Appendix-I

1-Significance of the difference between two independent means of large samples:

Given: Mean ($M_1$), number of cases ($N_1$) and standard deviation ($\sigma_1$) for the first sample and Mean ($M_2$), number of cases ($N_2$) and standard deviation ($\sigma_2$) for the second sample.

Computation of critical ratio (CR):

Standard error of difference $= \sigma_D = \sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}$

Critical ratio $= CR = \frac{D}{\sigma_D}$

Where $D =$ difference between the obtained means $= M_1 - M_2$

2-Significance of difference between two uncorrelated percentages when the sample is large:

Let $P_1$ and $P_2$ be the percent occurrence of the observed behavior for two samples of sizes $N_1$ and $N_2$ respectively. Then,

\[
P = \frac{N_1 P_1 + N_2 P_2}{N_1 + N_2}
\]

\[
Q = 1 - P
\]

\[
\sigma_{D\%} = \sqrt{PQ \left(\frac{1}{N_1} + \frac{1}{N_2}\right)}
\]

Critical ratio (CR) $= \frac{P_1 - P_2}{\sigma_{D\%}}$

Degrees of freedom $= N_1 + N_2 - 2$
3- Table D' :

<table>
<thead>
<tr>
<th>df</th>
<th>Probability (P)</th>
<th>df</th>
<th>Probability (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.10 0.05 0.02 0.01</td>
<td></td>
<td>0.10 0.05 0.02 0.01</td>
</tr>
<tr>
<td>1</td>
<td>6.34 12.71 31.82 63.06</td>
<td>25</td>
<td>1.71 2.06 2.48 2.79</td>
</tr>
<tr>
<td>2</td>
<td>2.92 4.30 6.96 9.92</td>
<td>26</td>
<td>1.71 2.06 2.48 2.78</td>
</tr>
<tr>
<td>3</td>
<td>2.35 3.18 4.54 5.84</td>
<td>27</td>
<td>1.70 2.05 2.47 2.77</td>
</tr>
<tr>
<td>4</td>
<td>2.13 2.78 3.75 4.60</td>
<td>28</td>
<td>1.70 2.05 2.47 2.76</td>
</tr>
<tr>
<td>5</td>
<td>2.02 2.57 3.36 4.03</td>
<td>29</td>
<td>1.70 2.04 2.46 2.76</td>
</tr>
<tr>
<td>6</td>
<td>1.94 2.45 3.14 3.71</td>
<td>30</td>
<td>1.70 2.04 2.46 2.75</td>
</tr>
<tr>
<td>7</td>
<td>1.90 2.36 3.00 3.50</td>
<td>35</td>
<td>1.69 2.03 2.44 2.72</td>
</tr>
<tr>
<td>8</td>
<td>1.86 2.31 2.90 3.36</td>
<td>40</td>
<td>1.68 2.02 2.42 2.71</td>
</tr>
<tr>
<td>9</td>
<td>1.83 2.26 2.82 3.25</td>
<td>45</td>
<td>1.68 2.02 2.41 2.69</td>
</tr>
<tr>
<td>10</td>
<td>1.81 2.23 2.76 3.17</td>
<td>50</td>
<td>1.68 2.01 2.40 2.68</td>
</tr>
<tr>
<td>11</td>
<td>1.80 2.20 2.72 3.11</td>
<td>60</td>
<td>1.67 2.00 2.39 2.66</td>
</tr>
<tr>
<td>12</td>
<td>1.78 2.18 2.68 3.06</td>
<td>70</td>
<td>1.67 1.99 2.38 2.65</td>
</tr>
<tr>
<td>13</td>
<td>1.77 2.16 2.65 3.01</td>
<td>80</td>
<td>1.66 1.99 2.38 2.64</td>
</tr>
<tr>
<td>14</td>
<td>1.76 2.14 2.62 2.98</td>
<td>90</td>
<td>1.66 1.99 2.37 2.63</td>
</tr>
<tr>
<td>15</td>
<td>1.75 2.13 2.60 2.95</td>
<td>100</td>
<td>1.66 1.98 2.36 2.63</td>
</tr>
<tr>
<td>16</td>
<td>1.75 2.12 2.58 2.92</td>
<td>125</td>
<td>1.66 1.98 2.36 2.62</td>
</tr>
<tr>
<td>17</td>
<td>1.74 2.11 2.57 2.90</td>
<td>150</td>
<td>1.66 1.98 2.35 2.61</td>
</tr>
<tr>
<td>18</td>
<td>1.73 2.10 2.55 2.88</td>
<td>200</td>
<td>1.65 1.97 2.35 2.60</td>
</tr>
<tr>
<td>19</td>
<td>1.73 2.09 2.54 2.86</td>
<td>300</td>
<td>1.65 1.97 2.34 2.59</td>
</tr>
<tr>
<td>20</td>
<td>1.72 2.09 2.53 2.84</td>
<td>400</td>
<td>1.65 1.97 2.34 2.59</td>
</tr>
<tr>
<td>21</td>
<td>1.72 2.08 2.52 2.83</td>
<td>500</td>
<td>1.65 1.96 2.33 2.59</td>
</tr>
<tr>
<td>22</td>
<td>1.72 2.07 2.51 2.82</td>
<td>1000</td>
<td>1.65 1.96 2.33 2.58</td>
</tr>
<tr>
<td>23</td>
<td>1.71 2.07 2.50 2.81</td>
<td>∞</td>
<td>1.65 1.96 2.33 2.58</td>
</tr>
<tr>
<td>24</td>
<td>1.71 2.06 2.49 2.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix-II

List of schools-I

(POPULATION)

1-BHIWANDI

1. SALAUDDIN AYUBI MEMORIAL URDU H.SCH, BHIWANDI, THANE 16.19.005
2. NEW NATIONAL URDU H.SCH, SHANTINAGAR, BHIWANDI, THANE 16.19.006
3. ALAHMD HIGH SCHOOL, BHIVANDI, THANE 16.19.016
5. SAMDIYA HIGH SCHOOL, BENGALPURA, BHIWANDI, THANE 16.19.026
6. AQSA GIRL'S HIGH SCHOOL, BHIWANDI, THANE 16.19.027
7. AQSA GIRL'S ENGLISH HIGH SCHOOL, BHIWANDI, THANE 16.19.028
8. RAFIUDDIN FAKIH BOY'S HIGH SCHOOL, BHIWANDI, THANE 16.19.029
9. S.A.SHAIKH URDU HIGH SCHOOL, BHIVANDI, THANE 16.19.030
10. AMJADIYA HIGH SCHOOL, BHIWANDI, DIST.THANE 16.19.031
11. ANSARI SAFIA GIRL'S HIGH SCHOOL, BHIWANDI, THANE 16.19.032
12. R.FAKIH.H.SCHL, QUASAIWADA, NIZAMPUR, BHIWANDI, THANE 16.19.036
13. S.ADAM S.TECH H.SCHOOL, QTRS GALI RD, BHIWANDI, THANE 16.19.037
14. ALU NUR GIRL'S HIGH SCHOOL, BHIVANDI, THANE 16.19.040
15. RABIYA GIRL'S HIGH SCHOOL, KANERI, BHIVANDI 16.19.041
16. BHIWANDI URDU HIGH SCHOOL, VITTHALNAGAR, BHIWANDI 16.19.047
17. MAULANA ABDUL AZAD URDU MADHYAMIK SHAJA, BHIWANDI 16.19.048

2-MUMBAI

1. BANDRA URDU HIGH SCHOOL, JAM MASJID, BANDRA, MUMBAI 32.01.012
2. A.I.I.S DR. M. I. JAMKHANWALA HIGH SCHOOL, BANDRAW 32.01.017
3. SHAHEEN URDU HIGH SCHOOL, BANDRA (E), MUMBAI 32.01.027
4. NATIONAL HIGH SCHOOL, BANDRA (E), MUMBAI 32.01.030
5. MAULANA AZAD URDU HIGH SCHOOL, SANTACRUZ (E) 32.01.076
6. SANSKAR URDU HIGH SCHOOL, SANTACRUZ, MUMBAI 32.01.082
7. AWAMI URDU HIGH SCHOOL, BANDRA (WEST), MUMBAI 32.01.084
8. MAROL URDU HIGH SCHOOL, MAROSHI RD, MAROL, MUMBAI-59 32.02.031
9. NATIONAL URDU HIGH SCHOOL, JOGESHWARI (E), MUMBAI-60 32.02.070
10. ALFALAH HIGH SCHOOL, JANTA COL, JOGESHWARI (E), MUMBAI 32.02.071
11. MUMBAI URDU HIGH SCHOOL, ANDHERI, MUMBAI 32.03.026
12. SHIBLI NOAMANI URDU H.SCHOOL, JUHU LANE, ANDHERI (W) 2.03.027
13. ANDHERI CITIZEN URDU NIGHT HIGH SCHOOL, ANDHERI (W) 32.03.029
14. ANJUMAN-E-ISLAM A.D.B.GIRL'S H.S, ANDHERI (W), MUMBAI 32.03.051
15. ANJUMAN-E-ISLAM HIGH SCHOOL, ANDHERI, MUMBAI 32.03.052
16. FAROOQ HIGH SCHOOL FOR GIRL'S, JOGESHWARI, MUMBAI 32.03.056
17. FAROOQ SATAR UMARBHOY H.SCHOOL, JOGESHWARI, MUMBAI 32.03.057

224
18. MADNI HIGH SCHOOL, MOMIN NAGAR, JOGESHWARI (W), MUMBAI 32.03.058
19. AL ITTEHAD URDU HIGH SCHOOL, JOGESHWARI (W) 32.03.059
20. ABDULLHA QUERESHI HIGH SCHOOL, JOGESHWARI 32.03.063
21. U.E.D.S.S.ABDULLA QUERESHI H.SCHL, JOGESHWARI, MUMBAI 32.03.064
22. A K I HUSSAIN ALLANA ENGL SCHL.ADARSH NGR.ANHERI 32.03.103

3-MALEGAON

2. MALEGAON HIGH SCHOOL & JUNIOR COLLEGE, MALEGAON 13.16.005
3. J.A.T.GIRL'S HIGH SCHOOL & JR. COLLEGE, MALEGAON 13.16.007
4. JAMHOOR HIGH SCHOOL, MALEGAON 13.16.008
5. TAHUB HIGH SCHOOL, MALEGAON 13.16.009
6. J.A.T.NIGHT HIGH SCHOOL, MALEGAON, 13.16.010
7. SHAIKH USMAN HIGH SCHOOL, MALEGAON 13.16.013
8. THE MALEGAON GIRL'S HIGH SCHOOL, MALEGAON, 13.16.014
9. SWES HIGH SCHOOL, MALEGAON 13.16.017
10. SARDAR HIGH SCHOOL, MALEGAON 13.16.018
11. JAMATUL HUDDA HIGH SCHOOL, MALEGAON 13.16.019
12. NISHAT GIRL'S HIGH SCHOOL, MALEGAON 13.16.020
13. SIR SAYYAD AHMED KHAN HIGH SCHOOL, MALEGAON 13.16.021
14. T.M.HIGH SCHOOL, ISLAMPURA, MALEGAON 13.16.022
15. MAULANA MOHD.ISHAQ HIGH SCHOOL, MALEGAON 13.16.023
16. S.M.KHALIL HIGH SCHOOL, GOLDEN NAGER, MALEGAON 13.16.024
17. THE URDU NIGHT HIGH SCHOOL, MAHEVINAGAR, MALEGAON 13.16.025
18. MODERN HIGH SCHOOL, JAFARNAGAR, MALEGAON 13.16.026
19. HAZRAT BIBI FATEMA GIRL'S HIGH SCHOOL, MALEGAON 13.16.027
20. KHATUN HAJJIN GIRL'S HIGH SCHOOL, MALEGAON 13.16.028
21. DIAMOND GIRL'S HIGH SCHOOL, MALEGAON 13.16.029
22. MOTHER AYESHA URDU HIGH SCHOOL, MALEGAON 13.16.030
23. SANA HIGH SCHOOL, MALEGAON 13.16.031
24. AL-HERA URDU HIGH SCHOOL, MALEGAON CAMP 13.16.036
25. GULSHAN A AMANA HIGHSCHOOLN JAFARNAGAR, MALEGAON 13.16.040
26. SHEEDA URDU HIGH SCHOOL NISHANTNAGAR, MALEGAON 13.16.041

4-DHULE

1. ANGLO URDU HIGH SCHOOL, IKBAL ROAD, DHULE 14.05.006
2. B.K.SHAIKH URDU HIGH SCHOOL, DHULE 14.05.016
3. ISALAMIK DAY SCHOOL, VADJAIROAD, DHULE 14.05.017
4. L.M.SARDAR URDU HIGH SCHOOL, DEOPUR, DHULE 14.05.021
5. ISLAHUL BANAT URDU GIRL'S HIGH SCHOOL, DHULE 14.05.049
6. MOHOMMADIYA URDU BOY'S HIGH SCHOOL, DHULE 14.05.050
7. MAULANA AZAD URDU GIRL'S HIGH SCHOOL, DHULE 14.05.051
8. H.B. SARDAR URDU HIGH SCHOOL, DEOPUR, DHULE 14.05.052
9. SWESS URDU HIGH SCHOOL, DHULE 14.05.053
10. HAJJAN SAIRABANO GIRL'S URDU HIGH SCHOOL, DHULE 14.05.055
11. NATIONAL URDU HIGH SCHOOL, DHULE 14.05.056
12. ABEDA ABDUL MUGNI URDU GIRL'S HIGH SCHOOL, DHULE 14.05.057
13. NUR URDU MADHYAMIK VIDHYALAYA, DHULE 14.05.060
14. MOHAMMAD SIDDIQUE URDU HIGH SCHOOL, DHULE 14.05.063
15. URDU HIGH SCHOOL, ZAM KA MALA, DHULE 14.05.064
### List of schools-II

*(SAMPLE)*

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>School</th>
<th>Address</th>
<th>City</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sir Syed high school</td>
<td>Nayapura ward, Raunakabad, Malegaon</td>
<td>Malegaon</td>
<td>Co-education</td>
</tr>
<tr>
<td>2</td>
<td>Urdu night high school</td>
<td>Mahevi Nagar, Malegaon</td>
<td>Malegaon</td>
<td>Co-education</td>
</tr>
<tr>
<td>3</td>
<td>Tahezeeb high school</td>
<td>Bajrang wadi, Malegaon</td>
<td>Malegaon</td>
<td>Co-education</td>
</tr>
<tr>
<td>4</td>
<td>Shaikh Usman high school</td>
<td>MHB colony, Malegaon</td>
<td>Malegaon</td>
<td>Co-education</td>
</tr>
<tr>
<td>5</td>
<td>Modern high school</td>
<td>Naya pura, Malegaon</td>
<td>Malegaon</td>
<td>Co-education</td>
</tr>
<tr>
<td>6</td>
<td>Diamond girls high school</td>
<td>Bajrang wadi, Malegaon</td>
<td>Malegaon</td>
<td>Girls</td>
</tr>
<tr>
<td>7</td>
<td>National Urdu high school</td>
<td>Dhule</td>
<td>Dhule</td>
<td>Boys</td>
</tr>
<tr>
<td>8</td>
<td>L. M. Sardar high school</td>
<td>Deopur, Dhule</td>
<td>Dhule</td>
<td>Co-education</td>
</tr>
<tr>
<td>9</td>
<td>Hajjin Saira Bano girls high school</td>
<td>Millat Nagar, Dhule</td>
<td>Dhule</td>
<td>Girls</td>
</tr>
<tr>
<td>10</td>
<td>Haji Badlu Sardar high school</td>
<td>Deopur, Dhule</td>
<td>Dhule</td>
<td>Co-education</td>
</tr>
<tr>
<td>11</td>
<td>Saad Aadam S. high school</td>
<td>Bhiwandi</td>
<td>Bhiwandi</td>
<td>Co-education</td>
</tr>
<tr>
<td>12</td>
<td>Rafiuddin Fakih Boy’s high school</td>
<td>Bhiwandi</td>
<td>Bhiwandi</td>
<td>Boys</td>
</tr>
<tr>
<td></td>
<td>School Name</td>
<td>Location</td>
<td>City</td>
<td>Gender</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------</td>
<td>----------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>13</td>
<td>Samadiya high school</td>
<td>Bhiwandi</td>
<td>Bhiwandi</td>
<td>Boys</td>
</tr>
<tr>
<td>14</td>
<td>R. Fakih high school</td>
<td>Quazi wada,</td>
<td>Bhiwandi</td>
<td>Girls</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bhiwandi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>National Urdu high school</td>
<td>Jogeshwari,</td>
<td>Mumbai</td>
<td>Boys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mumbai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Al-Ittehad Urdu high school</td>
<td>Jogeshwari (W),</td>
<td>Mumbai</td>
<td>Co-education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mumbai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Bandra Urdu high school</td>
<td>Jama Masjid,</td>
<td>Mumbai</td>
<td>Boys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bandra, Mumbai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Madani high school</td>
<td>Jogeshwari,</td>
<td>Mumbai</td>
<td>Co-education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mumbai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Mohamadiya high school</td>
<td>Bhindi Bazar,</td>
<td>Mumbai</td>
<td>Boys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mumbai</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix-III

OPINIONNAIRE

Respected teachers,

This opinionnaire is a part of research work. Its major purpose is to get the opinion of qualified and experienced teachers of mathematics, teaching mathematics to Class X of Urdu medium secondary schools of Maharashtra state, about the significance of combined passing provision (cpp) and its effects on the teaching learning of mathematics.

This is an important research work aimed to uplift the standard of teaching learning of mathematics in Urdu medium schools.

I expect that you will cooperate positively for making the teaching learning of mathematics more effective.

Thanking you in anticipation.

Ansari Khurhsid Ahmed

Lecturer
Marathwada College of education
Aurangabad

230
OPINIONNAIRE

Part A

Name: __________________________________________________________

School: _________________________________________________________

Educational Qualification: __________________________________________

Teaching experience: _____________________________________________

Teaching subjects: ______________________________________________

Kindly put a tick mark in the appropriate box.

1. Are you B.Ed. with mathematics method?
   Yes [ ] No [ ]

2. Do you enjoy teaching of mathematics?
   Yes [ ] No [ ]

3. If not, mention reasons.
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

4. Do your students take interest in learning of mathematics?
   Yes [ ] No [ ]

5. If not, mention reasons.
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
6. Do you take special efforts to make the teaching of mathematics effective?  

Yes  
No

7. If yes, mentions briefly the efforts.

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

8. How is the base of your students in mathematics?  

Average  Above ave.  Below ave.

OPINIONNAIRE  
PART B

Kindly put a tick mark in the appropriate box.

1. Mathematics is a difficult subject as compared with other school subjects.  

Agree  Disagree  Not sure

2. There should be grace marks scheme for mathematics at S.S.C. examination.  

Agree  Disagree  Not sure

3. Combined passing provision (cpp) is a good scheme of grace marks for passing mathematics at S.S.C. examination.  

Agree  Disagree  Not sure

232
4. I am fully acquainted with cpp.
   Agree  Disagree  Not sure

5. I know very well how to get the benefit of cpp.
   Agree  Disagree  Not sure

6. I very well acquaint my students about how to take advantage of cpp.
   Agree  Disagree  Not sure

7. I guide my students in taking benefit of cpp.
   Agree  Disagree  Not sure

8. cpp reduces the burden of teaching difficult topics of mathematics in the classroom.
   Agree  Disagree  Not sure

9. cpp helps to teach selective topics in the classroom.
   Agree  Disagree  Not sure

10. In order to get the benefit of cpp, I guide my students in selecting topics for the study.
    Agree  Disagree  Not sure

11. Majority of the students find it difficult to understand Group D examples hence they must be stressed more during classroom teaching.
    Agree  Disagree  Not sure
12. I teach mathematics by targeting selective topics so as to enable all the students to pass.
   Agree    Disagree    Not sure

13. I solve simple examples in the classroom so as to enable all the students to pass.
   Agree    Disagree    Not sure

14. It is very difficult to complete the syllabus along with solving group D examples in the classroom.
   Agree    Disagree    Not sure

15. The students do not have to drill difficult examples due to cpp.
   Agree    Disagree    Not sure

16. Students should be given homework regularly.
   Agree    Disagree    Not sure

17. I assign simple examples to the students for their homework.
   Agree    Disagree    Not sure

18. By drilling upon simple examples, students can easily pass in the examination.
   Agree    Disagree    Not sure

19. cpp reduces the burden of extra classes.
   Agree    Disagree    Not sure

20. Due to cpp, students do spent more time in the study of mathematics.
   Agree    Disagree    Not sure
21. Due to CPP students spent more time in the study of science.

Agree  Disagree  Not sure

22. Your suggestion about the grace marks scheme in mathematics.

__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________

Signature

__________________________________________________________

235