 10 | 6 | 322. | 51 | 19 | 30 |
| 305. | 88 | 8 | 4 | 323. | 78 | 13 | 9 |
| 306. | 61 | 25 | 14 | 324. | 81 | 12 | 7 |
| 307. | 63 | 25 | 12 | 325. | 85 | 8 | 7 |
| 308. | 78 | 13 | 9 | | | | |

opposite them the scores which appear on the scoring stencil for Fine Arts interest.

FIGURE - 1

Hand-scoring with Stencils

| Code | Item No. | Occupation I | Catagory of Preference | Scoring weights |
|---|---|---|---|---|
| (4) | 1 | Advertisor | (L) I D | 1 0 -1 |
| (14) | 2 | Organizer of Art Exhibition | (L) I D | -2 1 1 |
| (24) | 3 | Art Investigator | (L) I D | -1 0 1 |
| (34) | 4 | Artist (Graphic) | (L) I D | 1 0 0 |
| (44) | 5 | Photographer | (L) I D | 0 0 0 |
| | | | TOTAL :- | -1 |

If a person encircles L opposite all five of these items, he would be given the following scores as mentioned in Figure - 1. 1, -2, -1, 1 and 0; totaling -1. To score the blank, then one must ascertain 100 items assigned to the L's, I's and D's that have been circled and then total them, observing the algebric signs.

The raw score equals the sum of the 325 weights assigned to the responses to the 325 items on the verbal Interest blank. This score indicates not the amount of interest possesed but the likelihood that the person has or does not have the interest of men in the given education. A high score means that the individual has the interests

of the education in question, while a low score means that he does not have such interest. 'Education' is used here to mean "the men on the verge of completing the professional education" for we are concerned with analyzing not a field of study but the men who continuously studies in that particular field in its environment.

A mean raw scores vary considerably from one educational scale to another, it is impossible to compare them until they have been transmuted into (a) Standard Scores, (b) ratings or (c) Percentiles as stated by Strong.

Standard scores were derived from the raw scores of 825 subjects by employing the formula as stated by Strong as under :

$$\text{Standard Score} = 10 \times \frac{X-M}{\sigma} + 50$$

in which X = raw-score,

M = the mean of the distribution, and

$\sigma$ = the standard deviation of the distribution.

Fifty (50) is added to obviate negative scores and decimals. The data for each of the ten scales are supplied with the scoring scales as indicated as Norms.(Tables 19.1 to 19.10)

4.3.2 Differential Weights

The basic procedure for hand scoring while determining the weights for the development of scoring keys on each of the ten educational scales by chart method in the present study was followed as under :

The blank was scored in percentages to ascertain 325 weights assigned to L's, I's and D's that had been coded to obtain the total, observing the algebric signs; as seen from the Figure - 2.

FIGURE : 2

Determination of weights for Agriculture
(Educational Scale)

| | | I | | | II | | | III | | | IV | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Code No. Items | Agriculgural Scale First I | % of Men-in-general Tested | | | % of Agri. students Tested | | | Diff. in % between M-in-Agri. & M-in-Edu. | | | Scoring weights for Agriculture | | |
| | Occupation | L | I | D | L | I | D | L | I | D | L | I | D |
| 1 | Agriculture Officer | 39 | 17 | 44 | 100 | 0 | 0 | 61 | -17 | -44 | 6 | -2 | -4 |
| 11 | Director of a Dairy | 28 | 26 | 46 | 68 | 24 | 8 | 40 | -2 | -38 | 4 | 0 | -4 |
| 21 | Extension Officer | 25 | 28 | 47 | 72 | 24 | 4 | 47 | -4 | -43 | 5 | -1 | -4 |
| 31 | Advisor in Ferti. Co. | 28 | 17 | 55 | 72 | 16 | 12 | 44 | -1 | -43 | 4 | 0 | -4 |
| 41 | Dairy Technologist | 28 | 32 | 40 | 92 | 8 | 0 | 64 | -24 | -40 | 6 | -2 | -4 |

The two percentages (i) men-in-general and (ii) men-in-education (Agriculture) were contrasted as given in columns I and II of the Figure - 2, difference of I and II columns in IIIrd column, and in IVth column scoring weight was revealed for each item on the Interest blank for three catagories; referred as weighted or regular scales.

For example, given the two percentages of likes 39 and 100, the weights +6 was obtained for 'L' and since more students in Agriculture education like to be an Agriculture officer than men-in-general group, a plus sign was prefixed to the 'L' weight. The fourth column of the Figure - 2 revealed the differential weights on the basis of the difference between I & II as indicated in III column, such weights constituted the scale for scoring an interest blank. The scoring weights for all 325 items were obtained in the same manner as presented in Table - 14.

Figure - 3 illustrates the scoring of an interest blank. The first section of the figure (I) gives the weight for Fine Arts interest as derived in IVth column of Figure - 1. The IInd section of figure gives the responses of a student to be counselled; to the first five items on the Interest Blank under occupation of Fine Arts scale. The third (III) section gives the weights earned by the individual student on the Fine Arts scale of Interest Blank. He is INDIFFERENT to be an Advertizer which gives him weight of +1, and he likes to be an Art-investigator - which gives him weight of +3 and so on.

FIGURE : 3

Scores obtained by a Student on
Fine Arts Scale

| Interest - First Five Items on Fine Arts | Illustrating Method of Scoring the Interest Blank | | | | | | |
|---|---|---|---|---|---|---|---|
| | Scoring Weights of Agri. Interest I | | | Responses of a Student to the Five Items II | | | Scores for Agri. Edu. Interest obtained III |
| Scale | L | I | D | L | I | D | Raw Score |
| 1) Advertisor | -1 | 1 | 0 | - | (X) | - | +1 |
| 2) Organisor of Exhibition | 1 | 0 | -1 | (X) | - | - | +1 |
| 3) Art Investigator | 3 | -1 | -2 | (X) | - | - | +3 |
| 4) Artist | 1 | 0 | -1 | (X) | - | - | +1 |
| 5) Photographer | 2 | -1 | -1 | - | - | (X) | -1 |
| Total 5 Items | | | | | | | +5 |
| Total 100 Items (Raw Score) | | | | | | | 11 |
| Standard Score | | | | | | | 60 |
| Rating | | | | | | | A |

The total of this weighted scores for five items amounted to +5 and for all 100 items on Fine Arts educational interest scale to 11. Then it was equivaleted to a standard score (z score) of 60 (Norm Table - 15) and to a rating of (A) as explained by Strong (1953). In the same way using the above chart differential scoring weights were calculated and scoring key was prepared for each of the ten disciplines as described in Table - 14 for each of the hundred item on the blank. Table - 14 indicates the scoring weights for each of the ten disciplines. The weights for three categories of almost all items (99%) ranged from +4 to -4, whereas a negligible (0.8%) items were found with weight ranging from +5 to +8 and only (0.5%) fifty one items out of 1,000 were revealed to have 0 weights being equal properties of preferences of both the criterion and Norm group. Strong (1953) found that the unit scales (+1, -1, 0) did not differentiate occupational groups from one another as well as the weighted scales. Hence the weighted scales ranging from ±8 were obtained to develop the scoring key for ten disciplines.

In the case of Interest Test, however the score is a measure of how nearly a person's interests coincide with those of the average person successfully engaged in that particular educational field. Standard scores for different scales can be directly compared since they all have the same positional meaning.

4.3.3 Ratings

For guidance and employment/selection purposes it is sufficient to

TABLE - 14 (1)

Scoring Weights For Agriculture

(1, 11, 21 ... 241, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 1 | 6 | -2 | -4 | 211 | 4 | -1 | -3 |
| 11 | 5 | -1 | -4 | 221 | 5 | -2 | -3 |
| 21 | 4 | 0 | -4 | 231 | 4 | -2 | -2 |
| 31 | 4 | 0 | -4 | 241 | 4 | -2 | -2 |
| 41 | 6 | -2 | -4 | 251 | -2 | 1 | 1 |
| 51 | 3 | -1 | -2 | 252 | -2 | -1 | 3 |
| 61 | 0 | 1 | -1 | 253 | 0 | 0 | 1 |
| 71 | 2 | 0 | -2 | 254 | 0 | 0 | 0 |
| 81 | 1 | 1 | -2 | 255 | 1 | -1 | 0 |
| 91 | 2 | 1 | -3 | 256 | -1 | -1 | 2 |
| 101 | 1 | 1 | -2 | 257 | -1 | 0 | 1 |
| 111 | 2 | 0 | -2 | 258 | -2 | -1 | 3 |
| 121 | 4 | 0 | -4 | 259 | 0 | 0 | 0 |
| 131 | 5 | -2 | -3 | 260 | -1 | 1 | 0 |
| 141 | 3 | -1 | -2 | 261 | -2 | 0 | 2 |
| 151 | 2 | 0 | -2 | 262 | 0 | 0 | 0 |
| 161 | -1 | 1 | 0 | 263 | 0 | -1 | 1 |
| 171 | 0 | 1 | -1 | 264 | -1 | 1 | 0 |
| 181 | 3 | -1 | -2 | 265 | -2 | 2 | 0 |
| 191 | 5 | 0 | -5 | 266 | -1 | 1 | 0 |
| 201 | 3 | -1 | -2 | 267 | -3 | 1 | 2 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -1 | 1 | 0 | 292 | -2 | 2 | 0 |
| 269 | -2 | -1 | 3 | 293 | -1 | -1 | 2 |
| 270 | 1 | -2 | 1 | 294 | -2 | 1 | 1 |
| 271 | -2 | 0 | 2 | 295 | 2 | -1 | -1 |
| 272 | 0 | -1 | 1 | 296 | 0 | -1 | 1 |
| 273 | 1 | -1 | 0 | 297 | 0 | 0 | 0 |
| 274 | -1 | -1 | 2 | 298 | 0 | 0 | 0 |
| 275 | 1 | -1 | 0 | 299 | -1 | 1 | 0 |
| 276 | -1 | -1 | 2 | 300 | -1 | 1 | 0 |
| 277 | 2 | -2 | 0 | 301 | -1 | 1 | 0 |
| 278 | -2 | 1 | 1 | 302 | 0 | 0 | 0 |
| 279 | 0 | -1 | 1 | 303 | -2 | 2 | 0 |
| 280 | 1 | -2 | 1 | 304 | -6 | 3 | 3 |
| 281 | 0 | 0 | 0 | 305 | 0 | 0 | 0 |
| 282 | 0 | 0 | 0 | 306 | -1 | 0 | 1 |
| 283 | 0 | 0 | 0 | 307 | -1 | 1 | 0 |
| 284 | -1 | 0 | 1 | 308 | -3 | 1 | 2 |
| 285 | 0 | 0 | 0 | 309 | 1 | 0 | -1 |
| 286 | 1 | 0 | -1 | 310 | 2 | -1 | -1 |
| 287 | -3 | 1 | 2 | 311 | -1 | 0 | 1 |
| 288 | -1 | -1 | 2 | 312 | 1 | -1 | 0 |
| 289 | 0 | 0 | 0 | 313 | 0 | 0 | 0 |
| 290 | 0 | 0 | 0 | 314 | 1 | -2 | 1 |
| 291 | 0 | 0 | 0 | 315 | 0 | 0 | 0 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | 2 | -2 | 0 | 321 | 0 | 1 | -1 |
| 317 | 0 | 1 | -1 | 322 | 2 | 0 | -2 |
| 318 | -4 | 4 | 0 | 323 | 0 | 0 | 0 |
| 319 | -1 | 0 | 1 | 324 | 1 | 0 | -1 |
| 320 | -1 | 0 | 1 | 325 | 1 | -1 | 0 |

TABLE - 14 (2)

Scoring Weights For Arts

(2, 12, 22 ... 242, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 2 | 2 | 1 | -3 | 212 | 0 | 1 | -1 |
| 12 | 1 | 1 | -2 | 222 | 2 | -1 | -1 |
| 22 | 2 | 2 | -4 | 232 | 0 | 0 | 0 |
| 32 | -1 | 0 | 0 | 242 | 3 | 0 | -3 |
| 42 | 1 | 0 | -1 | 251 | -2 | 2 | 0 |
| 52 | 2 | 2 | -4 | 252 | 0 | 0 | 0 |
| 62 | -1 | 1 | 0 | 253 | 0 | 0 | 0 |
| 72 | 0 | 0 | 0 | 254 | 0 | 0 | 0 |
| 82 | 5 | -1 | -4 | 255 | 0 | 0 | 0 |
| 92 | 2 | 0 | -2 | 256 | -1 | 0 | 1 |
| 102 | 1 | 1 | -2 | 257 | -2 | 0 | 2 |
| 112 | 2 | -1 | -1 | 258 | 4 | -2 | -2 |
| 122 | 3 | 1 | -4 | 259 | -1 | 0 | 1 |
| 132 | 5 | -1 | -4 | 260 | -5 | 3 | 2 |
| 142 | 1 | 0 | -1 | 261 | -5 | 0 | 5 |
| 152 | 0 | 1 | -1 | 262 | -1 | 1 | 1 |
| 162 | 0 | 1 | -1 | 263 | 7 | -1 | -6 |
| 172 | 0 | 1 | -1 | 264 | -7 | 5 | 2 |
| 182 | 3 | -1 | -2 | 265 | 2 | -1 | -1 |
| 192 | 2 | 0 | -2 | 266 | -3 | 1 | 2 |
| 202 | 1 | 0 | -1 | 267 | -4 | 2 | 2 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -2 | 0 | 2 | 292 | 1 | 0 | -1 |
| 269 | -1 | 0 | 1 | 293 | 1 | -2 | 1 |
| 270 | -1 | 3 | -2 | 294 | -2 | 1 | 1 |
| 271 | -2 | -2 | 4 | 295 | 2 | -1 | -1 |
| 272 | 0 | -2 | 2 | 296 | -1 | 1 | 0 |
| 273 | 1 | 3 | -4 | 297 | -3 | 0 | 3 |
| 274 | 0 | -1 | 1 | 298 | 0 | 0 | -1 |
| 275 | -2 | 1 | 1 | 299 | -1 | 2 | -1 |
| 276 | 0 | -1 | 1 | 300 | -5 | 2 | 3 |
| 277 | 0 | 1 | 0 | 301 | 1 | -1 | 0 |
| 278 | 1 | -1 | 0 | 302 | 0 | 0 | 0 |
| 279 | 2 | -1 | 0 | 303 | 1 | 0 | -1 |
| 280 | 1 | 1 | -1 | 304 | -6 | 4 | 2 |
| 281 | -1 | 1 | 0 | 305 | -3 | 1 | 2 |
| 282 | -4 | 0 | -4 | 306 | -1 | 2 | -1 |
| 283 | 2 | -2 | 0 | 307 | -2 | 2 | 0 |
| 284 | -4 | -1 | 5 | 308 | -4 | 3 | 1 |
| 285 | 0 | 0 | 0 | 309 | 2 | -1 | -1 |
| 286 | 0 | 0 | 0 | 310 | 3 | -2 | -1 |
| 287 | -4 | 2 | 2 | 311 | -1 | 0 | 1 |
| 288 | 3 | -2 | -1 | 312 | 0 | -1 | 1 |
| 289 | -1 | 0 | 1 | 313 | -1 | 1 | 0 |
| 290 | 1 | -1 | 0 | 314 | -2 | 3 | -1 |
| 291 | -3 | 1 | 2 | 315 | -1 | 2 | -1 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | 2 | -2 | 0 | 321 | 1 | 0 | -1 |
| 317 | 0 | 2 | -2 | 322 | 0 | -1 | 1 |
| 318 | 0 | 1 | -1 | 323 | -3 | 3 | 0 |
| 319 | 0 | 1 | -1 | 324 | -1 | -1 | 1 |
| 320 | -1 | 1 | 0 | 325 | -1 | 1 | 0 |

TABLE - 14 (3)

Scoring Weights For Commerce

(3, 13, 23 ... 243, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 3 | 6 | -1 | -5 | 213 | 3 | -1 | -2 |
| 13 | 1 | -1 | 0 | 223 | 2 | 0 | -2 |
| 23 | 1 | -1 | 0 | 233 | 1 | 0 | -1 |
| 33 | 2 | 0 | -2 | 243 | 5 | -1 | -4 |
| 43 | 2 | 2 | -4 | 251 | -2 | 1 | 1 |
| 53 | 2 | 3 | -5 | 252 | -2 | 1 | 1 |
| 63 | 1 | 1 | -2 | 253 | -3 | 2 | 1 |
| 73 | 4 | -2 | -2 | 254 | -1 | 1 | 0 |
| 83 | 2 | 1 | -3 | 255 | 0 | 1 | -1 |
| 93 | 3 | -1 | -2 | 256 | -1 | 0 | 1 |
| 103 | 2 | -1 | -1 | 257 | 0 | 0 | 0 |
| 113 | 2 | 0 | -2 | 258 | -3 | 0 | 3 |
| 123 | 1 | 1 | -2 | 259 | 1 | 0 | -1 |
| 133 | -1 | 1 | 0 | 260 | 1 | 0 | -1 |
| 143 | 1 | 0 | -1 | 261 | -1 | 1 | 0 |
| 153 | 5 | -1 | -4 | 262 | -1 | 2 | -1 |
| 163 | 3 | -2 | -1 | 263 | 0 | 2 | -2 |
| 173 | 1 | 0 | -1 | 264 | 0 | 0 | 0 |
| 183 | 3 | -1 | -2 | 265 | -1 | 3 | -2 |
| 193 | 2 | 1 | -3 | 266 | -3 | 2 | 1 |
| 203 | 2 | 0 | -2 | 267 | -3 | 2 | 1 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -3 | 3 | 0 | 292 | 1 | 1 | -2 |
| 269 | 0 | 1 | -1 | 293 | 0 | 0 | 0 |
| 270 | 1 | -1 | 0 | 294 | -1 | 1 | 0 |
| 271 | -1 | 1 | 0 | 295 | -1 | 0 | 1 |
| 272 | 0 | 0 | 0 | 296 | 1 | -1 | 0 |
| 273 | 2 | 1 | -3 | 297 | 1 | -1 | 0 |
| 274 | 0 | 1 | -1 | 298 | -1 | 0 | 1 |
| 275 | -2 | 2 | 0 | 299 | 0 | -1 | 1 |
| 276 | -2 | 2 | 0 | 300 | -1 | 1 | 0 |
| 277 | 1 | -2 | 1 | 301 | 3 | -1 | -2 |
| 278 | -1 | 1 | 0 | 302 | 0 | 0 | 0 |
| 279 | 0 | 0 | 0 | 303 | -1 | 2 | -1 |
| 280 | 1 | 1 | -1 | 304 | -6 | 2 | 4 |
| 281 | 0 | 0 | 0 | 305 | -1 | 2 | -1 |
| 282 | 0 | 1 | -1 | 306 | -5 | 2 | 3 |
| 283 | -2 | 0 | 2 | 307 | -2 | 1 | 1 |
| 284 | -2 | 0 | 2 | 308 | -3 | 3 | 0 |
| 285 | 0 | 1 | -1 | 309 | -1 | 1 | 0 |
| 286 | 2 | -1 | -1 | 310 | 0 | 0 | 0 |
| 287 | -3 | 2 | 1 | 311 | 0 | 0 | 0 |
| 288 | 1 | 1 | -1 | 312 | 1 | -1 | 0 |
| 289 | 1 | 0 | -1 | 313 | -2 | 2 | 0 |
| 290 | -1 | 1 | 0 | 314 | -2 | 3 | -1 |
| 291 | -1 | 0 | 1 | 315 | 1 | 0 | -1 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | 1 | 0 | -1 | 321 | -1 | 1 | 0 |
| 317 | 1 | 0 | -1 | 322 | 1 | 1 | -2 |
| 318 | -3 | 4 | -1 | 323 | 1 | 0 | -1 |
| 319 | -1 | 1 | 0 | 324 | -1 | 0 | 1 |
| 320 | -3 | 1 | 2 | 325 | 1 | -1 | 0 |

TABLE - 14 (4)

Scoring Weights For Fine-Arts

(4, 14, 24 ... 244, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 4 | 3 | -1 | -2 | 214 | 0 | 1 | -1 |
| 14 | 3 | -2 | -1 | 224 | 1 | 1 | -2 |
| 24 | 0 | -1 | 1 | 234 | 2 | 0 | -2 |
| 34 | 0 | -1 | 1 | 244 | 4 | -1 | -3 |
| 44 | 2 | 0 | -2 | 251 | -5 | 1 | 4 |
| 54 | 4 | -1 | -3 | 252 | 0 | -1 | 1 |
| 64 | 3 | -1 | -2 | 253 | 1 | 0 | -1 |
| 74 | 4 | -1 | -3 | 254 | -4 | 2 | 2 |
| 84 | 2 | -1 | -1 | 255 | -3 | 1 | 2 |
| 94 | 2 | -1 | -1 | 256 | 1 | -1 | 0 |
| 104 | 1 | 0 | -1 | 257 | -1 | 0 | 1 |
| 114 | 4 | 0 | -4 | 258 | -1 | 0 | 1 |
| 124 | 3 | -2 | -1 | 259 | -1 | 0 | 0 |
| 134 | 2 | 1 | -3 | 260 | -1 | 0 | 1 |
| 144 | 4 | -2 | -2 | 261 | -3 | 1 | 2 |
| 154 | 1 | 0 | -1 | 262 | -1 | 0 | 0 |
| 164 | 0 | 1 | -1 | 263 | 0 | 1 | -1 |
| 174 | 0 | 0 | 0 | 264 | -1 | 0 | 1 |
| 184 | 2 | -1 | -1 | 265 | -3 | 1 | 2 |
| 194 | 2 | 0 | -2 | 266 | -2 | 1 | 1 |
| 204 | 2 | 0 | -2 | 267 | -3 | 2 | 1 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -1 | 2 | -1 | 292 | --1 | 1 | 0 |
| 269 | -3 | 0 | 3 | 293 | -1 | 1 | 0 |
| 270 | -1 | 3 | -2 | 294 | -3 | 1 | 2 |
| 271 | -1 | 2 | -1 | 295 | -1 | -1 | 2 |
| 272 | 1 | 1 | -2 | 296 | -1 | 1 | -1 |
| 273 | -1 | 2 | -1 | 297 | 0 | 1 | -1 |
| 274 | 0 | 1 | -1 | 298 | -2 | 0 | 2 |
| 275 | -1 | 0 | 1 | 299 | -1 | 1 | 0 |
| 276 | -2 | 2 | 0 | 300 | -1 | 1 | 0 |
| 277 | -1 | 1 | 0 | 301 | -1 | 1 | 0 |
| 278 | -3 | 3 | 0 | 302 | 1 | -1 | 0 |
| 279 | 0 | 0 | -1 | 303 | -3 | 2 | 1 |
| 280 | 0 | 1 | -1 | 304 | -5 | 2 | 3 |
| 281 | -1 | 1 | 0 | 305 | -1 | 0 | 1 |
| 282 | 0 | 1 | -1 | 306 | -4 | 1 | 3 |
| 283 | -1 | -1 | 2 | 307 | -1 | 1 | 0 |
| 284 | -5 | 3 | 2 | 308 | -3 | 2 | 1 |
| 285 | -1 | 0 | 1 | 309 | 0 | 1 | -1 |
| 286 | 0 | 0 | -1 | 310 | 1 | -1 | 0 |
| 287 | -1 | 1 | 0 | 311 | -2 | 2 | 0 |
| 288 | 1 | 0 | -1 | 312 | -2 | 2 | 0 |
| 289 | -1 | 1 | 0 | 313 | -2 | 1 | 1 |
| 290 | 1 | 0 | -1 | 314 | 0 | 0 | 0 |
| 291 | -2 | 1 | 1 | 315 | 0 | 1 | -1 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | 1 | -1 | 0 | 321 | 1 | 0 | -1 |
| 317 | 0 | 1 | -1 | 322 | 4 | -1 | -3 |
| 318 | -1 | 1 | 0 | 323 | -1 | 1 | 0 |
| 319 | 0 | 1 | -1 | 324 | 0 | 0 | 0 |
| 320 | -2 | 2 | 0 | 325 | -1 | 1 | 0 |

TABLE - 14 (5)

Scoring Weights For Home Science

(5, 15, 25 ... 245, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 5 | 4 | -1 | -3 | 215 | 3 | -1 | -2 |
| 15 | 4 | 0 | -4 | 225 | 4 | -2 | -1 |
| 25 | 2 | -1 | -1 | 235 | 3 | -2 | -1 |
| 35 | 2 | 0 | -2 | 245 | 1 | 1 | -2 |
| 45 | 0 | 0 | 0 | 251 | -4 | 1 | 3 |
| 55 | -1 | 2 | -1 | 252 | -3 | 3 | 0 |
| 65 | -1 | -1 | 0 | 253 | -3 | 2 | 1 |
| 75 | 3 | -1 | -2 | 254 | 1 | 0 | -1 |
| 85 | 2 | 1 | -3 | 255 | 1 | -2 | 1 |
| 95 | 3 | -1 | -2 | 256 | -3 | 1 | 2 |
| 105 | 4 | -1 | -3 | 257 | -5 | 2 | 3 |
| 115 | 4 | -4 | 0 | 258 | 4 | -1 | -3 |
| 125 | 3 | -1 | -2 | 259 | -8 | -1 | 9 |
| 135 | 4 | -1 | -3 | 260 | -7 | 2 | 5 |
| 145 | 3 | -1 | -2 | 261 | -6 | 2 | 4 |
| 155 | 3 | -1 | -2 | 262 | 6 | -2 | -4 |
| 165 | 3 | -1 | -2 | 263 | 5 | -1 | -4 |
| 175 | -1 | 1 | 0 | 264 | -8 | 2 | 6 |
| 185 | 2 | -1 | -1 | 265 | -4 | 4 | 0 |
| 195 | 0 | 1 | -1 | 266 | -8 | 2 | 6 |
| 205 | 0 | 3 | -3 | 267 | -6 | 0 | 6 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | 0 | 1 | -1 | 292 | -4 | 1 | 3 |
| 269 | -2 | 1 | 1 | 293 | -4 | -2 | 6 |
| 270 | -1 | 2 | -1 | 294 | -2 | 2 | 0 |
| 271 | -3 | 4 | -1 | 295 | -4 | 0 | 4 |
| 272 | 1 | -1 | 0 | 296 | -8 | -1 | 9 |
| 273 | -1 | 2 | -1 | 297 | -8 | 0 | 8 |
| 274 | -4 | 2 | 2 | 298 | -7 | 0 | 7 |
| 275 | -5 | -1 | 6 | 299 | -8 | -1 | 9 |
| 276 | 1 | -1 | 0 | 300 | -7 | 2 | 5 |
| 277 | -4 | -1 | 5 | 301 | -3 | 3 | 0 |
| 278 | -7 | 1 | 6 | 302 | -1 | 2 | -1 |
| 279 | -7 | 1 | 6 | 303 | -1 | 2 | -1 |
| 280 | -7 | 0 | 7 | 304 | -3 | 2 | 1 |
| 281 | -8 | 0 | 8 | 305 | 0 | 0 | 0 |
| 282 | -5 | 1 | 4 | 306 | -4 | 3 | 1 |
| 283 | 2 | -1 | -1 | 307 | 1 | -1 | 0 |
| 284 | -5 | 5 | 0 | 308 | -1 | 0 | 1 |
| 285 | 0 | -1 | 1 | 309 | -1 | 1 | 0 |
| 286 | -2 | 1 | 1 | 310 | 3 | -2 | -1 |
| 287 | -6 | 0 | 6 | 311 | -1 | 0 | 1 |
| 288 | -1 | -1 | 2 | 312 | 1 | -1 | 0 |
| 289 | -7 | 1 | 6 | 313 | 0 | -1 | 1 |
| 290 | -5 | -1 | 6 | 314 | 1 | 0 | -1 |
| 291 | -6 | 4 | 2 | 315 | 0 | 1 | -1 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | 2 | -1 | -1 | 321 | 1 | 0 | -1 |
| 317 | 0 | 1 | -1 | 322 | 3 | -1 | -2 |
| 318 | -3 | 3 | 0 | 323 | 1 | 0 | -1 |
| 319 | 1 | 0 | -1 | 324 | 0 | 0 | 0 |
| 320 | -1 | 1 | 0 | 325 | 1 | 0 | -1 |

TABLE - 14 (6)

Scoring Weights For Medicine

(6, 16, 26 ... 246, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 6 | -2 | 1 | 1 | 216 | 1 | 0 | -1 |
| 16 | 1 | 1 | -2 | 226 | 3 | 0 | -3 |
| 26 | -2 | 1 | 1 | 236 | 1 | 1 | -2 |
| 36 | -1 | 1 | -1 | 246 | -1 | 1 | 0 |
| 46 | -1 | 0 | 1 | 251 | -2 | 0 | 2 |
| 56 | 3 | -1 | -2 | 252 | -1 | 1 | 0 |
| 66 | -2 | 2 | 0 | 253 | 1 | -2 | 1 |
| 76 | 2 | 1 | -3 | 254 | -2 | -1 | 3 |
| 86 | 0 | -1 | 0 | 255 | -2 | 0 | 2 |
| 96 | -2 | 1 | 1 | 256 | 3 | -1 | -2 |
| 106 | 1 | 0 | -1 | 257 | -3 | 0 | 3 |
| 116 | -2 | 1 | 1 | 258 | 2 | -3 | 1 |
| 126 | 0 | 1 | -1 | 259 | 2 | -1 | -1 |
| 136 | 2 | 0 | -2 | 260 | 0 | 0 | 0 |
| 146 | -1 | 1 | 0 | 261 | -2 | 1 | 1 |
| 156 | 1 | -1 | 0 | 262 | 0 | -3 | 3 |
| 166 | 2 | -1 | -1 | 263 | 0 | -1 | 1 |
| 176 | 1 | 0 | -1 | 264 | -2 | 2 | 0 |
| 186 | 0 | 1 | -1 | 265 | -1 | 0 | 1 |
| 196 | -2 | 1 | 1 | 266 | -2 | 1 | 1 |
| 206 | 1 | -1 | 0 | 267 | -3 | 1 | 2 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -2 | 1 | 1 | 292 | 1 | -1 | 0 |
| 269 | -1 | 0 | 1 | 293 | -1 | 1 | 0 |
| 270 | -1 | 3 | -2 | 294 | -2 | 0 | 2 |
| 271 | 0 | 1 | -1 | 295 | -2 | -1 | 3 |
| 272 | -2 | -1 | 3 | 296 | -1 | 0 | 1 |
| 273 | 0 | -1 | 1 | 297 | -1 | 0 | 1 |
| 274 | -1 | 2 | -1 | 298 | -2 | -1 | 3 |
| 275 | 3 | -3 | 0 | 299 | -1 | 1 | 0 |
| 276 | -3 | 0 | 3 | 300 | 1 | -1 | 0 |
| 277 | -2 | 1 | 1 | 301 | -2 | -1 | 3 |
| 278 | -2 | 2 | 0 | 302 | 0 | 0 | 0 |
| 279 | 2 | -2 | 0 | 303 | 0 | 0 | 0 |
| 280 | -2 | 1 | 1 | 304 | -3 | 0 | 3 |
| 281 | 0 | 0 | 0 | 305 | 0 | 0 | 0 |
| 282 | -2 | 1 | 1 | 306 | -1 | 0 | 1 |
| 283 | -1 | -1 | 2 | 307 | 0 | 0 | 0 |
| 284 | -4 | 2 | 2 | 308 | -4 | 2 | 2 |
| 285 | -3 | 2 | 1 | 309 | 0 | 0 | 0 |
| 286 | 0 | -1 | 1 | 310 | 2 | -1 | -1 |
| 287 | -1 | 0 | 1 | 311 | -1 | 1 | 0 |
| 288 | 3 | -2 | -1 | 312 | 0 | -1 | 1 |
| 289 | 1 | -1 | 0 | 313 | -2 | 1 | 1 |
| 290 | -1 | 2 | -1 | 314 | 1 | -1 | 0 |
| 291 | -3 | 0 | 3 | 315 | 1 | -1 | 0 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | 0 | -2 | 2 | 321 | 1 | 0 | -1 |
| 317 | -1 | 2 | -1 | 322 | 4 | -1 | -3 |
| 318 | -3 | 2 | 1 | 323 | 0 | 0 | 1 |
| 319 | -1 | 1 | 0 | 324 | 0 | -1 | 1 |
| 320 | -3 | 1 | 2 | 325 | -1 | 0 | 0 |

TABLE - 14 (7)

Scoring Weights For Performing Arts

(7, 17, 27 ... 247, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 7 | 3 | -1 | -2 | 217 | 3 | -2 | -1 |
| 17 | 4 | 0 | -4 | 227 | 4 | -1 | -3 |
| 27 | 1 | 1 | -2 | 237 | 4 | -2 | -2 |
| 37 | 1 | 0 | -1 | 247 | 2 | -1 | -1 |
| 47 | 2 | 1 | -3 | 251 | -5 | 2 | 3 |
| 57 | 4 | -2 | -2 | 252 | -2 | 5 | -3 |
| 67 | 2 | 0 | -2 | 253 | -3 | 5 | -2 |
| 77 | -1 | 2 | -1 | 254 | -4 | -3 | 7 |
| 87 | 6 | -1 | -5 | 255 | -4 | 4 | 0 |
| 97 | 3 | 0 | -3 | 256 | 5 | -3 | -2 |
| 107 | 1 | 0 | -1 | 257 | -6 | 6 | 0 |
| 117 | 5 | 0 | -5 | 258 | -1 | 5 | -4 |
| 127 | 3 | 1 | -4 | 259 | 2 | -1 | -1 |
| 137 | -1 | 2 | -1 | 260 | -2 | 3 | -1 |
| 147 | 0 | 2 | -2 | 261 | 0 | 1 | -1 |
| 157 | 1 | 0 | -1 | 262 | -2 | 5 | -3 |
| 167 | 5 | -1 | -4 | 263 | -2 | 0 | 2 |
| 177 | 4 | -1 | -3 | 264 | 2 | -1 | -1 |
| 187 | 2 | 1 | -3 | 265 | -5 | 5 | 0 |
| 197 | 3 | -1 | -2 | 266 | -2 | 3 | -1 |
| 207 | 3 | -2 | -1 | 267 | -5 | 2 | 3 |

| ITEM CODE NO. | I. 1 | I 0 | D 2 | ITEM CODE NO. | I. 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -5 | 1 | 4 | 292 | 3 | -1 | -2 |
| 269 | -4 | 2 | 2 | 293 | -3 | 4 | -1 |
| 270 | 3 | 0 | -3 | 294 | 3 | -2 | -1 |
| 271 | -3 | 4 | -1 | 295 | 4 | -2 | -2 |
| 272 | -2 | 4 | -2 | 296 | -1 | 1 | -1 |
| 273 | -3 | 3 | 0 | 297 | -4 | 3 | 1 |
| 274 | -4 | 3 | 1 | 298 | 0 | 1 | -1 |
| 275 | -2 | 3 | -1 | 299 | -3 | 1 | 2 |
| 276 | 1 | -2 | 1 | 300 | 0 | 0 | 0 |
| 277 | 2 | -1 | -1 | 301 | -1 | 1 | 0 |
| 278 | 0 | -1 | 1 | 302 | -4 | 5 | -1 |
| 279 | -5 | 6 | -1 | 303 | 0 | 1 | -1 |
| 280 | 3 | -2 | -1 | 304 | -6 | 7 | -1 |
| 281 | -6 | -1 | 7 | 305 | 1 | -1 | 0 |
| 282 | 2 | -1 | -1 | 306 | 2 | -1 | -1 |
| 283 | 5 | -2 | -3 | 307 | 4 | -3 | -1 |
| 284 | 3 | -2 | -1 | 308 | -8 | 3 | 5 |
| 285 | 6 | -4 | -2 | 309 | -3 | 4 | -1 |
| 286 | 4 | -3 | -1 | 310 | -4 | 4 | 0 |
| 287 | 1 | -1 | 0 | 311 | -2 | 3 | -1 |
| 288 | 6 | -3 | -3 | 312 | -3 | 2 | 1 |
| 289 | -1 | 2 | -1 | 313 | -1 | 2 | -1 |
| 290 | -1 | 1 | 0 | 314 | 2 | -1 | -1 |
| 291 | -4 | 4 | 0 | 315 | -5 | 2 | 3 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | -3 | -2 | 5 | 321 | -1 | 0 | 1 |
| 317 | 1 | -2 | 1 | 322 | 5 | -2 | -3 |
| 318 | -6 | 2 | 4 | 323 | 0 | 1 | -1 |
| 319 | -2 | 0 | 2 | 324 | -8 | 1 | 7 |
| 320 | -7 | 2 | 5 | 325 | -4 | 5 | -1 |

TABLE - 14 (8)

Scoring Weights For Science

(8, 18, 28 ... 248, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 8 | -1 | 2 | -1 | 218 | 1 | 1 | -2 |
| 18 | 1 | 0 | -1 | 228 | 1 | 0 | -1 |
| 28 | 4 | -1 | -3 | 238 | 1 | 0 | -1 |
| 38 | -1 | 1 | 0 | 248 | 1 | 1 | -2 |
| 48 | 0 | 2 | -2 | 251 | -3 | 2 | 1 |
| 58 | 1 | 0 | -1 | 252 | 1 | 2 | -3 |
| 68 | -2 | 1 | 1 | 253 | 1 | 1 | -2 |
| 78 | 0 | 1 | -1 | 254 | -3 | 1 | 2 |
| 88 | 2 | 0 | -2 | 255 | -2 | -1 | 3 |
| 98 | 7 | -3 | -4 | 256 | -1 | 1 | 0 |
| 108 | 0 | 1 | -1 | 257 | -1 | 0 | 0 |
| 118 | 1 | 0 | -1 | 258 | -2 | 1 | 1 |
| 128 | 2 | 0 | -2 | 259 | -1 | 1 | -1 |
| 138 | 0 | 1 | -1 | 260 | 0 | 0 | 0 |
| 148 | -3 | 2 | 1 | 261 | -1 | 1 | 0 |
| 158 | 1 | 0 | -1 | 262 | -1 | 0 | 1 |
| 168 | 1 | 0 | -1 | 263 | 1 | 1 | -1 |
| 178 | 0 | 0 | -1 | 264 | 1 | 0 | -1 |
| 188 | 0 | 1 | -1 | 265 | -3 | 5 | -2 |
| 198 | 0 | 0 | 0 | 266 | -2 | 2 | 0 |
| 208 | 3 | -1 | -2 | 267 | -2 | 2 | 0 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -3 | 1 | 2 | 292 | 1 | 0 | -1 |
| 269 | -4 | 1 | 3 | 293 | 1 | -1 | 0 |
| 270 | -1 | 1 | 0 | 294 | -5 | 4 | 1 |
| 271 | 1 | 1 | -2 | 295 | -1 | -2 | 3 |
| 272 | -1 | 0 | 1 | 296 | 2 | -1 | -1 |
| 273 | -1 | 1 | 0 | 297 | 1 | 0 | -1 |
| 274 | -3 | 3 | 0 | 298 | -3 | 2 | 1 |
| 275 | 0 | 1 | -1 | 299 | 0 | 1 | -1 |
| 276 | -1 | 0 | 1 | 300 | -1 | 2 | -1 |
| 277 | 0 | -1 | 1 | 301 | 0 | 1 | -1 |
| 278 | -2 | 2 | 0 | 302 | 0 | 1 | -1 |
| 279 | 2 | -1 | -1 | 303 | -1 | 1 | 0 |
| 280 | 1 | 0 | -1 | 304 | -5 | 4 | 1 |
| 281 | 1 | 0 | -1 | 305 | -1 | 1 | 0 |
| 282 | -2 | 3 | -1 | 306 | -3 | 2 | 1 |
| 283 | -2 | -1 | 3 | 307 | 0 | 0 | 0 |
| 284 | -4 | 3 | 1 | 308 | -1 | 1 | 0 |
| 285 | 1 | -1 | 0 | 309 | 1 | 0 | -1 |
| 286 | 1 | 0 | -1 | 310 | 2 | -1 | -1 |
| 287 | 1 | 0 | 0 | 311 | -1 | 0 | 1 |
| 288 | 0 | -1 | 1 | 312 | 2 | -2 | 0 |
| 289 | -1 | 1 | 0 | 313 | -1 | 2 | -1 |
| 290 | 1 | -1 | 0 | 314 | -2 | 1 | 1 |
| 291 | 0 | 0 | 0 | 315 | 1 | 0 | -1 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | 2 | -1 | -1 | 321 | 1 | 1 | -2 |
| 317 | -1 | 0 | 1 | 322 | 3 | 0 | -3 |
| 318 | 0 | 1 | -1 | 323 | 0 | 0 | 0 |
| 319 | -1 | 1 | 0 | 324 | 1 | 0 | -1 |
| 320 | -3 | 2 | 1 | 325 | -1 | 1 | 0 |

TABLE - 14 (9)

Scoring Weights For Social Work

(9, 19, 29 ... 249, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 9 | 2 | 0 | -2 | 219 | 2 | 0 | -2 |
| 19 | 3 | -1 | -2 | 229 | 2 | -1 | -1 |
| 29 | 4 | -1 | -3 | 239 | 3 | 0 | -3 |
| 39 | 1 | -1 | -1 | 249 | 2 | -1 | -1 |
| 49 | 2 | -1 | -1 | 251 | -5 | 1 | 4 |
| 59 | 4 | -1 | -3 | 252 | 1 | 0 | -1 |
| 69 | 4 | -2 | -2 | 253 | 0 | 1 | -1 |
| 79 | 4 | -1 | -3 | 254 | -4 | -1 | 5 |
| 89 | 4 | -1 | -3 | 255 | 1 | -1 | 0 |
| 99 | 3 | 0 | -3 | 256 | 4 | -2 | -2 |
| 109 | 1 | 0 | -1 | 257 | -1 | 1 | 0 |
| 119 | 1 | 0 | -1 | 258 | -2 | 0 | 2 |
| 129 | -1 | 1 | 0 | 259 | -1 | 1 | 0 |
| 139 | 1 | 0 | -1 | 260 | -3 | 2 | 1 |
| 149 | 1 | 0 | -1 | 261 | -1 | 0 | 1 |
| 159 | 2 | -1 | -1 | 262 | -1 | 0 | 0 |
| 169 | 0 | 1 | -1 | 263 | 0 | -1 | 1 |
| 179 | 1 | 0 | -1 | 264 | 0 | 0 | 0 |
| 189 | 1 | 1 | -2 | 265 | -3 | 3 | 0 |
| 199 | 3 | -1 | -2 | 266 | 0 | 0 | 0 |
| 209 | 3 | -1 | -2 | 267 | -2 | 1 | 1 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -4 | 1 | 3 | 292 | -1 | 1 | 0 |
| 269 | -5 | 0 | 5 | 293 | 2 | -1 | -1 |
| 270 | 0 | 2 | -2 | 294 | -3 | 2 | 1 |
| 271 | -1 | 3 | -2 | 295 | 0 | -1 | 0 |
| 272 | -3 | -2 | 5 | 296 | 1 | -1 | 0 |
| 273 | 0 | 0 | 0 | 297 | 1 | 0 | -1 |
| 274 | -2 | 2 | 0 | 298 | -2 | 1 | 1 |
| 275 | -1 | 1 | 0 | 299 | -1 | 1 | 0 |
| 276 | 1 | -1 | 0 | 300 | -1 | 2 | -1 |
| 277 | -2 | 2 | 0 | 301 | 0 | 0 | -1 |
| 278 | -4 | 4 | 0 | 302 | 0 | 0 | -1 |
| 279 | 1 | -1 | 0 | 303 | 0 | 1 | -1 |
| 280 | 2 | -1 | -1 | 304 | -4 | 1 | 3 |
| 281 | 0 | 1 | -1 | 305 | -1 | 1 | 0 |
| 282 | 0 | 1 | -1 | 306 | -5 | 2 | 3 |
| 283 | -2 | 0 | 2 | 307 | 0 | -1 | 1 |
| 284 | -4 | 3 | 1 | 308 | 0 | 0 | 0 |
| 285 | -2 | 1 | 1 | 309 | -1 | 1 | 0 |
| 286 | -2 | 1 | 1 | 310 | 2 | -1 | -1 |
| 287 | -1 | 2 | -1 | 311 | -1 | 1 | 0 |
| 288 | 0 | -1 | 0 | 312 | 0 | -1 | 0 |
| 289 | 0 | 0 | 0 | 313 | -2 | 1 | 1 |
| 290 | 1 | 0 | 0 | 314 | -1 | 1 | 0 |
| 291 | -2 | 3 | 1 | 315 | 1 | -1 | 0 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | 1 | 0 | 0 | 321 | 2 | -1 | -1 |
| 317 | 0 | 1 | -1 | 322 | 3 | 0 | -3 |
| 318 | -2 | 1 | 1 | 323 | 2 | -1 | -1 |
| 319 | 0 | 0 | 0 | 324 | 1 | -1 | 0 |
| 320 | 0 | 0 | -1 | 325 | -3 | 2 | 1 |

TABLE - 14 (10)

Scoring Weights For Tech-Engineering

(10, 20, 30 ... 250, 251 ... 325) Items

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 10 | 2 | -1 | -1 | 220 | 1 | 0 | -1 |
| 20 | 2 | 0 | -2 | 230 | 1 | 0 | -1 |
| 30 | 2 | 0 | -2 | 240 | -1 | -1 | 2 |
| 40 | 0 | 0 | 0 | 250 | -1 | 1 | 0 |
| 50 | -1 | 0 | 1 | 251 | 1 | -1 | 0 |
| 60 | 4 | -2 | -2 | 252 | 3 | -1 | -2 |
| 70 | 3 | -2 | -1 | 253 | 1 | -1 | 0 |
| 80 | -1 | 0 | 1 | 254 | -2 | 0 | 2 |
| 90 | 1 | -1 | 0 | 255 | 0 | 0 | 0 |
| 100 | 2 | -2 | 0 | 256 | 1 | 0 | -1 |
| 110 | 2 | 0 | -2 | 257 | -3 | 2 | 1 |
| 120 | 1 | -1 | 0 | 258 | -2 | 0 | 2 |
| 130 | 0 | 0 | 0 | 259 | -1 | 1 | 0 |
| 140 | 3 | -1 | -2 | 260 | 0 | 0 | 0 |
| 150 | 2 | -1 | -1 | 261 | 0 | 0 | 0 |
| 160 | 0 | 0 | 0 | 262 | -1 | 1 | 0 |
| 170 | 0 | 0 | 0 | 263 | -1 | -1 | 2 |
| 180 | 0 | 0 | -1 | 264 | -1 | 1 | 0 |
| 190 | -1 | 0 | 1 | 265 | -3 | 2 | 1 |
| 200 | 2 | -2 | 1 | 266 | -1 | 2 | -1 |
| 210 | -1 | 1 | 0 | 267 | -4 | 1 | 3 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 268 | -2 | 3 | -1 | 292 | 1 | 0 | -1 |
| 269 | -2 | -1 | 3 | 293 | 2 | -1 | -1 |
| 270 | 0 | 1 | -1 | 294 | -5 | 3 | 2 |
| 271 | -1 | 0 | 1 | 295 | 1 | -1 | 0 |
| 272 | 0 | -3 | 3 | 296 | 0 | 0 | 0 |
| 273 | 1 | -1 | 0 | 297 | 0 | 0 | 0 |
| 274 | 1 | 0 | -1 | 298 | -5 | 0 | 5 |
| 275 | 0 | -1 | 0 | 299 | 0 | -1 | 1 |
| 276 | -1 | -1 | 2 | 300 | -3 | 2 | 1 |
| 277 | 2 | -1 | -1 | 301 | 1 | 0 | -1 |
| 278 | -2 | 2 | 0 | 302 | -2 | 1 | 1 |
| 279 | 1 | -1 | 0 | 303 | 0 | 1 | -1 |
| 280 | 1 | 0 | -1 | 304 | -5 | 3 | 2 |
| 281 | 2 | -2 | 0 | 305 | -1 | 0 | 1 |
| 282 | -1 | -2 | 3 | 306 | -3 | -1 | 4 |
| 283 | -3 | 2 | 1 | 307 | -1 | 0 | 1 |
| 284 | 0 | -1 | 1 | 308 | -3 | 0 | 3 |
| 285 | 0 | -2 | 2 | 309 | 0 | 0 | 0 |
| 286 | -1 | 0 | 0 | 310 | 1 | 0 | -1 |
| 287 | -1 | 0 | 0 | 311 | -1 | 1 | 0 |
| 288 | 3 | -2 | -1 | 312 | 0 | 0 | -1 |
| 289 | -1 | 1 | 0 | 313 | -1 | 0 | 1 |
| 290 | 0 | -1 | 1 | 314 | -1 | 1 | 0 |
| 291 | 2 | -2 | 0 | 315 | 1 | 0 | 0 |

| ITEM CODE NO. | L 1 | I 0 | D 2 | ITEM CODE NO. | L 1 | I 0 | D 2 |
|---|---|---|---|---|---|---|---|
| 316 | -4 | 3 | 1 | 321 | 1 | -1 | 0 |
| 317 | 1 | 0 | -1 | 322 | 4 | -1 | -3 |
| 318 | 1 | 0 | -1 | 323 | 0 | 1 | -1 |
| 319 | -3 | 2 | 1 | 324 | -1 | 1 | 0 |
| 320 | 0 | -1 | 1 | 325 | -1 | 0 | 1 |

TABLE : 15

Norms for Agricultura Scale
(N=825)

| Raw Score | Std. Score | Frequency | Cum. Percent |
|---|---|---|---|
| -97 | 28 | 5 | 0.6 |
| -91 | 30 | 7 | 1.5 |
| -84 | 32 | 14 | 3.2 |
| -77 | 34 | 26 | 6.3 |
| -70 | 36 | 42 | 11.4 |
| -64 | 38 | 37 | 15.9 |
| -57 | 40 | 41 | 20.8 |
| -50 | 42 | 46 | 26.4 |
| -43 | 44 | 63 | 34.1 |
| -37 | 46 | 54 | 40.6 |
| -30 | 48 | 66 | 48.6 |
| -23 | 50 | 58 | 55.6 |
| -16 | 52 | 47 | 61.3 |
| - 9 | 54 | 48 | 67.2 |
| - 3 | 56 | 47 | 72.8 |
| 4 | 58 | 39 | 77.6 |
| 11 | 60 | 45 | 83.0 |
| 18 | 62 | 31 | 88.0 |
| 24 | 64 | 32 | 91.9 |
| 31 | 66 | 35 | 96.1 |
| 38 | 68 | 18 | 98.3 |
| 45 | 70 | 13 | 99.9 |
| 51 | 72 | 1 | 100.0 |

| Score | | Raw Score | Std. Score | Percentage |
|---|---|---|---|---|
| Mean | | -23.012 | 50 | |
| Sigma | | 33.81 | 10 | |
| Ratings | | | | |
| High | A | +11 to +51 & above | 60 & above | 17 |
| Average | B | -50 to +10 | 41 to 59 | 62 |
| Low | C | -51 & below | 28 to 40 | 21 |
| Reliability | | | | 0.82 |

interpret raw scores in terms of the ratings of A, B and C. The ratings of A means that the individual has the high interests of persons successfully engaged in that educational field; the rating C means that the person does not have such interests, indicating the reverse or low interest in that field, and the rating B means Average interest that the person probably has those interests, but it cannot be considered as sure of the fact as in the case of A rating. But arbitary ratings are not satisfactory for the most accurate measurements possible. Standard scores are given on the specifically devised Report blank so that they can be easily translate into the letter ratings.

Interests were categorized according to the ratings determined in terms of high level, Average level and low level of interest for each educational scale. As the possible raw score of interest ranged from -97 to 51 and standard score ranged from 28 to 72, the scores indicating level of interest was determined on the basis of (Qi) quartile deviation calculated from frequency distribution as suggested by Garrett (1961).

1/4th percentile from lower limit and 1/8th percentile from the upper limit was calculated and the range for determining the level of interest was considered as under :

i) Range of below 25-40 standard scores indicated Low interest rated as C.

ii) Range of 41-59 standard scores indicated Average interest rated as B.

iii) Range of 60 and above standard scores indicated high interest rated as A.

The weighted raw score for 825 student under the ten discipline on the Interest Inventory varied distinctly as seen from Table - 16. The minimum raw score ranged from -218 to -68 among the ten disciplines whereas the maximum raw score ranged from +28 to +145. The minimum standard scores in the present study ranged from 18 to 30, whereas the maximum standard scores ranged from 72 to 98 respectively on the ten educational scales as can be seen from the table of Norms based on 825 students.

TABLE : 16

Distribution of Weighted Raw scores of Ten disciplines

| Sr. No. | Disciplines | Minimum Score | Maximum Score |
|---|---|---|---|
| 1. | Agriculture | -100 | 49 |
| 2. | Arts | -122 | 28 |
| 3. | Commerce | - 97 | 62 |
| 4. | Fine Arts | -108 | 62 |
| 5. | Home Science | -218 | 145 |
| 6. | Medical | - 69 | 37 |
| 7. | Performing Arts | -157 | 68 |
| 8. | Science | - 79 | 56 |
| 9. | Social Work | - 97 | 57 |
| 10. | Tech. & Engg. | - 68 | 29 |

The scoring key (differential weights) was used to score the raw score on each of the ten educational scale for each student's case on all the 100 items as shown in Table - 14 for Agriculture Scale. Then the total sum of raw (11) score was transmuted into standard (60) from the table of standard scores of an Agriculture disciplines and it was rated as A as per the criterion given on Norms table as shown in the Table - 15.

4.3.4 Norms can be established also without scoring the blanks by computing means of the preferences of 3 categories (L-I-D) as suggested by Strong to distinguish between the two samples as under.

When the selection of items for an educational scale had been completed, the next step was to determine whether the scale clearly distinguishes the men-in-general (norm group) from the other (criterion group) men-in-education.

When the mean scores of two samples on a given educational scale are compared, differences of four points or less should be ignored. Five point minimum differences which represent 1/2 standard deviation, are the minimum difference worth attending to, and then only when the samples are large enough to ensure that differences are stable. Greater differences of 10 or 20 points are much more impressive.

4.3.5 Calculations Of The Mean Score Without Scoring The Blanks

Since the tally of responses to each item in order to determine the weights, had been ascertained, the data needed to calculate the mean score were available.

The mean scores results computed by the above method had been presented in Table - 16 which proved that all the ten educational scales were valid and highly discriminating with the Norm group.

The procedure had been as under adopted by the investigator recommended by Strong Jr.

Given an item with n responses to each of which attached scoring weights, then a man's score on the item is --

$$(W_1 \times R_1) + (W_2 \times R_2) + (W_3 \times R_3) + \text{etc.}$$

Where W equal the weight and R equals the man's response, a 1 is he marks that responses, a 0 if he does not.

The sum of such totals for all the items in the test is the man's raw score. So far the procedure is exactly that employed in scoring the man's blank on the scale.

Similarly, the mean score of n persons on a single item is --

$\frac{1}{N}$ [($W_1$ x No. replying) + ($W_2$ x No. replying) + ($W_3$ x No. replying) + (etc.)]

Thus if 80 physicians like 'Surgeon', 14 are indifferent, and 6 dislike the activity, then the mean score on the item is --

$\frac{1}{100}$ [(4 x 80) + (1 x 14) + (-4 x 6) or 2.82 ]

The sum of such totals for all the items in the test is the mean raw score of the group. By this procedure the mean score of a group was obtained without scoring the individual blank on the appropriate scale. All that it needed were the weights for the different responses to each item and the tally of responses of the group.

If the weights are directly proportioned to the responses of the criterion group, or in the case of the Interest Test, to the differences in responses between men-in-general and the criterion group, the above procedure should give the same mean score as obtained by scoring blanks. The mean scores for ten educational field are presented below.

TABLE : 17

Mean Score of Educational Groups and the Men-in-general on the Interest Inventory (Hand Scoring)

| Sr. No. | Educational Scales | Criterion group | Men-in-general group N=825 |
|---|---|---|---|
| 1. | Agriculture | 68.28 | - 53.11 |
| 2. | Arts | 68.66 | - 46.30 |
| 3. | Commerce | 59.72 | - 6.80 |
| 4. | Fine Arts | 49.18 | - 16.82 |
| 5. | Home Science | 193.98 | -109.79 |
| 6. | Medical | 42.62 | - 24.08 |
| 7. | Performing Arts | 230.0 | - 50.92 |
| 8. | Science | 51.65 | - 14.37 |
| 9. | Social Work | 63.2 | - 58.88 |
| 10. | Tech. & Engg. | 41.70 | - 17.40 |

The mean scores calculated by above method can be considered as Norms as described by Strong.

The validity of the interest blank has been established by empirically testing the logic of the procedure adopted for developing this measure. Development of the Inventory is based on the construct that a particular educational group (criterion) would behave in significantly different way from the men-in-general (norm) group. This expectation from the construct has been substantiated by

the results obtained from independent samples of criterion groups and the men-in-general group as described in Table - 16 of mean raw scores of different educational groups and also these of the men-in-general group. The mean scores of criterion group ranged from +41.70 of Tech. & Engg. to +230 scores of Fine Arts, as per the Table - 16 whereas all the values of mean score of men-in-general group were revealed to be negative ranging from -6.80 of Commerce to a maximum mean score of -109.79 of Home Science. The scores with hand scoring and machine scoring revealed to be quite close and in the same serial order with all the negative values.

### 4.3.6 Predictive Validity Of The Interest Blank

Chi-square ($\chi^2$) was the statistic selected to determine which items differentiated among the ten educational groups significantly. The contribution of each educational group to the chi-square value for each item was used to determine discrimination power of the whole Interest Blank between various groups.

The formula selected to compute chi-square values through the test of independence in contingency table. The differences between the score on educational interests of men-in-general as observed results and those expected on normal distribution was calculated to establish the predictive validity of the test by using formula given by Garette (1961); the equation for chi-square ($\chi^2$) stated as follows for testing agreement between observed and expected results.

$$\chi^2 = \Sigma \left[ \frac{(fo-fe)^2}{fe} \right]$$

The differences between observed and expected frequencies are squared and divided by the expected number in each case, and the sum of these quotients is $X^2$. The more closely the observed results approximate to the expected, the smaller the chi-square and the closer agreement between the observed data and the hypothesis being tested.

The relationship between the interest of men-in-general (Norm group) on majority of the items under various educational scales by $\chi^2$ test indicated a significant difference. The $\chi^2$ values were also computed to confirm the group differentiation among Rural, Urban, Boys and Girls as under with the help of contingency tables as presented in Appendix-VIII. The procedure by Garette was employed to determine the $\chi^2$ values for various stratum on 325 items.

$\chi^2$ values thus computed to test whether one group significantly differed in interest patterns from that of the other groups; such as Urban boys and Urban girls, Rural boys and Rural girls, Urban and Rural students in general. $\chi^2$ values were computed for all the three strata and it revealed a significant difference having large values on preferences as shown in Table - 18. The first and second group consisting of Urban and Rural students and Urban boys and Urban girls were found to be significantly different on preferences at 0.05 level whereas the group of rural boys and girls was found to be

highly significant different on their preferences of items on Interest Inventory at both the levels including 0.01 level; as can be seen from the table given below.

TABLE : 18

$\chi^2$ Values of various groups of students showing significant difference on interest Blank

| GroupsCompared | $\chi^2$ Values | |
|---|---|---|
| 1) Urban and Rural Students (N=825) | 6.04 | * |
| 2) Urban Boys and Girls (N = 250+208=458) | 7.24 | * |
| 3) Rural Boys and Rural Girls (N = 225+142=367) | 10.8 | ** |
| D.f. = 2 | | |
| Significant value at 0.05 level = 5.991 | * | |
| 0.01 level = 9.2 | ** | |

Explaining the additive property of $\chi^2$ Garette stated that when several $\chi^2$s have been computed from independent experiments, these may be summed to give a new $\chi^2$ with df = the sum of the separate df's. The fact that chi-squares may be added to provide an overall test of a hypothesis is important in many experimental studies. In the present investigation the $\chi^2$ values on each of the 325 items on seven sub-test for various groups were added to provide an overall $\chi^2$ value. Garette explained that combining the data from several

experiments, will often yield a conclusive result, when separate experiments, taken alone, provide only indications.

Besides general norms for XIIth grade students the area-wise and sex-wise norms were also developed as $X^2$ results revealed a significant difference on the patterns of interest among XII grade rural, urban, boys and girls students which are presented in the Table - 20 (a, b, c, d).

### 4.3.7 Development Of Area And Sex-Wise Norms

Developing Area-wise and Sex-wise norms was favoured by the investigator because homogenity of the group for whom the norm is meant being a vital condition that has to be fulfilled if the norm is to serve any practical purpose. When the norm group is composed of several sub-groups which vary one from the other, then this condition will remain unfulfilled. Even when tests have been standardised on similar groups, the scales might not be exactly comparable for a particular local group. Hence, it was thought out to develop norms for various groups included in the sample of the present study. A student's performance on a test is not only reflection on his own individual interest it is also a reflection on the particular strengths, weaknesses, and group experience of his particular school or region. It is significant that even in U.S.A., where national norms are far easier to develop than India, the Strong trend is towards the use of regional and local norms. Area-

wise and Sex-wise norms for general XIIth grade students of Gujarat were developed and had been presented in the following tables.

Having obtained a raw score, of an individual student as explained in previous chapter by obtaining a sum of the total weights for the 325 responses under ten disciplines, the next step was to give meaning to this raw score. The first meaning concerning the individual as to how he scored - higher or lower compared to criterion scores (successful graduates) with reference to a standard group on a particular educational scale. The second meaning to what could be predicted about this student for future.

The most useful procedure for expressing how an individual had scored with reference to a criterion group is to convert the raw score into a standard score by using the formula as described in previous chapter. The derivation of such scores was obtained by machine scoring through employing (SPSS) Package on IBM. For example, in Table - 19.1 the distribution of raw score, standard scores are presented. As indicated in table the raw mean score on Agriculture scale obtained was 23.012 with sigma of 33.81. The mean raw score then was identified as 50 standard score, and a range of 33.81 was called a range of 10 standard scores. Consequently a standard score of 60 is equal to -23.0 + 33.81 or 11 as can be seen from the Norms table on Agriculture scale. From the given norms tables, it could be read directly the standard score for any raw score on its specific educational scale. Thus norms tables were

TABLE : 19.1

(1) NORMS FOR AGRICULTURE (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -97 | 28 | 5 | .6 |
| -91 | 30 | 7 | 1.5 |
| -84 | 32 | 14 | 3.2 |
| -77 | 34 | 26 | 6.3 |
| -70 | 36 | 42 | 11.4 |
| -64 | 38 | 37 | 15.9 |
| -57 | 40 | 41 | 20.8 |
| -50 | 42 | 46 | 26.4 |
| -43 | 44 | 63 | 34.1 |
| -37 | 46 | 54 | 40.6 |
| -30 | 48 | 66 | 48.6 |
| -23 | 50 | 58 | 55.6 |
| -16 | 52 | 47 | 61.3 |
| - 9 | 54 | 48 | 67.2 |
| - 3 | 56 | 47 | 72.8 |
| 4 | 58 | 39 | 77.6 |
| 11 | 60 | 45 | 83.0 |
| 18 | 62 | 41 | 88.0 |
| 24 | 64 | 32 | 91.9 |
| 31 | 66 | 35 | 96.1 |
| 38 | 68 | 18 | 98.3 |
| 45 | 70 | 13 | 99.9 |
| 51 | 72 | 1 | 100.0 |
| | TOTAL | 825 | |

| (1) Score | Raw Score | Std. Score | Percentage |
|---|---|---|---|
| Mean | -23.012 | 50 | |
| Sigma | 33.81 | 10 | |

Ratings :

| | | | | |
|---|---|---|---|---|
| High | A | +11 to +51 & above | 60 & above | 17 |
| Average | B | -50 to +10 | 41 to 59 | 62 |
| Law | C | -51 & below | 25 to 40 | 21 |
| Realibility | | | | 0.82 |

TABLE : 19.2

(2) NORMS FOR ARTS (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -120 | 22 | 1 | .1 |
| -114 | 24 | 3 | .5 |
| -109 | 26 | 1 | .6 |
| -104 | 28 | 4 | 1.1 |
| - 98 | 30 | 9 | 2.2 |
| - 93 | 32 | 13 | 3.8 |
| - 88 | 34 | 22 | 6.4 |
| - 82 | 36 | 26 | 9.6 |
| - 77 | 38 | 28 | 13.0 |
| - 72 | 40 | 47 | 18.7 |
| - 66 | 42 | 41 | 23.6 |
| - 61 | 44 | 60 | 30.9 |
| - 55 | 46 | 73 | 39.8 |
| - 50 | 48 | 70 | 48.2 |
| - 45 | 50 | 55 | 54.9 |
| - 39 | 52 | 90 | 65.8 |
| - 34 | 54 | 39 | 70.5 |
| - 29 | 56 | 55 | 77.2 |
| - 23 | 58 | 34 | 81.3 |
| - 18 | 60 | 25 | 84.4 |
| - 13 | 62 | 36 | 88.7 |
| - 7 | 64 | 33 | 92.7 |
| - 2 | 66 | 11 | 94.1 |
| - 4 | 68 | 16 | 96.0 |
| - 9 | 70 | 16 | 97.9 |
| - 14 | 72 | 6 | 98.7 |
| - 20 | 74 | 5 | 99.3 |
| - 25 | 76 | 3 | 99.6 |
| - 30 | 78 | 3 | 100.0 |
| | TOTAL | 825 | |

| (2) Score | | Raw Score | Std. Score | Percentage |
|---|---|---|---|---|
| Mean | | -44.70 | 50 | |
| Sigma | | 26.8 | 10 | |
| Ratings : | | | | |
| High | A | -18 & above | 60 & above | 19 |
| Average | B | -68 to -71 | 41 to 59 | 65 |
| Law | C | -69 & below | 40 & below | 16 |
| Realibility | | | | 0.85 |

TABLE : 19.3

(3) NORMS FOR COMMERCE (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -99 | 20 | 1 | .1 |
| -94 | 22 | 0 | .1 |
| -88 | 24 | 1 | .2 |
| -83 | 26 | 5 | .8 |
| -78 | 28 | 6 | 1.6 |
| -72 | 30 | 11 | 2.9 |
| -67 | 32 | 15 | 4.7 |
| -61 | 34 | 16 | 6.7 |
| -56 | 36 | 37 | 11.2 |
| -51 | 38 | 23 | 13.9 |
| -45 | 40 | 45 | 19.4 |
| -40 | 42 | 43 | 24.6 |
| -35 | 44 | 62 | 32.1 |
| -29 | 46 | 52 | 38.4 |
| -24 | 48 | 54 | 45.0 |
| -19 | 50 | 66 | 53.0 |
| -13 | 52 | 71 | 61.6 |
| - 8 | 54 | 57 | 68.5 |
| - 2 | 56 | 51 | 74.7 |
| 3 | 58 | 48 | 80.5 |
| 8 | 60 | 36 | 84.8 |
| 14 | 62 | 50 | 90.9 |
| 19 | 64 | 25 | 93.9 |
| 24 | 66 | 17 | 96.0 |
| 30 | 68 | 14 | 97.7 |
| 35 | 70 | 7 | 98.5 |
| 41 | 72 | 5 | 99.2 |
| 46 | 74 | 2 | 99.4 |
| 51 | 76 | 2 | 99.6 |
| 57 | 78 | 2 | 99.9 |
| 62 | 80 | 1 | 100.0 |
| | TOTAL | 825 | |

| (3) Score | | Raw Score | Std. Score | Percentage |
|---|---|---|---|---|
| Mean | | -18.57 | 50 | |
| Sigma | | 26.79 | 10 | |
| Ratings : | | | | |
| High | A | +8 & above | 60 & above | 19 |
| Average | B | -42 to +7 | 41 to 59 | 66 |
| Law | C | -43 & below | 40 & below | 15 |
| Realibility | | | | 0.81 |

TABLE : 19.4

(4) NORMS FOR FINE ARTS (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -110 | 18 | 1 | .1 |
| -105 | 20 | 0 | .1 |
| -100 | 22 | 0 | .1 |
| - 95 | 24 | 1 | .2 |
| - 90 | 26 | 3 | .6 |
| - 85 | 28 | 5 | 1.2 |
| - 80 | 30 | 10 | 2.4 |
| - 75 | 32 | 12 | 3.9 |
| - 70 | 34 | 15 | 5.4 |
| - 65 | 36 | 24 | 8.6 |
| - 60 | 38 | 37 | 13.1 |
| - 55 | 40 | 41 | 18.1 |
| - 50 | 42 | 59 | 25.2 |
| - 44 | 44 | 49 | 31.2 |
| - 39 | 46 | 68 | 39.4 |
| - 34 | 48 | 67 | 47.5 |
| - 29 | 50 | 82 | 57.5 |
| - 24 | 52 | 65 | 65.3 |
| - 19 | 54 | 42 | 70.4 |
| - 14 | 56 | 51 | 76.6 |
| - 9 | 58 | 44 | 81.9 |
| - 4 | 60 | 35 | 86.2 |
| 1 | 62 | 29 | 89.7 |
| 6 | 64 | 25 | 92.7 |
| 11 | 66 | 12 | 94.2 |
| 16 | 68 | 13 | 95.8 |
| 21 | 70 | 13 | 95.8 |
| 26 | 72 | 10 | 98.5 |
| 31 | 74 | 5 | 99.2 |
| 36 | 76 | 4 | 99.6 |
| 41 | 78 | 1 | 99.8 |
| 46 | 80 | 1 | 99.9 |
| 51 | 82 | 0 | 99.9 |
| 56 | 84 | 0 | 99.9 |
| 61 | 86 | 1 | 100.0 |
| | TOTAL | 825 | |

| (4) Score | Raw Score | Std. Score | Percentage |
|---|---|---|---|
| Mean | -29.33 | 50 | |
| Sigma | 25.21 | 10 | |

Ratings :

| | | | | |
|---|---|---|---|---|
| High | A | -4 & above | 60 & above | 14 |
| Average | B | -3 to -52 | 41 to 59 | 68 |
| Law | C | -53 & below | 40 & below | 18 |
| Realibility | | | | 0.85 |

TABLE : 19.5

(5) NORMS FOR HOME SCIENCE (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -216 | 30 | 2 | .2 |
| -206 | 32 | 6 | 1.0 |
| -195 | 34 | 16 | 2.9 |
| -184 | 36 | 25 | 5.9 |
| -174 | 38 | 32 | 9.8 |
| -163 | 40 | 50 | 15.9 |
| -153 | 42 | 66 | 23.9 |
| -143 | 44 | 81 | 33.7 |
| -132 | 46 | 86 | 44.1 |
| -121 | 48 | 83 | 54.2 |
| -111 | 50 | 73 | 63.0 |
| -101 | 52 | 50 | 69.1 |
| - 90 | 54 | 43 | 74.3 |
| - 80 | 56 | 32 | 78.2 |
| - 69 | 58 | 39 | 82.9 |
| - 59 | 60 | 28 | 86.3 |
| - 48 | 62 | 12 | 87.8 |
| - 38 | 64 | 23 | 90.5 |
| - 27 | 66 | 19 | 92.8 |
| - 17 | 68 | 17 | 94.9 |
| - 6 | 70 | 14 | 96.6 |
| 4 | 72 | 8 | 97.6 |
| 15 | 74 | 2 | 97.8 |
| 25 | 76 | 5 | 98.4 |
| 36 | 78 | 5 | 99.0 |
| 46 | 80 | 2 | 99.3 |
| 57 | 82 | 1 | 99.4 |
| 67 | 84 | 2 | 99.6 |
| 78 | 86 | 2 | 99.9 |
| 88 | 88 | 0 | 99.9 |
| 98 | 90 | 0 | 99.9 |
| 109 | 92 | 0 | 99.9 |
| 119 | 94 | 0 | 99.9 |
| 130 | 96 | 0 | 99.9 |
| 140 | 98 | 1 | 100.0 |
| | TOTAL | 825 | |

| (5) Score | Raw Score | Std. Score | Percentage |
|---|---|---|---|
| Mean | -110.61 | 50 | |
| Sigma | 52.35 | 10 | |

Ratings :

| | | | | |
|---|---|---|---|---|
| High | A | -59 & above | 60 & above | 14 |
| Average | B | -58 to -155 | 41 to 49 | 70 |
| Law | C | -159 & below | 40 & below | 16 |
| Realibility | | | 240 | 0.87 |

TABLE : 19.6

(6) NORMS FOR MEDICAL (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -68 | 24 | 1 | .1 |
| -65 | 26 | 3 | .5 |
| -61 | 28 | 2 | .7 |
| -58 | 30 | 4 | 1.2 |
| -55 | 32 | 20 | 2.4 |
| -52 | 34 | 21 | 5.0 |
| -49 | 36 | 28 | 8.4 |
| -46 | 38 | 42 | 13.5 |
| -43 | 40 | 44 | 18.8 |
| -40 | 42 | 65 | 26.7 |
| -36 | 44 | 60 | 33.9 |
| -33 | 46 | 68 | 42.2 |
| -30 | 48 | 51 | 48.4 |
| -27 | 50 | 63 | 56.0 |
| -24 | 52 | 61 | 63.4 |
| -21 | 54 | 40 | 68.2 |
| -18 | 56 | 66 | 76.2 |
| -14 | 58 | 41 | 81.2 |
| -11 | 60 | 36 | 85.6 |
| - 8 | 62 | 32 | 89.5 |
| - 5 | 64 | 27 | 92.7 |
| - 2 | 66 | 17 | 94.8 |
| 1 | 68 | 11 | 96.1 |
| 5 | 70 | 12 | 97.6 |
| 8 | 72 | 8 | 98.5 |
| 11 | 74 | 6 | 99.3 |
| 14 | 76 | 2 | 99.5 |
| 17 | 78 | 2 | 99.8 |
| 20 | 80 | 0 | 99.8 |
| 23 | 82 | 0 | 99.8 |
| 27 | 84 | 0 | 99.8 |
| 30 | 86 | 1 | 99.8 |
| 33 | 88 | 0 | 99.8 |
| 36 | 90 | 1 | 100.0 |
| | TOTAL | 825 | |

| (6) Score | | Raw Score | Std. Score | Percentage |
|---|---|---|---|---|
| Mean | | -26.93 | 50 | |
| Sigma | | 15.67 | 10 | |
| Ratings : | | | | |
| High | A | | 60 & above | 14 |
| Average | B | | 41 to 59 | 67 |
| Law | C | | 40 to 25 | 19 |
| Realibility | | | | 0.67 |

TABLE : 19.7

(7) NORMS FOR PERFORMING ARTS (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -158 | 26 | 1 | .1 |
| -149 | 28 | 5 | .7 |
| -140 | 30 | 14 | 2.4 |
| -131 | 32 | 15 | 4.2 |
| -122 | 34 | 19 | 6.5 |
| -114 | 36 | 29 | 10.1 |
| -105 | 38 | 35 | 14.3 |
| - 96 | 40 | 52 | 20.6 |
| - 87 | 42 | 47 | 26.3 |
| - 78 | 44 | 52 | 32.6 |
| - 70 | 46 | 49 | 38.5 |
| - 61 | 48 | 59 | 45.7 |
| - 52 | 50 | 68 | 53.9 |
| - 43 | 52 | 59 | 61.1 |
| - 34 | 54 | 56 | 67.9 |
| - 26 | 56 | 65 | 75.8 |
| - 17 | 58 | 47 | 81.5 |
| 8 | 60 | 35 | 85.7 |
| 1 | 62 | 38 | 90.3 |
| 10 | 64 | 22 | 93.0 |
| 18 | 66 | 19 | 95.3 |
| 27 | 68 | 12 | 96.7 |
| 36 | 70 | 8 | 97.7 |
| 45 | 72 | 8 | 98.7 |
| 54 | 74 | 6 | 99.4 |
| 62 | 76 | 3 | 99.8 |
| 71 | 78 | 2 | 100.0 |
| | TOTAL | 825 | |

| (7) Score | Raw Score | Std. Score | Percentage |
|---|---|---|---|
| Mean | -52.04 | 50 | |
| Sigma | 44.02 | 10 | |

Ratings :

| | | | |
|---|---|---|---|
| High | A | 60 & above | 14 |
| Average | B | 41 to 59 | 65 |
| Law | C | 40 & below | 21 |
| Realibility | | | 0.78 |

TABLE : 19.8

(8) NORMS FOR SCIENCE (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -80 | 18 | 1 | .1 |
| -76 | 20 | 0 | .1 |
| -72 | 22 | 0 | .1 |
| -69 | 24 | 1 | .2 |
| -65 | 26 | 2 | .5 |
| -61 | 28 | 6 | 1.2 |
| -57 | 30 | 11 | 2.5 |
| -54 | 32 | 6 | 3.3 |
| -50 | 34 | 20 | 5.7 |
| -46 | 36 | 22 | 8.4 |
| -42 | 38 | 48 | 14.2 |
| -39 | 40 | 45 | 19.6 |
| -35 | 42 | 43 | 24.8 |
| -31 | 44 | 53 | 31.3 |
| -28 | 46 | 62 | 38.8 |
| -24 | 48 | 69 | 47.2 |
| -20 | 50 | 53 | 53.6 |
| -16 | 52 | 67 | 61.7 |
| -13 | 54 | 71 | 70.3 |
| - 9 | 56 | 59 | 77.5 |
| - 5 | 58 | 30 | 81.1 |
| - 1 | 60 | 50 | 87.2 |
| 2 | 62 | 29 | 90.7 |
| 6 | 64 | 29 | 94.2 |
| 10 | 66 | 9 | 95.3 |
| 14 | 68 | 11 | 96.6 |
| 17 | 70 | 10 | 97.8 |
| 21 | 72 | 6 | 98.5 |
| 25 | 74 | 3 | 98.9 |
| 29 | 76 | 5 | 99.5 |
| 32 | 78 | 1 | 99.6 |
| 36 | 80 | 0 | 99.6 |
| 40 | 82 | 0 | 99.6 |
| 44 | 84 | 0 | 99.6 |
| 47 | 86 | 1 | 99.8 |
| 51 | 88 | 0 | 99.8 |
| 55 | 90 | 2 | 100.0 |
| | TOTAL | 825 | |

| (8) Score | Raw Score | Std. Score | Percentage |
|---|---|---|---|
| Mean | -19.97 | 50 | |
| Sigma | 18.69 | 10 | |

Ratings :

| | | | | |
|---|---|---|---|---|
| High | A | -1 & above | 60 & above | 13 |
| Average | B | -2 to -37 | 41 to 59 | 67 |
| Law | C | -38 & below | 40 & below | 20 |
| Realibility | | | | 0.79 |

TABLE : 19.9

(9) NORMS FOR SOCIAL WORK (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -99 | 20 | 1 | .1 |
| -94 | 22 | 0 | .1 |
| -89 | 24 | 1 | .2 |
| -84 | 26 | 1 | .2 |
| -79 | 28 | 5 | .8 |
| -74 | 30 | 8 | 1.8 |
| -68 | 32 | 14 | 3.5 |
| -63 | 34 | 22 | 6.2 |
| -58 | 36 | 25 | 9.2 |
| -53 | 38 | 43 | 14.4 |
| -48 | 40 | 45 | 19.9 |
| -43 | 42 | 45 | 25.3 |
| -38 | 44 | 48 | 31.2 |
| -33 | 46 | 71 | 39.8 |
| -27 | 48 | 57 | 46.7 |
| -22 | 50 | 71 | 55.3 |
| -17 | 52 | 69 | 63.6 |
| -12 | 54 | 57 | 70.5 |
| - 7 | 56 | 51 | 76.7 |
| - 2 | 58 | 43 | 81.9 |
| 3 | 60 | 33 | 85.9 |
| 8 | 62 | 21 | 88.5 |
| 14 | 64 | 33 | 92.5 |
| 19 | 66 | 16 | 94.4 |
| 24 | 68 | 21 | 97.0 |
| 29 | 70 | 9 | 98.1 |
| 34 | 72 | 5 | 98.7 |
| 39 | 74 | 4 | 99.2 |
| 44 | 76 | 2 | 99.4 |
| 49 | 78 | 1 | 99.5 |
| 55 | 80 | 2 | 99.8 |
| 60 | 82 | 2 | 100.0 |
| | TOTAL | 825 | |

| (9) Score | Raw Score | Std. Score | Percentage |
|---|---|---|---|
| Mean | -22.26 | 50 | |
| Sigma | 25.56 | 10 | |

Ratings :

| | | | |
|---|---|---|---|
| High | A | 60 & above | 14 |
| Average | B | 41 to 59 | 66 |
| Law | C | 40 & below | 20 |
| Realibility | | | 0.74 |

TABLE : 19.10

(10) NORMS FOR TECHNOLOGY & ENGINEERING (N=825)

| Raw Score | Std. Score | Frequency | Cum Percent |
|---|---|---|---|
| -67 | 24 | 3 | .4 |
| -63 | 26 | 0 | .4 |
| -60 | 28 | 3 | .7 |
| -57 | 30 | 9 | 1.8 |
| -53 | 32 | 7 | 2.7 |
| -50 | 34 | 23 | 5.5 |
| -47 | 36 | 34 | 9.6 |
| -43 | 38 | 36 | 13.9 |
| -40 | 40 | 47 | 19.6 |
| -37 | 42 | 38 | 24.2 |
| -33 | 44 | 69 | 32.6 |
| -30 | 46 | 56 | 39.4 |
| -27 | 48 | 65 | 47.3 |
| -23 | 50 | 73 | 56.1 |
| -20 | 52 | 71 | 64.7 |
| -17 | 54 | 51 | 70.9 |
| -13 | 56 | 53 | 77.3 |
| -10 | 58 | 44 | 82.7 |
| - 7 | 60 | 28 | 86.1 |
| - 4 | 62 | 32 | 89.9 |
| 0 | 64 | 20 | 92.4 |
| 3 | 66 | 11 | 93.7 |
| 7 | 68 | 20 | 96.1 |
| 10 | 70 | 7 | 97.0 |
| 13 | 72 | 11 | 98.3 |
| 16 | 74 | 4 | 98.8 |
| 20 | 76 | 6 | 99.5 |
| 23 | 78 | 1 | 99.6 |
| 26 | 80 | 0 | 99.6 |
| 30 | 82 | 3 | 100.0 |
| | TOTAL | 825 | |

| (10) Score | Raw Score | Std. Score | Percentage |
|---|---|---|---|
| Mean | -23.42 | 50 | |
| Sigma | 16.56 | 10 | |

Ratings :

| | | | | |
|---|---|---|---|---|
| High | A | -7 & above | 60 & above | 14 |
| Average | B | -8 to -38 | 41 to 59 | 66 |
| Law | C | -39 & below | 40 & below | 20 |
| Realibility | | | | 0.74 |

TABLE - 20 (A)

Distribution of the ranges of Raw Scores Corresponding to the Standard Scores (Z Scores) for each of the data on the the basis of the data on Interest Inventory from Gujarati Medium Higher Secondary Schools of GUJARAT

Norm for Urban Students (N-250)
Mean - 50
Sigma - 10

| Sr. No. | Fields | Std. Scores | 60 & Above | 41 to 59 | 25 to 40 |
|---|---|---|---|---|---|
| | | Rating | A | B | C |
| 1. | Agriculture | | 15 and above | 14 to -48 | -49 and below |
| 2. | Arts | | -14 and above | -15 to -65 | -66 and below |
| 3. | Commerce | | 9 and above | -8 to -41 | -42 and below |
| 4. | Fine Arts | | -3 and above | -2 to -56 | -57 and below |
| 5. | Home Science | | -46 and above | -45 to-154 | -155 and below |
| 6. | Medical | | -7 and above | -8 to -40 | -41 and below |
| 7. | Performing Arts | | -12 and above | -13 to -96 | -97 and below |
| 8. | Science | | 4 and above | +3 to -32 | -33 and below |
| 9. | Social Work | | 8 and above | +9 to -45 | -46 and below |
| 10. | Tech. & Engg. | | -1 and above | -2 to -34 | -35 and below |

TABLE - 20 (B)

Distribution of the ranges of Raw Scores Corresponding to the Standard Scores (Z Scores) for each of the data on the the basis of the data on Interest Inventory from Gujarati Medium Higher Secondary Schools of GUJARAT

Norm for Urban Girls (N-209)
Mean - 50
Sigma - 10

| Sr. No. | Fields | Std. Scores / Rating | 60 & Above A | 41 to 59 B | 25 to 40 C |
|---|---|---|---|---|---|
| 1. | Agriculture | | -4 and above | -5 to -65 | -66 and below |
| 2. | Arts | | -23 and above | -24 to -75 | -76 and below |
| 3. | Commerce | | +3 and above | 2 to -47 | -48 and below |
| 4. | Fine Arts | | +2 and above | 1 to -46 | -47 and below |
| 5. | Home Science | | -59 and above | -60 to-162 | -163 and below |
| 6. | Medical | | -12 and above | -13 to -40 | -41 and below |
| 7. | Performing Arts | | +1 and above | -1 to -88 | -89 and below |
| 8. | Science | | -5 and above | -6 to -40 | -41 and below |
| 9. | Social Work | | +1 and above | -1 to -45 | -46 and below |
| 10. | Tech. & Engg. | | -8 and above | -9 to -39 | -40 and below |

TABLE - 20 (C)

Distribution of the ranges of Raw Scores Corresponding to the Standard Scores (Z Scores) for each of the data on the the basis of the data on Interest Inventory from Gujarati Medium Higher Secondary Schools of GUJARAT

Norm for Rural Boys (N=229)
Mean - 50
Sigma - 10

| Sr. No. | Fields | Std. Scores Rating | 60 & Above A | 41 to 59 B | 25 to 40 C |
|---|---|---|---|---|---|
| 1. | Agriculture | | 21 and above | 20 to -42 | -43 and below |
| 2. | Arts | | -18 and above | -19 to -67 | -68 and below |
| 3. | Commerce | | 11 and above | 10 to -40 | -41 and below |
| 4. | Fine Arts | | -10 and above | -9 to -54 | -55 and below |
| 5. | Home Science | | -68 and above | -69 to-163 | -164 and below |
| 6. | Medical | | -13 and above | -14 to -42 | -43 and below |
| 7. | Performing Arts | | -19 and above | -20 to -97 | -98 and below |
| 8. | Science | | -6 and above | -7 to -43 | -44 and below |
| 9. | Social Work | | +2 and above | 1 to -45 | -46 and below |
| 10. | Tech. & Engg. | | -10 and above | -11 to -40 | -41 and below |

TABLE - 20 (D)

Distribution of the ranges of Raw Scores Corresponding to the Standard Scores (Z Scores) for each of the data on the the basis of the data on Interest Inventory from Gujarati Medium Higher Secondary Schools of GUJARAT

Norm for Rural Girls (N=137)
Mean - 50
Sigma - 10

| Sr. No. | Fields | Std. Scores / Rating | 60 & Above A | 41 to 59 B | 25 to 40 C |
|---|---|---|---|---|---|
| 1. | Agriculture | | -1 and above | -2 to -60 | -61 and below |
| 2. | Arts | | -18 and above | -19 to -66 | -67 and below |
| 3. | Commerce | | +10 and above | 9 to -37 | -38 and below |
| 4. | Fine Arts | | -8 and above | -9 to -50 | -51 and below |
| 5. | Home Science | | -67 and above | -68 to-149 | -150 and below |
| 6. | Medical | | -15 and above | -16 to -40 | -41 and below |
| 7. | Performing Arts | | -19 and above | -20 to -96 | -97 and below |
| 8. | Science | | -6 and above | -7 to -43 | -44 and below |
| 9. | Social Work | | +1 and above | -1 to -44 | -45 and below |
| 10. | Tech. & Engg. | | -13 and above | -14 to -40 | -41 and below |

prepared for each of the ten fields of education for Gujarat State as under. (Refer - Table 19.1 to 19.10)

To meet the needs of the two entirely different groups of persons, the layman and the statistician, standard scores were given on the specially devised sheet so that they could be easily translated into the letter which are already presented at the bottom of the Norm tables. Every test had a certain degree of dependability of this test and might be interpreted as follows.

### 4.3.8 Utility Of The Present Interest Inventory

The present verbal Academic Interest Inventory helps in identifying interests in broad areas of education, viz. (1) AGRICULTURE, (2) ARTS, (3) COMMERCE, (4) FINE ARTS, (5) HOME-SCIENCE (6) MEDICAL, (7) PERFORMING-ARTS (8) SCIENCE, (9) SOCIAL WORK, and (10) TECHNOLOGY & ENGINEERING.

The variety of fields of education are available in the contemporary India, it becomes a formidable task to study each in relation to a particular individual for finding out these which are most suitable. Moreover, it is very difficult for a XIIth passed average student to know actually which field she or he is really most interested in, simply because he does not know the requirements and the activities involved in each of these fields. But at the same time, it could be identified from this list of his likes

and dislikes, the field which would be best suited to him. After the field to be looked into have been narrowed down, they could be considered in detail for selecting the careers most suitable for her or him.

After obtaining the raw score and tallying with standard score on each of the ten educational scale of one student, the teacher or counsellor obtains a composite score as under for the ten areas of study.

FIGURE : 4

Scores of First case on Interest Inventory

| Disciplines | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Raw Scores | 7 | 10 | -23 | -31 | -137 | -7 | -98 | -7 | -9 | -26 |
| Std. Score | 59 | 70 | 48 | 49 | 45 | 63 | 40 | 57 | 55 | 48 |

Looking to the standard scores, the student get (above 60) 70 standard score with A rating in Arts as his first highest preference and Medical as his second highest choice with 63 standard score.

FIGURE : 5

Scores of Second case on Interest Inventory

| Disciplines | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Raw Scores | -62 | -67 | -42 | -95 | -177 | -53 | -138 | -62 | -71 | -20 |
| Std. Scores | 38 | 42 | 41 | 24 | 37 | 33 | 30 | 27 | 31 | 52 |

In view of the standard scores of second student it can be seen that he prefers Technology and Engineering as his first highest choice with a standard score of 52 and Arts as second highest choice with 42 and B rating for both the disciplines.

These preferences on ten disciplines can be narrowed down in 6 themes suggested by Campbell (1977) as charaterized on the basis of Hollands' as described in Campbells' manual in Appendix B. Campbell has classified 120 occupations based on empirical research under these six themes (Holland 1966) which are also considered by the investigator to classify the various disciplines as described as under.

FIGURE : 6

Classification of disciplines according to six themes*

| Sr. No. | Code | THEMES | Classified Occupational Interest by Campbell | Disciplines |
|---|---|---|---|---|
| 1. | (R) | Realistic | Outdoors, Technical, Mechanical II | Agriculture, & Tech. & Engg. |
| 2. | (E) | Enterprising | Enterpreneurial, Persua-ssive, Political | Art |
| 3. | (C) | Conventional | Methodical, Organized, Clerical | Commercial |
| 4. | (A) | Artistic | Dramatic, Musical, Self-experience | Fine Arts, Per. Arts |
| 5. | (S) | Social | Helping, Guiding, Group-usiented | Home Science, Social-work |
| 6. | (I) | Investigative | Scientific, Inquiring, Analytical | Medical, Science |

*Holland

In the light of the above mentioned themes, the preference of the first student can be interpreted under Enterprising and Investigative as (EI). This means that he is most interested in Medical with high interest in Arts proving to be an 'intellectual' rejecting artistic and conventional areas. The student may be guided further to choose study or occupation as medical inventor, a college professor, or for language oriented medical career such as book writer or researcher in future.

Looking to the scores of a second case, he is most interested in Technology and Engineering under Realistic and Enterprising with second highest preference in Arts, identified as (RE) with B rating rejecting Artistic and Investigative areas. His score to convential i.e. Commerce is quite similar to Arts and hence may be suggested to take mechanical as conventional career.

As explained earlier, this present academic Interest Inventory will be helpful for not only educational guidance but also for vocational guidance for higher education level students for selecting the future educational and vocational careers.