APPENDICES
APPENDIX ‘A’

Interview Schedule For The Aged

I. BASIC DATA:

IA. No. of Family members

<table>
<thead>
<tr>
<th>Age</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please tick (✓) against your reply.

B. Type of Family:

(a) Joint (3)
(b) Extended (2)
(c) Nuclear (1)

2. With whom are you living:

(i) Son (4)
(ii) Daughter (3)
(iii) living by oneselves (2)
(iv) alone (1)

3. Are you:

(a) In-Business (4)
(b) Re-employed (3)
(c) Retired (2)
(d) Housewife (1)

4. Previous employment: Did you retire as a

(a) Doctor (1)
(b) Engineer (1)
(c) I.A.S. (1)
(d) Bank (1)
(e) Central Government Employee (1)
(f) State Government Employee (1)
(g) Business:
   (i) Public Sector (1)
   (ii) Private Sector (1)
   (h) Artist (1)
   (i) Lawyer (1)
   (j) Teacher (1)
   (k) House wife (1)
5. Are you getting:
   (a) Salary ( 3 )
   (b) Pension ( 2 )
   (c) Interest ( 1 )

6. How much is your income per month:
   (i) Rs. 1000 and below ( 1 )
   (ii) Rs. 1000 to Rs. 2000 ( 2 )
   (iii) Rs. 2000 to Rs. 3000 ( 3 )
   (iv) Rs. 3000 to Rs. 4000 ( 4 )
   (v) Rs. 4000 to Rs. 5000 ( 5 )
   (vi) Rs. 5000 and above ( 6 )

7 (a) Besides do you get monetary help:
   (i) Yes ( 2 )
   (ii) No ( 1 )

   (b) If yes, is it from:
       (i) Son ( 5 )
       (ii) Daughters ( 4 )
       (iii) Brothers ( 3 )
       (iv) Sisters ( 2 )
       (v) Any other source ( 1 )

8. Do you have property:
   (a) House ( 7 )
   (b) Car ( 6 )
   (c) Fields ( 5 )
   (d) Bank deposit ( 4 )
   (e) Interest ( 3 )
   (f) Savings ( 2 )

II. LIVING CONDITIONS

9a. Is your house:
   (a) Own ( 2 )
   (b) Rented ( 1 )

9b. Is your house:
   (a) Bungalow ( 4 )
   (b) Single house ( 3 )
   (c) Apartment ( 2 )
   (d) Any other ( 1 )
Living Space

10. Is your house: In a city with space:
   a. Comfortable (4)
   b. Large (3)
   c. Average (2)
   d. Small (1)

11. Are the expenses for the house hold:
   (i) Expensive (1)
   (ii) Average cost (2)
   (iii) Cost is less (3)
   (iv) Reasonable (4)

III. FAMILY RELATIONSHIPS

12 a). Are you visited by your family members:
   (i) Yes (2)
   (ii) No (1)

b) If yes, who visits and how often do they visit:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Annually</th>
<th>Any Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

1. Sons (s) (8)
2. Daughters (7)
3. Grand Sons (6)
4. Grand Daughters (5)
5. Brothers (4)
6. Sisters (3)
7. Relatives (2)
8. Friends (1)

c) If No, do you feel lonely:
   (a) Yes (1)
   (b) No (3)
   (c) Sometimes (2)
13. a) Do your participate in family discussions:
   (i) Yes (3)
   (ii) Sometimes (2)
   (iii) No (1)

b) If yes, do they accept your decisions:
   (i) Yes (2)
   (ii) No (1)

14. a) Are you attending functions:
   (i) Yes (3)
   (ii) Occasionally (2)
   (iii) No (1)

b) Are they:
   (i) Religious functions (5)
   (ii) Marriages (4)
   (iii) Birth of a child (3)
   (iv) Parties (2)
   (v) Any others (1)

IV. LEISURE TIME ACTIVITIES

15. a) Do you find a lot of free time now:
   (i) Yes (3)
   (ii) Sometimes (2)
   (iii) No (1)

16. Are you doing the following:
   (i) Exercises:
      a) Walk (1)
      b) Visit to park (1)
   (ii) Play (1)
   (iii) House hold activities (1)
   (iv) Association functions (1)
   (v) Religious activities (1)
   (vi) Hobbies (1)
   (vii) Travel (1)
17. Have you turned more towards religion:
   (i) Yes ( 3 )
   (ii) Unchanged ( 2 )
   (iii) No ( 1 )

V. HEALTH CONDITIONS

18. Do you experience any of the following:

   (1) Insomnia ( 10 )
   (2) Digestive problems ( 9 )
   (3) Disability due to accidents ( 8 )
   (4) Asthma ( 7 )
   (5) Hypertension ( 6 )
   (6) Cancer ( 5 )
   (7) Stroke ( 4 )
   (8) Diabetes ( 3 )
   (9) Arthritis ( 2 )
   (10) Heart Problem ( 1 )

19. Do you take regular check-ups:
   (i) Yes ( 2 )
   (ii) No ( 1 )

VI. COMFORTS

20. Are you in your ‘Second Childhood’ for your family members:
   (i) Yes ( 1 )
   (ii) No ( 2 )

21 (a) Do you take help for any activities:
   (i) Yes ( 1 )
   (ii) No ( 2 )

   (b) If yes, are they:

   (i) To walk ( 1 )
   (ii) Personal care ( 1 )
   (iii) Eat ( 1 )
   (iv) Read ( 1 )
22. Who helps you and how do you feel about the help:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Like</th>
<th>Comfortable</th>
<th>Dislike</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Son</td>
<td>(5)</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Daughter</td>
<td>(4)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Grand child</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Spouse</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Relative</td>
<td>(1)</td>
<td></td>
</tr>
</tbody>
</table>

VII. PERSONALITY

23. Do you feel you could retain individuality:
   i) Yes (2)
   ii) No (1)

24. Do you notice the following characteristics of old age:
   a) Grey hair (1)
   b) Deteriorated sight (1)
   c) Deteriorated hearing (1)
   d) Wrinkled dry withered skin (1)
   e) Labored breathing (1)
   f) Loss of weight (1)
   g) Brittle bones (1)
   h) Varicose Veins (1)
   i) Loss of teeth (1)
   j) Atrophy of taste buds (1)
   k) Exhaustion (1)
   l) Loss of memory (1)

25 (a) Do you feel interested in doing new activities:
   i) Yes (3)
   ii) Sometimes (2)
   iii) No (1)

   b) If yes, are they:
      a) Working (6)
      b) Learning (5)
      c) Creative activities (4)
      d) Arts (3)
      e) Family roles (2)
      f) Any other (1)
26. Do you experience:
   i) Loneliness ( 1 )
   ii) Depression ( 1 )
   iii) Conflicts 1
   iv) Regrets 1
   v) Guilt 1
   vi) Anxiety 1
   vii) Rage 1
   viii) Helplessness 1
   ix) Grief 1
   x) Abandonment 1
   xi) Bitterness ( 1 )

27. Loss of spouse has increased loneliness:
   a) Yes ( 1 )
   b) No ( 2 )
   c) NA ( 3 )

28. Do you feel satisfied with your life:
   a) Yes ( 3 )
   b) No ( 2 )
   c) Undecided ( 1 )

VIII GENERATION GAP

29. Do you consider caring for the aged is the responsibility of:
   a) Middle age children ( 5 )
   b) Adult or adolescent Grand children ( 4 )
   c) Spouse ( 3 )
   d) Self ( 2 )
   e) Any other ( 1 )

30. Do you think what the aged feel about the young is and for:

<table>
<thead>
<tr>
<th>Independence</th>
<th>Youthfulness</th>
<th>Attractiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

a). Anxiety ( 4 )
b). Jealousy ( 3 )
c). Envious ( 2 )
d). Selfishness ( 1 )
31. Do you find the aged often behave with:
   a) Complaints (1)
   b) Nag (1)
   c) Criticise (1)
   d) Become irritable (1)
   e) Become petulant (1)
   f) Manipulation (1)
   g) Prejudiced (1)

32. Do you think the aged gets:
   a) Love (1)
   b) Respect (1)
   c) Recognition of Status or Identity (1)
   d) Independence / Autonomy (1)
   e) Understanding (1)
   f) Assistance (1)
   g) Sympathy (1)
   h) Friendship (1)
   i) Acceptance (1)
   j) Selfless sharing (1)

33 (i) Are you of the opinion that ageing is eventual:
   a) Yes (3)
   b) No (2)
   c) Undecided (1)

(ii) What do you feel about being aged:
   a) Like (3)
   b) Dislike (2)
   c) Undecided (1)

34. Have you made changes to the requirements of old age:
   i) Yes (3)
   ii) No (2)
   iii) Undecided (1)
IX  CONCEPT OF DEATH

35. Aged think death is:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Religion</th>
<th>Family</th>
<th>Friends</th>
<th>Any other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Natural Phenomenon</td>
<td></td>
<td></td>
<td>(5)</td>
</tr>
<tr>
<td>2.</td>
<td>End of Physical system</td>
<td></td>
<td></td>
<td>(4)</td>
</tr>
<tr>
<td>3.</td>
<td>End of both body and soul</td>
<td></td>
<td></td>
<td>(3)</td>
</tr>
<tr>
<td>4.</td>
<td>Vacuum</td>
<td></td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td>5.</td>
<td>Any other</td>
<td></td>
<td></td>
<td>(1)</td>
</tr>
</tbody>
</table>

36. Does the idea of death make one:

i) Accept it as part of life (7)
ii) Unconcerned (6)
iii) Anxious (5)
iv) Afraid (4)
v) Depressing (3)
vi) Suppress (2)
vii) Any other. (1)

37. Do you feel with old age one has:

i) Many years of life (3)
ii) Not many years (2)
iii) Undecided (1)

38. Do you feel changes have to be made to improve life satisfaction:

i) Yes (3)
ii) No (2)
iii) Undecided (1)

39. Please give your suggestions for improving quality ageing: (1)...
APPENDIX : B

Interview Schedule For The Family Member:

1. Basic Data:

<table>
<thead>
<tr>
<th>IA. No. of Family members</th>
<th>Sex</th>
<th>Age</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please tick (v) against your reply.

B. Type of family:

(a) Joint (3)
(b) Extended (2)
(c) Nuclear (1)

2. What is your relationship to the aged: (1)

.................................

3. Are you:

a) Working (4)
   b) Study (1)

If (a) your job is:

(a) Doctor (1)
(b) Engineer (1)
(c) I.A.S. (1)
(d) Bank (1)
(e) Central Govt. Employee (1)
(f) State Govt. Employee (1)
(g) Business (1)
(i) Public Sector (1)
(ii) Private Sector (1)
(h) Artist (1)
(l) Lawyer (1)
(j) Teacher (1)
(k) House wife (1)
If (b) are you studying:

(a) School
   (1)

(i) Class
    (1)

(b) Any other
    (2)

   i) Diploma
   (1)

   ii) Certificate
    (1)

   iii) Training
    (1)

(c) College
    (3)

   i) Pre-Univ
    (1)

   ii) Graduate
    (1)

   iii) Post Graduate
    (1)

   iv) Any other
    (1)

4 a) What is your family income per month:

(i) Rs. 1000 and below
    (1)

(ii) Rs. 1000 to Rs. 2000
     (2)

(iii) Rs. 2000 to Rs. 3000
     (3)

(iv) Rs. 3000 to Rs. 4000
     (4)

(v) Rs. 4000 to Rs. 5000
    (5)

(vi) Rs. 5000 and above
     (6)

(b) Do your elders get financial assistance from you:

(i) Yes
     (2)

(ii) No
     (1)

5. Do you have property:

(a) House
    (7)

(b) Car
    (6)

(c) Fields
    (5)

(d) Bank deposit
    (4)

(e) Interest
    (3)

(f) Savings
    (2)

(g) Any other
    (1)

II. LIVING CONDITIONS

6 a) Is your house:

(a) Own
    (2)

(b) Rented
    (1)
b) Is your house:
   (a) Single house (3)
   (b) Bungalow (4)
   (c) Apartment (2)
   (d) Any other (1)

7. Is your house in a city with space:
   (a) Comfortable (4)
   (b) Large (3)
   (c) Average (2)
   (d) Small (1)

8. Are the expenses for the house hold:
   (i) Expensive (1)
   (ii) Average cost (2)
   (iii) Cost is less (3)
   (iv) Reasonable (4)

III. FAMILY RELATIONSHIPS

9. Do you visit your elderly:
   (i) Yes (2)
   (ii) No (1)

10. Mention the people visiting the aged and how often:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Annually</th>
<th>Any Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Self (8)
Spouse (7)
Brothers (6)
Sisters (5)
Sons (s) (4)
Daughters (3)
Relatives (2)
Friends (1)

11. If No, do you think the aged would be lonely:
   (a) Yes (1)
   (b) Sometimes (2)
   (c) No (3)
12. a) If the aged are with you, do you allow them to participate in family discussions:

(i) Yes (3)
(ii) Sometimes (2)
(iii) No (1)

b) If yes, do you accept their decisions

(i) Yes (3)
(ii) Sometimes (2)
(iii) No (1)

b) If No, Why (1):

13. a) Do you take the aged to functions:

(i) Yes (3)
(ii) Occasionally (2)
(iii) No (1)

b) Are they:

(i) Religious functions (5)
(ii) Marriages (4)
(iii) Birth of a child (3)
(iv) Parties (2)
(v) Any others (1)

IV. LEISURE TIME ACTIVITIES

14. Do you think the aged have a lot of free time:

(i) Yes (3)
(ii) Sometimes (2)
(iii) No (1)

15. Do you make sure they do the following:

(i) Exercises
   a) Walk (1)
   b) Visit to park (1)
   (ii) Play (1)
   (iii) House hold activities (1)
   (iv) Association functions (1)
   (v) Religious activities (1)
   (vi) Hobbies (1)
   (vii) Travel (1)
   (viii) Any other (1)
16. Do you think they have turned more towards religion:
   (i) Yes (3)
   (ii) Unchanged (2)
   (iii) No (1)

V. HEALTH CONDITIONS

17. Did you notice any of the following:
   (1) Insomnia (10)
   (2) Digestive problems (9)
   (3) Disability due to accidents (8)
   (4) Asthma (7)
   (5) Hypertension (6)
   (6) Cancer (5)
   (7) Stroke (4)
   (8) Diabetes (3)
   (9) Arthritis (2)
   (10) Heart Problem (1)

18. Do you take the aged for regular check-ups:
   i) Yes (2)
   ii) No (1)

VI. COMFORTS

19. Are you think the aged are in 'Second Childhood':
   i) Yes (1)
   ii) No (2)

20. a) Do you help the aged in the daily activities:
   i) Yes (1)
   ii) No (2)
   b) If yes, are they:
      i) To walk (1)
      ii) Personal care (1)
      iii) Eat (1)
      iv) Read (1)

21. Do you feel burdened with the care of elders:
   i) No (3)
   ii) Yes (2)
   iii) Undecided (1)
22. Who helps them and what do you feel about the help:

<table>
<thead>
<tr>
<th>SL.No.</th>
<th>Like</th>
<th>Comfortable</th>
<th>Dislike</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2. Son (S)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Daughter (S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Spouse</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Relative</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VII. PERSONALITY

23. Do you feel you have given individuality to elders:

i) Yes (2)

ii) No (1)

24. Do you notice the following characteristics of old age:

a) Grey hair (1)
b) Deteriorated sight (1)
c) Deteriorated hearing (1)
d) Wrinkled dry withered skin (1)
e) Labored breathing (1)
f) Loss of weight (1)
g) Brittle bones (1)
h) Varicose Veins (1)
i) Loss of teeth (1)
j) Atrophy of taste buds (1)
k) Exhaustion (1)
l) Loss of memory (1)

25. a) Do you encourage them to do new activities they are interested in:

i) Yes (3)

ii) Sometimes (2)

iii) No (1)

b) If yes, are they:

a) Working (6)
b) Learning (5)
c) Creative activities (4)
d) Arts (3)
e) Family roles (2)
f) Any other (1)
26. Do you observe the following feelings:

i) Loneliness (1)  
ii) Depression (1)  
iii) Conflicts. (1)  
iv) Regrets (1)  
v) Guilt (1)  
vi) Anxiety (1)  
vii) Rage (1)  
viii) Helplessness (1)  
ix) Grief (1)  
x) Abandonment (1)  
xd) Bitterness (1)  

27. Has Loss of spouse increased loneliness in the elderly:

a) Yes (1)  
b) No (2)  
c) NA (3)  

28. Are you feeling you have given them satisfaction in their lives:

a) Yes (3)  
b) No (2)  
c) Undecided (1)  

VIII GENERATION GAP

29. Do you consider caring for the aged is the responsibility of:

a) Middle age children (5)  
b) Adult or adolescent Grand children (4)  
c) Spouse (3)  
d) Self (2)  
e) Any other (1)  

30. Do you think what the Aged feel about the young is and for:

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a). Anxiety (4)  
b). Jealousy (3)  
c). Envious (2)  
d). Selfishness (1)
31. Do you find the aged often behave with:
   a) Complaints (1)
   b) Nag (1)
   c) Criticize (1)
   d) Become irritable (1)
   e) Become petulant (1)
   f) Manipulation (1)
   g) Prejudiced (1)

32. Do you think the aged gets:
   a) Love (1)
   b) Respect (1)
   c) Recognition of Status or Identity (1)
   d) Independence / Autonomy (1)
   e) Understanding (1)
   f) Assistance (1)
   g) Sympathy (1)
   h) Friendship (1)
   i) Acceptance (1)
   j) Selfless sharing (1)

33. What is your opinion about ageing being:
   a) Yes (3)
   b) No (2)
   c) Undecided (1)

b) How do you feel about being ageing:
   a) Like (3)
   b) Dislike (2)
   c) Undecided (1)

IX CONCEPT OF DEATH

35. Aged think death is:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Religion</th>
<th>Family</th>
<th>Friends</th>
<th>Any other</th>
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<tbody>
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<td>1.</td>
<td>Natural Phenomenon</td>
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<tr>
<td>2.</td>
<td>End of Physical system</td>
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<td></td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>End of both body and soul</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Vacuum</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>Any other</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
36. Does the idea of death make one:
   i) Accept it as part of life (7)
   ii) Unconcerned (6)
   iii) Anxious (5)
   iv) Afraid (4)
   v) Depressing (3)
   vi) Suppress (2)
   vii) Any other. (1)

37. Do you feel with old age one has:
   i) Many years of life (3)
   ii) Not many years (2)
   iii) Undecided (1)

38. Do you feel changes have to be made to improve life satisfaction:
   i) Yes (3)
   ii) No (2)
   iii) Undecided (1)

39. Please give your suggestions for improving quality ageing: (1)....
APPENDIX - 'C'

Map of Bangalore Urban

Source: Karnataka State Map (Enlarged)
APPENDIX -'D'

The split half reliability (Spearman – Brown prophecy formula) is given by:

\[
    r = \frac{2r_{\frac{1}{2}} I/II}{1 + r_{\frac{1}{2}} I/II}
\]

where \( r_{\frac{1}{2}} I / II \) is on reliability co-efficient.

(a) Reliability value for an aged:

\[ r_{\frac{1}{2}} I/II = 0.5774 \]

Therefore the test scores are 57% reliable for the aged interviews schedule.

(b) Reliability value for the family members:

\[ r_{\frac{1}{2}} I/II = 0.4889 \]

Therefore the test scores are 48% reliable for the family members interviews schedule.

Appendix -'E'

Mean ( \( \bar{X} \) ) = \( A + \frac{\sum fd' \cdot X}{n} \cdot C \)

SD ( \( \sigma \) ) = \( C \sqrt{\frac{1}{N} \left( \sum fd''^2 - \left( \frac{\sum fd'}{N} \right)^2 \right)} \)
Appendix - ‘F’

Chi-Square test
The Economic Support of the aged depends on their age.

Null Hypothesis (H₀) : The Economic support of aged is independent of their age.

Alternative Hypothesis (H₁) : The Economic Support of the aged depends on their age.

Level of significance : 5% level

Test statistics : The $\chi^2$ test statistic is

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

This follows $\chi^2$ distribution with (r-1) (c-1) degrees of freedom

$\chi^2$ cal = 11.2214
$\chi^2$ table value = 9.488
at (r-1)(c-1) = (3-1)(3-1) = 4 df
at 5% level.

Since $\chi^2$ cal > $\chi^2$ table, the null hypothesis $H₀$ is rejected and the test is significant at 5% level

Conclusion: The test reveals that the level of economic support of the aged depends upon the age of the respondent.
Chi - square test

Null Hypothesis (H₀): The economic support of the aged is independent of their SES.

Alternative hypothesis (H₁)
The economic support of the aged depends on their SES

Level of significance : 5% level

Test statistic: The $\chi^2$ test statistic is

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

This follows $\chi^2$ distribution with $(r-1)(c-1)$ df

$\chi^2$ cal = 53.8862

$\chi^2$ table value = 15.50%

at $(r-1)(c-1)=(5-1)(3-1)=8$ df at 5% level.

Decision Rule: Since $\chi^2$ cal > $\chi^2$ table, the null hypothesis $H₀$ is rejected and the test is significant.

Conclusion: The test concludes that the economic support of the aged depends on their SES.
APPENDIX – ‘G’

\[ \bar{X}_1 = 16.1601, \ n_1 = 303 \]

\[ S_1 = \bar{X} (n-1) = 9.4756 \]

\[ \bar{X}_2 = 19.454, \ n_2 = 306 \]

\[ S_2 = \bar{X}_2 (n-1) = 10.1046 \]

\[ S^2_p = \frac{(n_1-1) S^2_1 + (n_2-1) S^2_2}{n_1+n_2-2} \]

\[ S_1 = \frac{\sqrt{\sum (x_i - \bar{x}_1)^2}}{n_1-1} \]

\[ S_2 = \frac{\sqrt{\sum (x_i - \bar{x}_2)^2}}{N_2-1} \]

\[ \{x_i - \bar{x}_2\} \]

\[ \sqrt{S^2_p (1/n_1 + 1/n_2)} \]

\[ = \frac{19.4542 - 16.1601}{\sqrt{96.0728 (1/303 + 1/306)}} \]

\[ t_{cal} = (4.1372) \]