MINISTRY OF EDUCATION GUYANA NON-ACADEMIC STANDARDS
FOREWORD

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The Ministry of Education recognizes that minimum Academic and Non-Academic standards have to be formally established if quality education at all levels is to be realized. This document addresses the Non-Academic Norms.

Attention has been given to the siting of schools and basic requisites, sanitary and safety facilities, classroom size and accessimies, class and school enrolment, composition of staff in terms of trained and untrained teachers, teacher qualifications, school grades, entitlement for administrative staff, teacher-student ratio, outdoor facilities, laboratories for Science and information Technology, and facilities for workshops and laboratories for Pre-vocation Education accommodation for teachers and students, etc. Attention was also placed on requisites and space utilization at Practical Instruction Centres and Departments.

It however, must be pointed out that much emphasis was not put on the construction of school buildings and the designs and specifications of classroom furniture. Designs, plans and specifications are available at the Planning Unit of the Ministry of Education.

These norms, which will be reviewed and updated from time to time, will allow the functionaries at the Central Ministry and those in the regions to speak with one voice as they encourage the nation to work towards the attainment of the minimum standards stated herein. They will also serve as guides to other stakeholders, interested persons and groups who seek to make inputs in the education sector.

This document will be in every education institution and Department of Education, it is expected that it will serve as a constant reminder to education practitioners of the standards they ought to embrace.

It will be imprudent to think that these standards can all be achieved over-night. Some of them can be put in place almost immediately, while the others can be implemented in either the medium or long term.

The following persons have contributed to the development of these norms: Mr. Herbert Grandison, Assistant Chief Education Officer (Inspectorate) whose responsibility it was to ensure that Non-Academic Norms were developed and documented in this manner. Mr. Jerry Simpson, Senior Education Officer (Technical), Mr. Philip Neri, Education Officer (Agriculture), Ms. Olga Britton, Technical Advisor to the Chief Education Officer, Mr. Yoganand Indarsingh, Management Information Systems Officer, Mr. Duane Parris, Technical Support Specialist, Ms. Lorna Mc. Pherson, Coordinator, Health and Family Life Education, Ms. Desiree Wyles-Ogle, Administrator, Unit of Allied. Arts(U.A.A.), Ms. Lorraine Barker-King, Public Relations Officer(U.A.A.), Ms. Shirley Inniss, Coordinator of Dance(U.A.A.), Ms Mildred Lowe, Coordinator of Music(U.A.A.), Mr. Linden Smith, Head of Department, Allied Arts-Queens College, Mr Smeaton Russel, Senior Subject Specialist (Information Technology), Ms. Pam Kingpetcharat, Senior Subject Specialist (Information Technology) and
Mr. Nathan Coullin, Senior Subject Specialist (Information Technology). Special thanks to you all.

Genevieve Whyte-Nedd
Chief Education Officer.

24 a 2, - ε 5· ε t
NON-ACADEMIC EDUCATION NORMS

GENERAL

FOCUS

SCHOOL SITE

EXPLANATORY NOTES

- Located in a central and the most accessible point of catchment area.

- Away from drainage and sewage canals, garbage dumps, noisy, and/or foul smelling areas.

  Fenced with concrete, zinc or chain link material and bottom/mud boards where appropriate. In the Deep Riverain and Hinterland Areas indigenous materials to those areas may be used if traditional material is inappropriate or unavailable.

- Levelled, well drained and kept free of bush, litter, rubbish.

- Adequate land space, enough for future expansion of school.

- Adequate space set aside for Physical Education and other outdoor activities.

- Provision made on the leeward side for furnace or other means of litter/rubbish disposal.

BUILDINGS

Roof must be close boarded, zinc sheeted. Troolie may be used in the Deep Riverain and Hinterland Areas

Walls must be no less than 10ft from floor to plate.

No less than two stairways must be provided, leading into and out of the building, one of which must be 6 feet (182.88cm) wide and the other no less than 4 feet (121.92cm) wide.

Painted in white or cream

Name of school must be boldly painted/ indicated thereon.

- Classrooms constructed therein for the primary and secondary levels; and wall dividers made for nursery.
### NON-ACADEMIC EDUCATION NORMS

#### GENERAL

- Provided with an adequate number of windows to facilitate inflow of natural light and ventilation.

  Equipped with telephones, or radio sets for schools in Deep Riverain and Hinterland Areas.

- Equipped with electricity (solar- or hydro- or fuel generated).

  Provision made for the physically challenged — ramps' etc.

- Provided with fire extinguishers: 1 large extinguisher for each flat; 1 small extinguisher (DI a fire bucket in each classroom.

  Security Hut must be provided where guards are in operation.

  Housing accommodation must be provided for Headteacher of schools in Deep Riverain and Hinterland Areas and on the coast where necessary.

- Dormitories must be provided where residential schooling is offered.

#### EXPLANATORY NOTES

<table>
<thead>
<tr>
<th>FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Provided with an adequate number of windows to facilitate inflow of natural light and ventilation.</td>
</tr>
<tr>
<td>- Equipped with telephones, or radio sets for schools in Deep Riverain and Hinterland Areas.</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
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</tr>
<tr>
<td>- Housing accommodation must be provided for Headteacher of schools in Deep Riverain and Hinterland Areas and on the coast where necessary.</td>
</tr>
<tr>
<td>- Dormitories must be provided where residential schooling is offered.</td>
</tr>
</tbody>
</table>
### NON-ACADEMIC EDUCATION NORMS
#### NURSERY SCHOOLS

<table>
<thead>
<tr>
<th><strong>FOCUS</strong></th>
<th><strong>EXPLANATORY NOTES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCHOOL GRADE</strong></td>
<td></td>
</tr>
<tr>
<td>GRADE A</td>
<td>Enrolment of 250 children and above</td>
</tr>
<tr>
<td>GRADE B</td>
<td>Enrolment of 150 to 249 children</td>
</tr>
<tr>
<td>GRADE C</td>
<td>Enrolment of 60 to 149 children</td>
</tr>
<tr>
<td>GRADE D</td>
<td>Enrolment of 59 children and below</td>
</tr>
<tr>
<td><strong>CATCHMENT AREA</strong></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1 mile radius</td>
</tr>
<tr>
<td>-</td>
<td>8 minutes by public transport</td>
</tr>
<tr>
<td><strong>SANITARY FACILITIES</strong></td>
<td>Sanitary Block: Children</td>
</tr>
<tr>
<td>-</td>
<td>4 Toilets for 50 children</td>
</tr>
<tr>
<td>-</td>
<td>6 Toilets for 100 children</td>
</tr>
<tr>
<td>-</td>
<td>8 Toilets for 150 children</td>
</tr>
<tr>
<td>-</td>
<td>10 Toilets for 200 children</td>
</tr>
<tr>
<td>-</td>
<td>13 Toilets for 250 Children</td>
</tr>
<tr>
<td>-</td>
<td>15 Toilets for 300 children</td>
</tr>
<tr>
<td>-</td>
<td>Sanitary Block: Teachers</td>
</tr>
<tr>
<td>-</td>
<td>2 Toilets for 10 Teachers</td>
</tr>
<tr>
<td>-</td>
<td>4 Toilets for 20 Teachers</td>
</tr>
<tr>
<td>The number of toilets must be divided between the sexes. Sanitact Units must be placed in the toilets used by the female teachers.</td>
<td></td>
</tr>
<tr>
<td><strong>DRINKING OUTLETS</strong></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1 Tap for every 10 children</td>
</tr>
<tr>
<td>-</td>
<td>1 Tank/reservoir</td>
</tr>
<tr>
<td><strong>SAFETY/EMERGENCY FACILITIES</strong></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1 Fire Bucket for each group</td>
</tr>
<tr>
<td>-</td>
<td>1 large Fire Extinguisher</td>
</tr>
<tr>
<td><strong>ROOMS</strong></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1 Staff Room</td>
</tr>
<tr>
<td>-</td>
<td>1 Store/Strong Room</td>
</tr>
<tr>
<td>-</td>
<td>Restroom</td>
</tr>
<tr>
<td>-</td>
<td>1 Kitchenette</td>
</tr>
<tr>
<td><strong>OFFICE</strong></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1 Headteacher’s Office</td>
</tr>
</tbody>
</table>
**NON-ACADEMIC EDUCATION NORMS**  
**NURSERY SCHOOLS**

<table>
<thead>
<tr>
<th>CORNERS/AREAS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Water and Sand Play Area</td>
</tr>
<tr>
<td></td>
<td>- Shop Corner</td>
</tr>
<tr>
<td></td>
<td>- Dress-up Corner</td>
</tr>
<tr>
<td></td>
<td>- Concept Corner</td>
</tr>
<tr>
<td></td>
<td>- Manipulative Corner</td>
</tr>
<tr>
<td></td>
<td>- Reading Corner</td>
</tr>
<tr>
<td></td>
<td>- Science Corner</td>
</tr>
<tr>
<td></td>
<td>- Patriotic Corner</td>
</tr>
<tr>
<td></td>
<td>- Maths Corner</td>
</tr>
<tr>
<td></td>
<td>- Reception/Waiting Area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLASSROOM ACCESSORIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1 small chalkboard/whiteboard</td>
<td></td>
</tr>
<tr>
<td>- 1 Display Board</td>
<td></td>
</tr>
<tr>
<td>- 1 small Cupboard</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCHOOL ACCESSORIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- 4 Radio-Cassette Recorders: Grades A&amp;B</td>
<td></td>
</tr>
<tr>
<td>- 3 Radio-Cassette Recorders: Grade C</td>
<td></td>
</tr>
<tr>
<td>- 2 Radio-Cassette Recorders: Grade D</td>
<td></td>
</tr>
<tr>
<td>- 1 Overhead Projector</td>
<td></td>
</tr>
<tr>
<td>- 1 Slide Projector</td>
<td></td>
</tr>
<tr>
<td>- 1 Television</td>
<td></td>
</tr>
<tr>
<td>- 1 Video Cassette Recorder</td>
<td></td>
</tr>
<tr>
<td>- Camcorder</td>
<td></td>
</tr>
<tr>
<td>- 1 Stage</td>
<td></td>
</tr>
<tr>
<td>- Ramps</td>
<td></td>
</tr>
<tr>
<td>- Seesaw</td>
<td></td>
</tr>
<tr>
<td>- Climbing Frames</td>
<td></td>
</tr>
<tr>
<td>- Multi-purpose Frames</td>
<td></td>
</tr>
<tr>
<td>- Swings</td>
<td></td>
</tr>
<tr>
<td>- Sand Trays</td>
<td></td>
</tr>
<tr>
<td>- Fun Tunnels</td>
<td></td>
</tr>
<tr>
<td>- 2 Computers</td>
<td></td>
</tr>
<tr>
<td>- Plastic Tubs</td>
<td></td>
</tr>
<tr>
<td>- Buckets</td>
<td></td>
</tr>
<tr>
<td>- Shovels and Scoops</td>
<td></td>
</tr>
<tr>
<td>- Sifters</td>
<td></td>
</tr>
<tr>
<td>- Hoops</td>
<td></td>
</tr>
<tr>
<td>- May Pole</td>
<td></td>
</tr>
</tbody>
</table>
### NON-ACADEMIC EDUCATION NORMS
#### NURSERY SCHOOLS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FURNITURE FOR (CHILDREN)</strong></td>
<td>- 6 Chairs and 1 table to 6 children</td>
</tr>
<tr>
<td><strong>TEACHER FURNITURE</strong></td>
<td>- 2 Chairs and a Writing Desk for 1 Teacher</td>
</tr>
<tr>
<td><strong>TEXTBOOKS</strong></td>
<td>- Group sets – story books</td>
</tr>
<tr>
<td>- A minimum of two workbooks per child – pre math, pre-writing, etc.</td>
<td></td>
</tr>
</tbody>
</table>

#### CLASSROOM SIZE

**MINIMUM**
- \(225\text{ft}^2 \times 1.12\text{ft} = 337\text{ft}^2\)
- \((209031.75\text{cm}^2 + 104051.36 = 313083.11\text{cm}^2)\)

**OPTIMUM**
- \(300^2 + 1.50\text{ft} = 450\text{ft}^2\)
- \((278709\text{cm}^2 + 139354.5\text{cm}^2 = 418063.5\text{cm}^2)\)

**MAXIMUM**
- \(375\text{ft}^2 + 1.87.5\text{ft} = 562\text{ft}^2\)
- \((348386.25\text{cm}^2 + 174193.12 = 522579.37\text{cm}^2)\)

#### NUMBER OF ADMINISTRATIVE STAFF

| GRADE A | - 1 HM; 1 SM |
| GRADE B | - 1 HM |
| GRADE C | - 1 HM |
| GRADE D | - 1 HM |

**TEACHER-CHILD RATIO**
- 1 Teacher to 20 Children

**TEACHER QUALIFICATIONS**
- 4 CXC's including English and Mathematics at Grade 3 or above

*This is space provided for installation of floor (horizontal), upright (vertical) cupboards or displaying exhibits in each classroom.*
### NON-ACADEMIC EDUCATION NORMS

#### NURSERY SCHOOLS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
</table>
| **OPTIMUM** | Grade I Class I Trained Teachers Certificate Grade I Class I 'Trained Teachers Certificate **Plus**  
A First Degree in a discipline approved by the Ministry of Education. |
| **MAXIMUM** | |

#### STATUS COMPOSITION OF STAFF.

##### TRAINED TEACHERS

- At least 75%.

#### MINIMUM AGE OF CHILDREN AT BEGINNING OF CYCLE

- 3 years 6 months by the first clay of the school year  
  or  
- 3 years 9 months by December 31 of the year in which first enrolment is sought.

#### AGE OF CHILDREN AT END OF CYCLE

- 5 years 6 months by the first day of the school year  
- 5 years 9 months by December 31 of the year in which first enrolment is sought.

#### SPACE PER CHILD

- 15$\text{ft}$ or 150$\text{ft}^2$ / $(13935.45\text{cm}^2)$ or $(424752.69\text{cm}^3)$

#### CLASS ENROLMENT

##### MINIMUM

- 15 Children - Coastal Plain
- 10 Children - Deep Riverin and Hinterland Areas

##### OPTIMUM

- 20 Children
- 25 Children
### NON-ACADEMIC EDUCATION NORMS

#### NURSERY SCHOOLS

<table>
<thead>
<tr>
<th>Focus</th>
<th>Explanatory Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCHOOL ENROLMENT</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MINIMUM</strong></td>
<td>- 15 Children</td>
</tr>
<tr>
<td><strong>OPTIMUM</strong></td>
<td>- 260 Children</td>
</tr>
<tr>
<td><strong>MAXIMUM</strong></td>
<td>- 300 Children</td>
</tr>
<tr>
<td></td>
<td>- For the Deep Riverain and Hinterland Areas. Permission must be sought from the Chief Education Officer for the establishment of a school of under 15 but not less than 10 children</td>
</tr>
<tr>
<td><strong>REPETITION</strong></td>
<td>- No child should repeat any of the two levels.</td>
</tr>
<tr>
<td><strong>TRANSFER OF CHILDREN</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CONSIDERATIONS</strong></td>
<td>- Siblings at school to which transfer is sought.</td>
</tr>
<tr>
<td></td>
<td>- Change of residence.</td>
</tr>
<tr>
<td></td>
<td>- Place of employment of parents/guardians.</td>
</tr>
</tbody>
</table>
### Non-Academic Education Norms

**Primary Schools**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>750 to 999 pupils</td>
</tr>
<tr>
<td>B</td>
<td>500 to 749 pupils</td>
</tr>
<tr>
<td>C</td>
<td>250 to 499 pupils</td>
</tr>
<tr>
<td>D</td>
<td>100 to 249 pupils</td>
</tr>
<tr>
<td>E</td>
<td>99 pupils and below</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Catchment Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 miles radius from school</td>
</tr>
</tbody>
</table>

**Sanitary Facilities**

- **Sanitary Blocks: Pupils**
  - 4 toilets for 100-150 pupils
  - 6 toilets for 151-250 pupils
  - 8 toilets for 251-350 pupils
  - 10 toilets for 351-450 pupils
  - 12 toilets for 451-600 pupils

- **Sanitary Block: Teachers**
  - 2 toilets for 10 Teachers
  - 4 toilets for 20 Teachers
  - 6 toilets for 30 Teachers

  The number of toilets must be divided between the sexes. Sanitary units must be placed in the toilets used by female teachers and female students. Height of toilet bowls must be suitable for Levels I and II.

**Drinking Outlets**

- 1 Tap for every 20 Pupils.
- 1 Tank/reservoir

**Safety/Emergency Facilities**

- 1 Fire Bucket or small Fire Extinguisher for each classroom.
- 1 large Fire Extinguisher for each flat/storey

**Rooms**

- 1 Reading Room/Library
- 1 Staff Room
- 1 Sick Bay
- 1 Information Technology Laboratory
- 1 Kitchenette
- 1 Science Laboratory
### NON-ACADEMIC EDUCATION NORMS

#### PRIMARY SCHOOLS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TEACHER-PUPIL RATIO</strong></td>
<td></td>
</tr>
<tr>
<td>Levels I &amp; II</td>
<td>- 1 Teacher to 25 Pupils</td>
</tr>
<tr>
<td>Levels III - VI</td>
<td>- 1 Teacher to 35 Pupils</td>
</tr>
<tr>
<td><strong>MINIMUM</strong></td>
<td>- 4 CXC(\text{s}), including English and Mathematics at Grade 3 or above.</td>
</tr>
<tr>
<td><strong>OPTIMUM</strong></td>
<td>- Grade I Class I Trained Teachers Certificate</td>
</tr>
<tr>
<td><strong>MAXIMUM</strong></td>
<td>- Grade I Class I Trained Teachers Certificate <strong>Plus</strong></td>
</tr>
<tr>
<td></td>
<td>- a Certificate and/or Diploma and/or First Degree <strong>Plus</strong></td>
</tr>
<tr>
<td></td>
<td>- a Second Degree in disciplines approved by the Ministry of Education.</td>
</tr>
</tbody>
</table>

### STATUS COMPOSITION OF STAFF

#### TRAINED TEACHERS

- At least 75%

#### MINIMUM AGE OF PUPILS AT BEGINNING OF CYCLE

- 5 years 6 months by the first day of the school year,
  or
- 5 years 9 months by December 31 of the year in which first enrolment is sought.

#### MAXIMUM AGE OF PUPILS AT END OF CYCLE

- 11 years plus.
### NONACADEMIC EDUCATION NORMS

#### PRIMARY SCHOOLS

<table>
<thead>
<tr>
<th>Focus</th>
<th>Explanatory Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPACE PER PUPIL</td>
<td>14ft or 140ft (13006.42cm²) or (396435.2cm²)</td>
</tr>
<tr>
<td>CLASS ENROLMENT</td>
<td></td>
</tr>
<tr>
<td>MINIMUM</td>
<td>12 Pupils — for the Coastal Plain</td>
</tr>
<tr>
<td>OPTIMUM</td>
<td>- 10 Pupils — for the Deep Riverain and Hinterland Areas</td>
</tr>
<tr>
<td>Levels I and II</td>
<td>25 Pupils</td>
</tr>
<tr>
<td>Levels HI to VI</td>
<td>35 Pupils</td>
</tr>
<tr>
<td>MAXIMUM</td>
<td></td>
</tr>
<tr>
<td>Level I and II</td>
<td>30 Pupils</td>
</tr>
<tr>
<td>Levels HI to VI</td>
<td>40 Pupils</td>
</tr>
<tr>
<td>SCHOOL ENROLMENT</td>
<td></td>
</tr>
<tr>
<td>MINIMUM</td>
<td>20 Pupils</td>
</tr>
<tr>
<td>OPTIMUM</td>
<td>600 Pupils</td>
</tr>
<tr>
<td>MAXIMUM</td>
<td>1000 Pupils</td>
</tr>
<tr>
<td></td>
<td>For the Deep Riverain and Hinterland Areas, permission must be sought from the Chief</td>
</tr>
<tr>
<td></td>
<td>Education Officer to establish a school of under 20 but no less that 15 pupils.</td>
</tr>
<tr>
<td>REPETITION</td>
<td>No pupil should repeat Level I or Level II</td>
</tr>
</tbody>
</table>
NON-ACADEMIC EDUCATION NORMS

PRIMARY SCHOOLS

FOCUS

EXPLANATORY NOTES

TRANSFER OF PUPILS

CONSIDERATIONS
- Siblings at school to which transfer is sought
  Change of residence.
- Place of employment of parents/guardians
### NON-ACADEMIC EDUCATION NORMS
#### SECONDARY SCHOOLS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. SCHOOL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>GRADE A</strong></td>
<td>- Enrolment of 550 to 699 student</td>
</tr>
<tr>
<td><strong>GRADE B</strong></td>
<td>- Enrolment of 400 to 549 students</td>
</tr>
<tr>
<td><strong>GRADE C</strong></td>
<td>- Enrolment 250 to 399 students</td>
</tr>
<tr>
<td><strong>GRADE D</strong></td>
<td>- Enrolment of 249 students and below.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SANITARY FACILITIES</strong></th>
<th><strong>Sanitary Blocks: Students</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- 4 toilets for 150 —250 students</td>
</tr>
<tr>
<td></td>
<td>- 6 toilets for 251 — 350 students</td>
</tr>
<tr>
<td></td>
<td>8 toilets for 351-450 students</td>
</tr>
<tr>
<td></td>
<td>10 toilets for 451 — 600 students</td>
</tr>
<tr>
<td></td>
<td>- 12 toilets for 601 — 800 students</td>
</tr>
<tr>
<td></td>
<td>- 14 toilets for 801 — 1000 students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sanitary Block: Teachers</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- 2 toilets for 10 Teachers</td>
</tr>
<tr>
<td></td>
<td>- 4 toilets for 20 Teachers</td>
</tr>
<tr>
<td></td>
<td>- 6 toilets for 30 Teachers</td>
</tr>
<tr>
<td></td>
<td>- 8 toilets for 40 Teachers</td>
</tr>
</tbody>
</table>

The number of toilets must be divided between the sexes. **Sanitary Units must be placed in the toilets used by female teachers and female students.**

|                            | - 3 sets of showers: 2 for students; 1 set for Teachers. |

<table>
<thead>
<tr>
<th><strong>DRINKING OUTLETS</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- 1 Tap for every 40 students</td>
</tr>
<tr>
<td></td>
<td>- 2 Tanks/reservoirs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SAFETY/EMERGENCY - FACILITIES</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- 1 Fire Bucket or small Fire Extinguisher for each classroom.</td>
</tr>
<tr>
<td></td>
<td>Large Fire Extinguishers for each flat/storey.</td>
</tr>
</tbody>
</table>
## NON-ACADEMIC EDUCATION NORMS
### SECONDARY SCHOOLS

<table>
<thead>
<tr>
<th>RESOURCE ROOMS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Room/Library (with internet service)</td>
<td></td>
</tr>
<tr>
<td>Information Technology Laboratory (possibly 3 labs to cater for Industrial Technology, Information Technology and Subject Offerings.)</td>
<td></td>
</tr>
<tr>
<td>Science Laboratory (possibly 2)</td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
</tr>
<tr>
<td>Allied Arts</td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
</tr>
<tr>
<td>Language Laboratory</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>Home Economics</td>
<td></td>
</tr>
<tr>
<td>Agricultural Science</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER ROOMS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Room</td>
<td></td>
</tr>
<tr>
<td>Sick Bay</td>
<td></td>
</tr>
<tr>
<td>Store/Strong Room</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OFFICES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Headteacher’s Office</td>
<td></td>
</tr>
<tr>
<td>Deputy Headteacher’s Office</td>
<td></td>
</tr>
<tr>
<td>Support Staff’s Office</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HALLS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dining Hall</td>
<td></td>
</tr>
<tr>
<td>Multi-purpose Hall</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AREAS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary’s Area</td>
<td></td>
</tr>
<tr>
<td>Canteen Area</td>
<td></td>
</tr>
<tr>
<td>Waiting/Reception Area</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLASSROOM ACCESSORIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Chalkboard/White board and Eraser</td>
<td></td>
</tr>
<tr>
<td>1 Display Board</td>
<td></td>
</tr>
<tr>
<td>1 Bulletin Board</td>
<td></td>
</tr>
<tr>
<td>2 Book Racks</td>
<td></td>
</tr>
<tr>
<td>1 Small Cupboard</td>
<td></td>
</tr>
<tr>
<td>2 Large Cupboards</td>
<td></td>
</tr>
<tr>
<td>1 Meter Rule</td>
<td></td>
</tr>
</tbody>
</table>
# Non-Academic Education Norms

## Secondary Schools

<table>
<thead>
<tr>
<th>Focus</th>
<th>Explanatory Notes</th>
</tr>
</thead>
</table>
| **School Accessories** | - 1 Overhead Projector  
- 1 Public Address System  
- 1 Slide Projector  
- 2 Televisions  
- 2 Video Cassette Recorders  
- 1 Camcorder  
- 2 Globes  
- 2 World Maps  
- 4 Radio-Cassette Recorders: Grades A & B  
- 3 Radio-Cassette Recorders: Grade C  
- 2 Radio-Cassette Recorders: Grade D |
| **Furniture for Students** | - 1 Chair and Table or Desk with Storage Compartment to 1 student. |
| **Furniture for Teachers** | - 2 Chairs and a Writing Desk for 1 Teacher. |
| **Text Books** | - A minimum of 1 Text Book per student for each Core subject.  
- Class Sets for each Enrichment (Non-core) subject.  
- Supplementary Texts for Group Work and Research. |
| **Classroom Size** | - Minimum: $280ft^2 + 140ft^2 = 420ft^2$  
- Optimum: $490ft^2 + 245ft^2 = 735ft^2$  
- Maximum: $630ft^2 + 315ft^2 = 945ft^2$  
- $260128.4cm^2 + 130064.2cm^2 = 390192.6cm^2$  
- $455224.7cm^2 + 227612.35cm^2 = 682837.05cm^2$  
- $585288.9cm^2 + 292644.45cm^2 = 877933.35cm^2$ |

*This is space provided for installation of floor (horizontal), upright (vertical) cupboards or displaying exhibits in each classroom.*
## NON-ACADEMIC EDUCATION NORMS
### SECONDARY SCHOOLS

<table>
<thead>
<tr>
<th>Focus</th>
<th>Explanatory Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum Age of Students at Beginning of Cycle</strong></td>
<td>1-12 years</td>
</tr>
<tr>
<td><strong>Maximum Age of Students at End of Cycle</strong></td>
<td>18 years plus</td>
</tr>
<tr>
<td><strong>Space Per Student</strong></td>
<td>14\text{ft} or 140\text{ft} ((13006.42\text{cm})) or ((396435.2\text{cm}))</td>
</tr>
<tr>
<td><strong>Class Enrolment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>20 students — for the Coastal Plain</td>
</tr>
<tr>
<td><strong>Optimum</strong></td>
<td>35 students</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>45 students</td>
</tr>
<tr>
<td><strong>School Enrolment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>200 students</td>
</tr>
<tr>
<td><strong>Optimum</strong></td>
<td>350 students: 2 streams</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>1000 students: 5 or 6 streams For the Deep Riverain and Hinterland Areas, permission must be sought from the Chief Education Officer to establish a school that would have an enrolment below 200 students but no less than 70.</td>
</tr>
<tr>
<td><strong>Repetition</strong></td>
<td>Students should repeat only once in any particular level.</td>
</tr>
</tbody>
</table>
### NON-ACADEMIC EDUCATION NORMS
### SECONDARY SCHOOLS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRANSFER OF STUDENTS</td>
<td>- Change of residence</td>
</tr>
<tr>
<td></td>
<td>- Movement from School through action of the Head of the Education Department</td>
</tr>
</tbody>
</table>

**CONSIDERATIONS**
**NON-ACADEMIC EDUCATION NORMS**

**SCIENCE LABORATORY**

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE</td>
<td>A lab should be 1 1/4 time a classroom space and be located on the ground floor away from the direction of the wind if possible.</td>
</tr>
<tr>
<td>TYPE OF LAB</td>
<td>Labs in our schools should be multipurpose, that is suitable for Biology, Chemistry, Physics, Integrated Science, Agricultural Science, Home Economics (Food and Nutrition), or Environmental Science.</td>
</tr>
</tbody>
</table>

| PREPARATION AREA/ROOM | If a school offers only Integrated Science, then one lab is needed; if other Science related subjects are taught, then at least two labs are needed. (For details see figures). |
| VENTILATION/LIGHT WATER | Separate space should be provided in a lab for the preparation and storage of dangerous chemicals, and for a staff room. |
| DOORWAYS | Labs should have adequate ventilation, lights and water. |
| SECURITY | There must be two doorways to facilitate quick exit in case of any emergency. |
| SAFETY | Labs must have adequate security, doors and windows being grilled. |
| | Gas bottles must not be in enclosed cupboards in the lab (even if they are 20lb cylinders) but outside the building or in a location where there is adequate ventilation. |
| | All pipelines, electrical wires and gas lines must run in conduits so as not be easily accessible to students. |
| | 120v and 240v outlets must be distinctly different, clearly identified and must carry security covers. |
| | Gooseneck pipe must carry attachments for rubber tubing. |
### NON-ACADEMIC EDUCATION NORMS
#### SCIENCE LABORATORY

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREPARATION ROOM</strong></td>
<td>The following should be in the preparation room: cupboard to mix liquids with noxious fumes (with space below for storage of strong chemicals); 1’ electronic balance; a water still to prepare distilled water; first aid equipment and facility for a hose down in event of acid spills; fire extinguisher; fire blanket and fire buckets; a small table-model refrigerator; large sink for washing glassware; a lab cart to move equipment around.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAFETY RULES AND SYMBOLS</th>
<th>Laboratory safety rules and symbols should be clearly displayed.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students should not have any bags on the lab desks. As such the rear wall of the lab should be reserved for displays and shelves on which bags will be put.</td>
</tr>
</tbody>
</table>
Science materials and equipment
These are the minimum quantities that should be given to a new lab. These quantities will allow 3D students to work in groups.

<table>
<thead>
<tr>
<th>NO.</th>
<th>ITEM</th>
<th>SPECIFICATION</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$10^\circ C-110^\circ C$ Thermometer</td>
<td>mercury</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Boiling tube</td>
<td>pyrex</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>Test tube</td>
<td>pyrex</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>Rubber stopper</td>
<td>23mm</td>
<td>60</td>
</tr>
<tr>
<td>5</td>
<td>Rubber stopper</td>
<td>15mm</td>
<td>60</td>
</tr>
<tr>
<td>6</td>
<td>Beaker</td>
<td>250ml pyrex</td>
<td>50</td>
</tr>
<tr>
<td>7</td>
<td>Beaker</td>
<td>1 litre</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Beaker</td>
<td>100ml poly</td>
<td>12</td>
</tr>
<tr>
<td>9</td>
<td>Measuring cylinder</td>
<td>250ml poly</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td>Measuring cylinder</td>
<td>100ml poly</td>
<td>20</td>
</tr>
<tr>
<td>11</td>
<td>Conical flask</td>
<td>250ml boro</td>
<td>40</td>
</tr>
<tr>
<td>12</td>
<td>Rubber stopper</td>
<td>45mm</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>Cork bores</td>
<td>poly</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>Funnel</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>Test tube holder</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>16</td>
<td>Test tube stand</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>17</td>
<td>Watch glass</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>18</td>
<td>Evaporating dish</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>19</td>
<td>Satula</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>20</td>
<td>Glass rod</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>21</td>
<td>Bunsen burner</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>22</td>
<td>Spirit burner</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>23</td>
<td>Tripod</td>
<td>standard height</td>
<td>10</td>
</tr>
<tr>
<td>24</td>
<td>Tripod</td>
<td>low form</td>
<td>12</td>
</tr>
<tr>
<td>25</td>
<td>Gauze mat</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>26</td>
<td>Rubber tubing</td>
<td>red bunsentubing</td>
<td>6m</td>
</tr>
<tr>
<td>27</td>
<td>Rubber tubing</td>
<td>brown, thin</td>
<td>12m</td>
</tr>
<tr>
<td>28</td>
<td>Glass tubing</td>
<td>borosilicate</td>
<td>5m</td>
</tr>
<tr>
<td>29</td>
<td>Dropping pipette</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>30</td>
<td>Clamp</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>31</td>
<td>Boss</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>32</td>
<td>Retort stand base</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>33</td>
<td>Retort stand rod</td>
<td></td>
<td>12</td>
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<tr>
<td>34</td>
<td>Spring</td>
<td>extension</td>
<td>10</td>
</tr>
<tr>
<td>35</td>
<td>Newton meter</td>
<td>1ON</td>
<td>10</td>
</tr>
<tr>
<td>36</td>
<td>Newton meter</td>
<td>2.5N</td>
<td>10</td>
</tr>
<tr>
<td>37</td>
<td>Slotted masses</td>
<td>10-100g</td>
<td>12</td>
</tr>
<tr>
<td>38</td>
<td>Slotted masses</td>
<td>100g-1kg</td>
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</tr>
<tr>
<td>NO.</td>
<td>ITEM</td>
<td>SPECIFICATION</td>
<td>QUANTITY</td>
</tr>
<tr>
<td>-----</td>
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<td>-------------------------</td>
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</tr>
<tr>
<td>39</td>
<td>Ball and ring</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>40</td>
<td>Bimetallic strip</td>
<td>large</td>
<td>10</td>
</tr>
<tr>
<td>41</td>
<td>Bimetallic strip</td>
<td>small</td>
<td>10</td>
</tr>
<tr>
<td>42</td>
<td>Copper rod</td>
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<td>10</td>
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<td>43</td>
<td>Iron rod</td>
<td></td>
<td>10</td>
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<td>44</td>
<td>Pin-hole camera</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>45</td>
<td>Lens</td>
<td>convex, cylindrical</td>
<td>10</td>
</tr>
<tr>
<td>46</td>
<td>Lens</td>
<td>convex</td>
<td>10</td>
</tr>
<tr>
<td>47</td>
<td>Lens</td>
<td>convex</td>
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</tr>
<tr>
<td>48</td>
<td>Lens</td>
<td>concave</td>
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<td>49</td>
<td>Lens holder</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>50</td>
<td>Mirror</td>
<td>Plan</td>
<td>10</td>
</tr>
<tr>
<td>51</td>
<td>Pins</td>
<td></td>
<td>2 packs</td>
</tr>
<tr>
<td>52</td>
<td>Rectangle block</td>
<td>perspex</td>
<td>10</td>
</tr>
<tr>
<td>53</td>
<td>Prism</td>
<td>60° perspex</td>
<td>10</td>
</tr>
<tr>
<td>54</td>
<td>Prism</td>
<td>45°/90° perspex</td>
<td>10</td>
</tr>
<tr>
<td>55</td>
<td>Liebig condenser</td>
<td>With bored bung</td>
<td>10</td>
</tr>
<tr>
<td>56</td>
<td>Round bottom flask</td>
<td>With wide tube + bung</td>
<td>10</td>
</tr>
<tr>
<td>57</td>
<td>Microscope</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>58</td>
<td>Glass slide</td>
<td></td>
<td>500</td>
</tr>
<tr>
<td>59</td>
<td>Cavity slide</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>60</td>
<td>Cover slips</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>61</td>
<td>Bulb holder</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>62</td>
<td>Bulb</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>63</td>
<td>Wire</td>
<td>PVC insulated, red</td>
<td>40m</td>
</tr>
<tr>
<td>64</td>
<td>Wire</td>
<td>PVC insulated, black</td>
<td>40m</td>
</tr>
<tr>
<td>65</td>
<td>Crocodile clip</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>66</td>
<td>Filter paper</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>67</td>
<td>Measuring cylinder</td>
<td>glass, 1 L</td>
<td>1</td>
</tr>
<tr>
<td>68</td>
<td>Funnel</td>
<td>glass</td>
<td>10</td>
</tr>
<tr>
<td>69</td>
<td>Rule</td>
<td>inn</td>
<td>12</td>
</tr>
<tr>
<td>70</td>
<td>Balance</td>
<td>triple beam</td>
<td>1</td>
</tr>
<tr>
<td>71</td>
<td>Balance masses</td>
<td></td>
<td>1 set</td>
</tr>
<tr>
<td>72</td>
<td>Safety spectacles</td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>73</td>
<td>Benedict's solution</td>
<td>L</td>
<td>1</td>
</tr>
<tr>
<td>74</td>
<td>Calcium carbonate</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>75</td>
<td>Marble chippings</td>
<td>1 kg</td>
<td>1</td>
</tr>
<tr>
<td>76</td>
<td>Copper sulphate</td>
<td>5000+ 250g</td>
<td>1</td>
</tr>
<tr>
<td>77</td>
<td>Iodine</td>
<td>100 g</td>
<td>1</td>
</tr>
<tr>
<td>78</td>
<td>Universal indicator</td>
<td>100 ml</td>
<td>1</td>
</tr>
<tr>
<td>79</td>
<td>Universal indicator</td>
<td>test papers</td>
<td>40 books</td>
</tr>
<tr>
<td>80</td>
<td>Litmus paper</td>
<td>red</td>
<td>1 tube + 2 books</td>
</tr>
<tr>
<td>NO.</td>
<td>ITEM</td>
<td>SPECIFICATION</td>
<td>QUANTITY</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------</td>
<td>------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>81</td>
<td>Litmus paper</td>
<td>blue</td>
<td>1 tube + 2 books</td>
</tr>
<tr>
<td>82</td>
<td>Zinc</td>
<td>granular 250g</td>
<td>1</td>
</tr>
<tr>
<td>83</td>
<td>Copper turnings</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>84</td>
<td>Magnesium ribbon</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>85</td>
<td>Iron filings</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>86</td>
<td>Copper foil</td>
<td></td>
<td>1 rack</td>
</tr>
<tr>
<td>87</td>
<td>Oxalic acid</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>88</td>
<td>Magnesium sulphate</td>
<td>1kg</td>
<td>1</td>
</tr>
<tr>
<td>89</td>
<td>Zinc sulphate</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>90</td>
<td>Calcium hydroxide</td>
<td>1kg</td>
<td>1</td>
</tr>
<tr>
<td>91</td>
<td>Copper carbonate</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>92</td>
<td>Iron sulphate</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>93</td>
<td>Copper oxide</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>94</td>
<td>Ethanol</td>
<td>1L</td>
<td>1</td>
</tr>
<tr>
<td>95</td>
<td>Hydrosulphic acid</td>
<td>2L (2M)</td>
<td>1</td>
</tr>
<tr>
<td>96</td>
<td>Sulpuric acid</td>
<td>2L (2M)</td>
<td>1</td>
</tr>
<tr>
<td>97</td>
<td>Sodium hydroxide</td>
<td>500g</td>
<td>1</td>
</tr>
<tr>
<td>98</td>
<td>Bar magnet</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>99</td>
<td>Plotting compass</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>100</td>
<td>Iron rod</td>
<td>copper</td>
<td>1</td>
</tr>
<tr>
<td>101</td>
<td>Plate for simple cell</td>
<td>zinc</td>
<td>2</td>
</tr>
<tr>
<td>102</td>
<td>Clear glass, 250ml</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>103</td>
<td>Reagent, 250ml</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>104</td>
<td>Dropping bottles, 50ml</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>105</td>
<td>Pocket lens</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>106</td>
<td>Bell</td>
<td>electric</td>
<td>1</td>
</tr>
<tr>
<td>107</td>
<td>Wire helix</td>
<td>slinky</td>
<td>1</td>
</tr>
<tr>
<td>108</td>
<td>Beehive shelf</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>109</td>
<td>Pestle and mortar</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>110</td>
<td>Spotting tile</td>
<td>plastic</td>
<td>12</td>
</tr>
<tr>
<td>111</td>
<td>Electrodes</td>
<td>carbon</td>
<td>24</td>
</tr>
<tr>
<td>112</td>
<td>Ammeter</td>
<td>dual range</td>
<td>10</td>
</tr>
<tr>
<td>113</td>
<td>Voltmeter</td>
<td>dual range</td>
<td>10</td>
</tr>
<tr>
<td>114</td>
<td>Thistle funnel</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>115</td>
<td>Potassium iodide</td>
<td>100g</td>
<td>1</td>
</tr>
<tr>
<td>116</td>
<td>Lead foil</td>
<td>20g</td>
<td>2</td>
</tr>
<tr>
<td>117</td>
<td>Zinc foil</td>
<td>20g</td>
<td>1</td>
</tr>
<tr>
<td>118</td>
<td>Dropping bottles</td>
<td>50ml, TK pattern</td>
<td>10</td>
</tr>
</tbody>
</table>
Figure 1 represents the minimum acceptable size of a lab – I classroom. This lab seats 18 students and should be located only in a Grade D school. This lab may also accommodate a larger class of up to 24, but the whole class should not be doing the practicals simultaneously. For a class of 24 students, for example, 12 may work around the central bench while the others do theoretical work at the other benches. Storage of equipment would be done in the cupboards beneath the benches.
Figure 1

Science Laboratory
Figure 2 occupies the area of 2 classrooms and seats 36 students. However all 36 students should not be engaged in practical work; simultaneously. 18 students should do practical work at three work stations while theory is done at the other 3 work stations. In this way the lab can accommodate a class of up to 42 (with 18 doing practical work at 3 work stations and 20, theoretical work at the other 3 work stations). This type of lab is suitable for any grade school. However the number of labs would vary depending on the grade of the school. For example, a small Grade C school with a small Science programme may have one lab while a grade a school may have 3 such labs. It is advised that if school has 48ft x 24ft space for labs., that one lab of this design should be made rather than 2 smaller 24ft x 24ft labs.
Figure 2
Science Laboratory

Display Area & Bag Bay

Emergency Exit

Corridors

Teacher's Desk

White Board

Preparation area with sink & floor and wall cupboards

Fire Station and First Aid

Section 18: Lab door, laminating cupboards

Set of Center gas and water outlet

Sink
Figure 3 represents what can be done with 3 classrooms. Note that once more, there are 2 labs separated by a preparation room. There is also a teacher's room. This allows up to 20 students to do practical work in each lab simultaneously. With this arrangement 4 discrete activities can be undertaken simultaneously. A different class can be doing practical work in each lab; preparation for a lab can be taking place in the preparation room and a teacher can be giving individual attention to a student or making SBA's in the staff room.
Figure 3

Science Laboratory
Figure 4, represents the ideal configuration for a pair of labs in a Grade A C school. The labs and preparation room extend over 92ft. The arrangement of the lab is illustrated by Figure 2. Figure 3 illustrates the arrangement of the preparation room and staff room.
Figure 4

Ideal Configuration of a pair of Science Laboratory

40ft Arranged IS in.

Figure 11

40ft Arranged as in
Figure II
Figures 5A—5C illustrate some details of fittings and dimensions for benches and stools.
Figure 5 A

Fume Cupboard

Water Outlet

Gas Outlet

Lab Stool
Figure C

SECTION C–C

TYPICAL STOOL DETAILS
# Non-Academic Education Norms

## Information Technology Laboratory

### General Considerations - Approach

Lab would cater for the entire class of students. Two students will share a computer. The lab will be configured to allow for both independent student work, as well as maximum supervision and contact during lecture sessions.

### Electrical Wiring

- Electrical wiring for the Lab should isolate all computer points and have these run from a separate distribution panel. These points should be specifically coded as computer points. Care should be taken to ensure that the polarity and voltage levels between Earth, Neutral and Live confirm to the requirements of computer equipment.

### Networking

- All systems within the lab must be networked to allow for information and resource sharing, and also facilitate the efficient management of all IT resource.

- All networking must use the Ethernet standard and must follow the follow guideline:
  1. All cabling run in conduits
  2. Termination of drops using wall jacks
  3. Hub secured in a secure wiring closet.

### Ventilation

- Adequate ventilation must be provided by either:
  1. Air-conditioning unit(s) or
  2. Fans (preferably ceiling or wall mounted) with open windows to allow for circulation of fresh air.

  In an environment that is extremely dusty, the air-conditioning option should be used.

### Lighting

- The lab must be oriented so that computer monitors are not facing directly a bright light source or direct lighting from the sun so as to cause a glare.

- If the room is sealed from natural light then appropriate artificial lighting must be used.
### NON-ACADEMIC EDUCATION NORMS

#### INFORMATION TECHNOLOGY LABORATORY

<table>
<thead>
<tr>
<th><strong>FOCUS</strong></th>
<th><strong>EXPLANATORY NOTES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LABORATORY LAYOUT</strong></td>
<td>- See Diagram attached.</td>
</tr>
<tr>
<td><strong>PHYSICAL DIMENSIONS</strong></td>
<td>- Min Depends on class size</td>
</tr>
<tr>
<td></td>
<td>- Max 24 ft x 24 ft = 576 ft²</td>
</tr>
<tr>
<td></td>
<td>- Optimum 24 ft x 24 ft = (22296.72 cm x 22296.72 cm = 535121.28 cm²)</td>
</tr>
<tr>
<td><strong>NUMBER OF STUDENTS</strong></td>
<td>- Min 1</td>
</tr>
<tr>
<td></td>
<td>- Max 32</td>
</tr>
<tr>
<td></td>
<td>- Optimum 24</td>
</tr>
<tr>
<td><strong>LAB FURNISHING</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DESKS/TABLES</strong></td>
<td>- Custom-built to specifications in diagram.</td>
</tr>
<tr>
<td><strong>CHAIRS</strong></td>
<td>- Chairs must be of adjustable height to support proper ergonomics in accessing the keyboard and viewing the monitor.</td>
</tr>
<tr>
<td><strong>WHITEBOARD</strong></td>
<td>- Must be of the type utilizing dustless markers.</td>
</tr>
<tr>
<td><strong>TEACHER’S WORKSPACE</strong></td>
<td>- Must be as given in diagram.</td>
</tr>
<tr>
<td><strong>STORAGE CABINET</strong></td>
<td>- Secure, locked storage must be provided for magnetic or optical storage media as well as for Manuals, Software and Drivers.</td>
</tr>
<tr>
<td><strong>LAB EQUIPMENT</strong></td>
<td></td>
</tr>
<tr>
<td><strong>WORKSTATIONS</strong></td>
<td>- For a given lab there must be one workstation provided for every two students. One workstation will also be provided for the teacher. Specifications for workstations must meet minimum standards as set out by the MIS Unit.</td>
</tr>
<tr>
<td><strong>SERVER</strong></td>
<td>- Each lab must have a server which will be used for central administration of the network. This machine will also provide file, print and remote access services. Specification for workstations must meet minimum standards as set out by the MIS Unit.</td>
</tr>
<tr>
<td><strong>PRINTERS</strong></td>
<td>- Each lab must be equipped with a minimum of one laser printer for shared access by all workstations in the lab. Specifications for workstations must meet minimum standards as set out by the MIS Unit.</td>
</tr>
</tbody>
</table>
INFORMATION TECHNOLOGY LABORATORY

EXPLANATORY NOTES

All computer points must be located at the least 2 m from the nearest stabilizers. However, because of the need for systems protection in the event of power failure, it is recommended that all computer points be fitted with surge regulation and battery backup systems.

A minimum of one telephone line is required for internal and external use and for accessing the Regional or supplier help desks.

All schools with IT labs should have a designated coordinator who will be responsible for smooth functioning of the lab. The coordinator can only access the lab under the supervision of the Regional Department of Education, who will escalate difficult problems to the Ministry of Education.

Policies and Procedures governing the use of IT labs are contained within relevant documents published by the Ministry of Education.

Computers must be housed in a sealed cabinet to prevent dust entering the machines.

All food must be eaten in the computer room.
NON-ACADEMIC ED 1.1 CALL ON NORMS
INFORMATION TECHNOLOGY LABORATORY

FOCUS

HEALTH AND SAFETY

EXPLANATORY NOTES

Room should be kept clean at all times and
Exit should be clearly marked.

Safety rule must be conspicuously displayed.

A First Aid Kit and suitable fire extinguisher (for electrical fires) must be provided. The fire extinguisher must be checked regularly.

- Must be in good order as to prevent accidental stepping on and tripping by users of the lab.
Computer Lab Layout

Figure 6

Optional Island Specifications

Specifications

Depth 2.5 ft

WALL
# NON-ACADEMIC EDUCATION NORMS

## ALLIED ARTS

<table>
<thead>
<tr>
<th><strong>FOCUS</strong></th>
<th><strong>EXPLANATORY NOTES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GUIDING PRINCIPLES</strong></td>
<td>Allied Arts comprises Dance, Drama, Music, Physical Education and Visual Arts.</td>
</tr>
<tr>
<td>- Each of these subjects should be done in its own room.</td>
<td></td>
</tr>
<tr>
<td>- Rooms should be spacious and away from regular classrooms.</td>
<td></td>
</tr>
<tr>
<td>- Rooms could be created in Multipurpose Halls, using wall dividers.</td>
<td></td>
</tr>
<tr>
<td>- Rooms for Music and Visual Arts should be, preferably, of fixed walls (permanent structures).</td>
<td></td>
</tr>
<tr>
<td>- A strong/store room must be provided for the storage of all Allied Arts equipment/materials. This room should be air-conditioned.</td>
<td></td>
</tr>
<tr>
<td>- An Allied Arts Department must offer at least (3) three of its component subjects mentioned.</td>
<td></td>
</tr>
<tr>
<td>- Floor should be sturdy, clean, free from holes, splinters and projecting nail heads (well sanded).</td>
<td></td>
</tr>
<tr>
<td>- Students should be appropriately attired for the particular subject – Dance, Physical Education, etc.</td>
<td></td>
</tr>
<tr>
<td>- The Allied Arts Department could operate in a Multipurpose Hall or spacious Auditorium.</td>
<td></td>
</tr>
<tr>
<td>- Rooms should facilitate individual and large group activities.</td>
<td></td>
</tr>
<tr>
<td>- For music, each student must have his/her own recorder.</td>
<td></td>
</tr>
</tbody>
</table>
**NON-ACADEMIC EDUCATION NORMS**

**ALLIED ARTS**

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>- A person appointed Head of Department (Allied Arts) must have a working knowledge of at least three areas of the programme and must have advanced skills in one area.</td>
<td>- A Department must have at least a Head and Two other teachers -- each person must specialize in a different subject.</td>
</tr>
<tr>
<td>- Allied Arts should be compulsory for Levels 7-9, and free of gender bias.</td>
<td></td>
</tr>
</tbody>
</table>

**MULTIPURPOSE HALL**

**LOCATION**

- Located on the leeward side of the school.
- Away from the regular classrooms.

**ACCESSORIES/FIXTURES**

- 1 Stage with two entrances
- 2 Adjoining Dressing Rooms, one for males and the other for females.

Dressing Rooms must have lockers, toilet and bath, mirrors and counters.

- 2 Sets Stage Lights
- 1 Modern Sound System
- Folding Steps attached to walls
- Folding Chairs and Tables
- 6 Moveable White Boards
- 6 Cupboards (large)
- 2 Large Fire Extinguishers
- 6 Fire Buckets
- 4 Industrial Fans
- 4 Ironing Boards and irons
- 2 Televisions on trolleys
- 2 Video Cassette Recorders
- Computer
- • 1 Radio Cassette Compact Disc Player
- 1 Podium
### NON-ACADEMIC EDUCATION NORMS
#### A LIED ARTS

<table>
<thead>
<tr>
<th><strong>FOCUS</strong></th>
<th><strong>EXPLANATORY NOTES</strong></th>
</tr>
</thead>
</table>
| - 2 Bulletin Boards  
- 1 First Aid Kit  
- 2 Water Fountains  
- 1 Clock | |
| **RESOURCE ROOMS** | - Dance Room  
- Physical Education Room  
- Visual Arts Room  
- Drama Room  
- Music Room with Keyboard Laboratory  
- Indoor Games Room |
| **OTHER ROOMS** | - Store Room/Strong Room |
| **OFFICE** | - Head of Department Office |
| **COURTS** | Multifunctional Clay Court to enter for Volleyball, Lawn Tennis and Netball.  
- Multifunctional Concrete Court to cater for Basketball, Lawn Tennis, Netball and Volleyball. |
| **FIELD** | Multifunctional Outdoor Field to cater for Football, Cricket, Circle Tennis, Netball and Tract and Field events.  
- Where space is not available for these to be provided at each school, they could be located centrally in school clusters or sub-regionally and be accessed by a number of contiguous schools. On the other hand in a cluster of schools, school A may be provided a Multifunctional Clay Court while school B has a Multifunctional Concrete Court and school C the Multifunctional Outdoor Field and a roster be put in place for their use. Same could be done for the swimming pool. |
# NON-ACADEMIC EDUCATION NORMS
## ALLIED ARTS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF ADMINISTRATIVE STAFF</td>
<td>Head-of-Department (H.O.D)</td>
</tr>
</tbody>
</table>

### TEACHER QUALIFICATIONS

#### MINIMUM

- Four (4) subjects CXC/GCE including English and Mathematics, at Grade III or above with at least 3 years experience in any *Expressive Arts subject or Physical Education.
  
  **Or**

- 4 (4) CXC including English and Mathematics and any Expressive Arts subject at Grade III or above.
  
  **Or**

- Grade I Class I Trained Teachers Certificate and three (3) years experience in any Expressive Arts subject or Physical Education

#### OPTIMUM

- Grade I Class I Trained Teachers Certificate with an option in **Music**, **Drama**, **Physical Education**, **Visual Arts**
  
  **Plus**

- a Certificate and/or Diploma from the **Burrowes School of Arts**, **National School of Dance** or the University of Guyana (in a relevant subject area).
  
  **Plus**

- a First Degree, or equivalent, in the Expressive Arts or Physical Education.
## NON-ACADEMIC EDUCATION NORMS
### ALLIED ARTS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAXIMUM</strong></td>
<td>- Grade I Class I Trained Teachers Certificate with an option in any Expressive Arts subject or Physical Education.</td>
</tr>
<tr>
<td></td>
<td><strong>Plus</strong></td>
</tr>
<tr>
<td></td>
<td>- a Certificate and/or Diploma from the Burrowes School of Arts, National School of Dance or the University of Guyana (in a relevant subject area)</td>
</tr>
<tr>
<td></td>
<td><strong>Plus</strong></td>
</tr>
<tr>
<td></td>
<td>- a First Degree and Second Degree, or equivalent, in the Expressive Arts or Physical Education.</td>
</tr>
</tbody>
</table>

### TEACHER-STUDENT RATIO

<table>
<thead>
<tr>
<th>WORKING GROUP SIZE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINIMUM</strong></td>
<td>10 students</td>
</tr>
<tr>
<td><strong>OPTIMUM</strong></td>
<td>15 students</td>
</tr>
<tr>
<td><strong>MAXIMUM</strong></td>
<td>20 students</td>
</tr>
</tbody>
</table>

### STATUS COMPOSITION OF STAFF

| TRAINED GRADUATE | At least 40% |

*Expressive Arts*  
Dance  
Music  
Drama  
Visual Arts
Figure 7

Pool layout:
Figure 8

Basketball court layout
Figure 9

Basketball backboard layout
Basketball backboard and rim support frame layout

Foul/Penalty layout
Figure 11

Cricket pitch layout
Figure 12

Football field

Maximum width 100yds --- Minimum width 50yds

Goal

20yds

44yds

10yd Radius

Goal area

8yds
Figure 13

Volleyball court layout
Figure 14

Tennis court layout
### NON-ACADEMIC EDUCATION NORMS
#### PRACTICAL INSTRUCTION CENTRES/DEPARTMENTS

<table>
<thead>
<tr>
<th>GUIDING PRINCIPLES</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Department, or Centre should be equipped with up-to-date and appropriate facilities for teaching in all areas of pre-vocational education.</td>
<td></td>
</tr>
</tbody>
</table>

- Workshops, laboratories, areas for practical Ark should be allocated for each subject area—Clothing and Textiles, Crop Science, Technical Drawing, etc.

- The Centre or Department should be located in such a way that it facilitates the delivery of supplies and removal of waste.

Where more than one building is in the compound, the Centre or Department should be located on the leeward side.

- Adequate provision must be made for the disposal of waste.

- Size of rooms and quantity of equipment should be adequate for the number of students who use them at any one time.

Heights of working surfaces, stools and tables should be suitable for the heights of students who use them.

- Floors should be constructed of such material that they are sturdy and easy to keep clean.
## NON-ACADEMIC EDUCATION NORMS
### PRACTICAL INSTRUCTION CENTRES/DEPARTMENTS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Adequate safety devices should be provided.</td>
<td>- Storage space should be suited to, and adequate for, all of the materials and equipment needed for the teaching of each subject area.</td>
</tr>
<tr>
<td>- Storage must be provided for students' personal belongings.</td>
<td></td>
</tr>
</tbody>
</table>

### LAND FOR AGRICULTURE PICS, AND PIDS

<table>
<thead>
<tr>
<th>MINIMUM</th>
<th>MAXIMUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Proper drainage and irrigation must be provided.</td>
<td>- Adequate land space must be provided</td>
</tr>
<tr>
<td>5 acres</td>
<td>10 acres</td>
</tr>
<tr>
<td>I-2 acres for buildings, depending on the grade and daily attendance.</td>
<td></td>
</tr>
<tr>
<td>Minimum of 1 acre to plant vegetable crops.</td>
<td></td>
</tr>
<tr>
<td>1 acre to plant any one of the crops – legumes (cow peas) cereals (corn), root crops (cassava).</td>
<td></td>
</tr>
<tr>
<td>1-2 acres to plant orchard crops- citrus, banana, cherries.</td>
<td></td>
</tr>
<tr>
<td>1/10 of an acre for nursery</td>
<td></td>
</tr>
<tr>
<td>2-5 acres to plant antelope grass and practise rational grazing or zero grazing.</td>
<td></td>
</tr>
</tbody>
</table>
NON-ACADEMIC EDUCATION NORMS
PRACTICAL INSTRUCTION CENTRES/DEPARTMENTS

<table>
<thead>
<tr>
<th>CENTRE GRADES</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRADE A</strong></td>
<td>Enrolment of 11+ students and above.</td>
</tr>
<tr>
<td><strong>GRADE B</strong></td>
<td>- Enrolment of 80-120 students.</td>
</tr>
<tr>
<td><strong>GRADE C</strong></td>
<td>- Enrolment of 79 students and below.</td>
</tr>
</tbody>
</table>

**SANITARY FACILITIES**

Sanitary Block: Students

4 toilets for 79 students and below  
6 toilets for 80-120 students  
8 toilets for 121 students and above.

Sanitary Block: Teachers

- 2 toilets for 10 teachers  
  4 toilets for 20 teachers  
- Showers: Students  
  - 2 sets of showers  
- Showers: Teachers  
  - 1 set of showers

The number of toilets and showers must be divided between the sexes. Sanitary Units must be placed in the toilets used by female teachers and female students.

**DRINKING OUTLETS**

- 1 tap for every 40 students  
- 2 tanks/reservoirs  
- 3 Water pitchers

**SAFETY/EMERGENCY FACILITIES**

- 1 Fire Bucket in each classroom  
- 1 Fire Extinguisher (small) in each classroom  
- 1 Fire Extinguisher in each laboratory/practical room/workshop  
1 First Aid Kit.
# Non-Academic Education Norms

## Practical Instruction Centres/Departments

<table>
<thead>
<tr>
<th>Resource Rooms</th>
<th>Industrial Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Technical Drawing</td>
</tr>
<tr>
<td></td>
<td>Woods/Construction</td>
</tr>
<tr>
<td></td>
<td>Welding</td>
</tr>
<tr>
<td></td>
<td>Brick Laying and Masonry</td>
</tr>
<tr>
<td></td>
<td>- Mechanical Engineering Technology/Metals</td>
</tr>
<tr>
<td></td>
<td>- Electrical and Electronic Technology/General</td>
</tr>
<tr>
<td></td>
<td>Electricity and Electrical Installation</td>
</tr>
<tr>
<td></td>
<td>- Upholstery</td>
</tr>
<tr>
<td></td>
<td>- Sheet Metal Work</td>
</tr>
<tr>
<td></td>
<td>- Plumbing-</td>
</tr>
<tr>
<td></td>
<td>Motor Mechanics</td>
</tr>
<tr>
<td></td>
<td>- Library</td>
</tr>
</tbody>
</table>

## Home Economics

- Food and Nutrition
- Clothing and Textiles
- Home Economics Management

## Agriculture Science

- Crop Science
- Animal Science

## Other Rooms

- Staff Room
- Sick Bay
- Store/Strong Room(s)
- Laboratory

## Offices

- Head-of-Centre’s Office
- Deputy Head-of-Centre’s Office
- Head-of-Department’s Office

## Areas

- Waiting/Reception Area
### CENTRE ACCESSORIES
- Bell/Buzzer
- Guillotine
- 1 Photocopyer
  - Computer(s) and Accessories
    - 1 Television
- 1 Video Cassette Recorder
- 1 Camcorder
- 1 Overhead Projector and Screen
- 1 Camera
- 1 Radio Cassette Recorder
- 1 Slide Projector
  - 1 Microwave
- 1 Refrigerator
- 1 Standby Generator
- 1 Clock

### GENERAL CLASSROOM ACCESSORIES
- 1 Chalk/White Board and Eraser
- 1 Display Board
- 1 Bulletin Board
- 1 Electric Fan
- 1 Waste Paper Bin
- 1 Hand Brush
- 1 Towel Rack
- 1 Wall Clock
- 1 Sink
  - 1 Large Cupboard
### NON-ACADEMIC EDUCATION NORMS

#### PRACTICAL INSTRUCTION CENTRES/DEPARTMENTS

<table>
<thead>
<tr>
<th><strong>FOCUS</strong></th>
<th><strong>EXPLANATORY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TEXT BOOKS</strong></td>
<td></td>
</tr>
<tr>
<td>- 1 Basic Text for each subject for each student of Levels 7-9</td>
<td></td>
</tr>
<tr>
<td>- Levels: 10-11 each student must have a copy of a basic text in each component of the subject in which he/she specializes.</td>
<td></td>
</tr>
<tr>
<td>- Class sets of Supplementary texts.</td>
<td></td>
</tr>
<tr>
<td>- 2 copies of Reference Texts.</td>
<td></td>
</tr>
<tr>
<td><strong>MODULES</strong></td>
<td></td>
</tr>
<tr>
<td>- Class Sets of particular CXC Modules (those subjects for which the Centre/Department has CXC candidates).</td>
<td></td>
</tr>
</tbody>
</table>

#### SIZE OF GENERAL CLASSROOM

<table>
<thead>
<tr>
<th><strong>MINIMUM</strong></th>
<th>$2801^2 + 140ft^2 = 420ft^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPTIMUM</strong></td>
<td>$(260128.4cm + 130064.2cm = 390192.6cm^2)$</td>
</tr>
<tr>
<td><strong>MAXIMUM</strong></td>
<td>$490ft^2 * 245ft = 735ft^2$</td>
</tr>
</tbody>
</table>

#### SIZE OF WORKSHOP/LABORATORY PRACTICAL AREA

<table>
<thead>
<tr>
<th><strong>MINIMUM</strong></th>
<th>Technical Drawing $1200ft^2 = 1114836cm^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Woods, Metals, Agricultural Science $1500ft^2 = 1393545cm^2$</td>
</tr>
<tr>
<td></td>
<td>Home Economics $500ft^2 = 464515cm^2$</td>
</tr>
<tr>
<td><strong>OPTIMUM</strong></td>
<td>Technical Drawing $1750ft^2 = 162580.2cm^2$</td>
</tr>
<tr>
<td></td>
<td>Woods, Metals, Agricultural Science $2400ft^2 = 2229672cm^2$</td>
</tr>
<tr>
<td></td>
<td>Home Economics $800ft^2 = 743224cm^2$</td>
</tr>
<tr>
<td><strong>MAXIMUM</strong></td>
<td>Technical Drawing $2100ft^2 = 1950963cm^2$</td>
</tr>
<tr>
<td></td>
<td>Woods, Metals, Agricultural Science $2400ft^2 = 2229672cm^2$</td>
</tr>
<tr>
<td></td>
<td>Home Economics $900ft^2 = 836127cm^2$</td>
</tr>
</tbody>
</table>

*Space is provided for the installation of floor (horizontal) vertical cupboards and displaying of exhibits, models, etc.*
<table>
<thead>
<tr>
<th><strong>NUMBER OF ADMINISTRATIVE STAFF</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRADE A</strong></td>
<td>1 HM; 1 DHM; 2 SMs</td>
</tr>
<tr>
<td><strong>GRADE B</strong></td>
<td>1 HM; 1 DHM; 1 SM</td>
</tr>
<tr>
<td><strong>GRADE C</strong></td>
<td>1 HM; 2 SMs</td>
</tr>
</tbody>
</table>

| **TEACHER-STUDENT RATIO** | 2 Teachers to 40 students |

| **TEACHER QUALIFICATIONS** |  |
|----------------------------|  |
| **INDUSTRIAL ARTS** |  |
| **MINIMUM** | Advanced Craft or Technician Certificate or equivalent. |
| **OPTIMUM** | Grade I Class I Trained Teachers Certificate with Industrial Arts option. **Plus** |
| | a Certificate and/or Diploma **Plus** |
| | a First Degree in Technical and/or Vocational Education |
| **MAXIMUM** | Grade I Class I Trained Teachers Certificate (Industrial Arts option) **Plus** |
| | a Certificate and/or Diploma **Plus** |
| | a First Degree in Technical and/or Vocational Education |
### Non-Academic Education Norms

**Focus**

<table>
<thead>
<tr>
<th><strong>HOME ECONOMICS</strong></th>
<th><strong>EXPLANATORY NOTES</strong></th>
</tr>
</thead>
</table>
| **MINIMUM**       | - 4 CXC/GCE including 2 Home Economics (H.Ec.) subjects and English and Math at Grade III or above  
|                   | **Or**  
|                   | - Carnegie School of Home Economics Diploma/Certificate |
| **OPTIMUM**       | Grade I Class I Trained Teachers Certificate with Home Economics option.  
|                   | **Plus** Certificate and/or Diploma (Home Economics option).  
|                   | **Plus**  
|                   | - a First Degree with Home Economics option/major. |
| **MAXIMUM**       | - Grade I Class I Trained Teachers Certificate (Home Economics option).  
|                   | **Plus**  
|                   | - A Certificate and/or Diploma (Home Economics option) and/or First Degree (Home Economics option)  
|                   | **Plus**  
|                   | a Second Degree (Home Economics option) |
## NONACADEMIC EDUCATION NORMS
### PRACTICAL INSTRUCTION CENTRES/DEPARTMENTS

<table>
<thead>
<tr>
<th>Focus</th>
<th>Explanatory Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGRICULTURAL SCIENCE</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **MINIMUM** | - Guyana School of Agriculture Certificate  
                 Or  
                 - 4 CXC/GCE with Math, English, Agricultural Science and any other subject. Agricultural Science must be at Grade I, II or III. |
| **OPTIMUM** | - Grade I Class I Trained Teachers Certificate with Agricultural Science (A.S) as option.  
                 Plus  
                 - a Certificate and/or Diploma (A.S option) from the Guyana School of Agriculture (GSA) or University of Guyana (UG)  
                 Plus  
                 - a First Degree from UG (A.S option/major) |

| **MAXIMUM** | - Grade I Class I Trained Teachers Certificate (A.S option).  
                 Plus  
                 - a Certificate and/or Diploma (A.S option)  
                 Plus  
                 - A First Degree (A.S option/major)  
                 Plus  
                 - A Second Degree (AS option/major) |

| **FARM MANAGER** | - GSA Diploma plus first degree in Agriculture Sc., and 5 years or more of teaching experience in Agriculture St. i.e. a Secondary school with a productive school farm. It must be a PSC appointment so that he/she will be mandated to work during school vacation. |
### NON-ACADEMIC EDUCATION NORMS

#### PRACTICAL INSTRUCTION CENTRES/DEPARTMENTS

<table>
<thead>
<tr>
<th>Focus</th>
<th>Explanatory Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POULTRY PEN</strong></td>
<td>- Long axis of the building should run from East to West to avoid draught, morning and afternoon sun.</td>
</tr>
<tr>
<td></td>
<td>- Building should be located to allow for speedy removal of pen washing.</td>
</tr>
<tr>
<td></td>
<td>- Liberal supply of water should be available.</td>
</tr>
<tr>
<td></td>
<td>- See Fig. 15</td>
</tr>
<tr>
<td></td>
<td>50ft x 20ft = 1000 ft</td>
</tr>
<tr>
<td></td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>2 at 20ft x 20ft each</td>
</tr>
<tr>
<td></td>
<td>20ft x 20ft = 400 ft</td>
</tr>
<tr>
<td></td>
<td>(609.6cm x 609.6cm = 371612.16 cm)</td>
</tr>
<tr>
<td></td>
<td>Floor made of concrete.</td>
</tr>
<tr>
<td></td>
<td>Roof covered with aluminum or galvanized sheets.</td>
</tr>
<tr>
<td></td>
<td>Walls made of concrete blocks up to 1ft from the floor and 1/2 in-1in wire mesh above the blocks to the roof.</td>
</tr>
</tbody>
</table>

| **BROILER UNIT**       |                                                                                                       |
| **SIZE**               |                                                                                                       |
| **NUMBER OF BIRDS**    |                                                                                                       |
| **PENS**               |                                                                                                       |
| **STORE ROOM**         |                                                                                                       |
|                        | See Fig. 16                                                                                           |
|                        | 60ft x 20ft = 1200 ft                                                                                 |
|                        | 400                                                                                                    |
|                        | 20ft x 7ft = 140 ft                                                                                   |
|                        | 701.04cm x 609.6cm = 427353.98 cm                                                                     |
|                        | #2 AT 30ft x 20ft = 600ft                                                                            |
|                        | (914.4cm x 609.6cm = 557418 cm)                                                                       |
|                        | - Floor, roof and wall to be the same as for boilers.                                                 |

| **LAYER UNIT**         |                                                                                                       |
| **SIZE**               |                                                                                                       |
| **NUMBER OF LAYERS**   |                                                                                                       |
| **STORE ROOM**         |                                                                                                       |
| **PENS**               |                                                                                                       |
|                        | See Fig. 16                                                                                           |
|                        | 60ft x 20ft = 1200 ft                                                                                 |
|                        | 400                                                                                                    |
|                        | 20ft x 7ft = 140 ft                                                                                   |
|                        | 701.04cm x 609.6cm = 427353.98 cm                                                                     |
|                        | #2 AT 30ft x 20ft = 600 ft                                                                            |
|                        | (914.4cm x 609.6cm = 557418 cm)                                                                       |

| **CATTLE PEN**         |                                                                                                       |
| **FEED ALLEY**         |                                                                                                       |
| **FEED TROUGH**        |                                                                                                       |
| **STALL**             |                                                                                                       |
| **GUTTERS**            |                                                                                                       |
|                        | See Fig. 17                                                                                           |
|                        | 2 'Aft wide = 76.2cm                                                                                 |
|                        | 1 'Aft wide = 45.72 cm                                                                                |
|                        | 6ft x 4ft = 24ft                                                                                      |
|                        | (182.88 x 121.62 = 22296.72 cm)                                                                      |
|                        | 1 ¼ft and bins deep (covered with planks). (38.1 cm x 15.24 cm)                                       |

| **SERVICE ALLEY**      |                                                                                                       |
| **CROSS ALLEY**        |                                                                                                       |
| **STORE ROOM**         |                                                                                                       |
| **CALF PEN**           |                                                                                                       |
**NON-ACADEMIC EDUCATION NORMS**

**PRACTICAL INSTRUCTION CENTRES/DEPARTMENTS, FOCUS**

**EXPLANATORY NOTES**

- See Fig 4-9
- Floor should be of concrete, 3ins - 4in thick. (7.62cm - 10.16cm)
- Floor should slope ¼in to 1 foot (6.35cm - 30.48cm) from front to rear.
- Floor should also slope from both sides to the centre for speedy removal of moisture from pen.

**WALL**
- Built of concrete to a height of 3ft 6ins (106.68cm)
- There should be latticed to allow free passage of air.

**ROOF**
- Aluminum of galvanized sheets; flattened drums painted in white on the upper surface may be used.

**UNIT SIZE**

<table>
<thead>
<tr>
<th>BOAR PEN</th>
<th>FURROWING AREA</th>
<th>FATTENERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>48ft x 36ft = 1728ft² (1463.04cm x 1097.28cm = 1605364cm²)</td>
<td>16ft x 911 = 14411² (487.68cm x 274.32cm = 133780.37cm²)</td>
<td>7ft x 5ft = 35ft² (2/3.36cm x 52.4cm = 32516.06cm²)</td>
</tr>
<tr>
<td>7ft x 2ft = 14ft² (2/3.36cm x 60.96cm = 13006.42cm²) for each pig.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### NON-ACADEMIC EDUCATION NORMS

#### PRACTICAL INSTRUCTION CENTRES/DEPARTMENTS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STATUS COMPOSITION OF STAFF</strong></td>
<td></td>
</tr>
<tr>
<td>TRAINED GRADUATE</td>
<td>- At least 40%</td>
</tr>
<tr>
<td><strong>SPACE PER STUDENT</strong></td>
<td></td>
</tr>
<tr>
<td>- Technical Drawing 40ft² or 400ft² (37161.2cm² or 11,326,720cm³)</td>
<td></td>
</tr>
<tr>
<td>- Woods, Metals, Agricultural Science, etc 75ft² or 750ft² (69677.25cm² or 21,237,600cm³)</td>
<td></td>
</tr>
<tr>
<td><strong>MINIMUM</strong></td>
<td></td>
</tr>
<tr>
<td>- Home Economics 50ft² or 500ft² (46451.5cm² or 14,158,400cm³)</td>
<td></td>
</tr>
<tr>
<td><strong>OPTIMUM</strong></td>
<td></td>
</tr>
<tr>
<td>- Technical Drawing 50ft² or 500ft² (46451.5cm² or 14,158,400cm³)</td>
<td></td>
</tr>
<tr>
<td>- Woods, Metals, Agricultural Science 100ft² or 1000ft² (92903cm² or 28,316,000cm³)</td>
<td></td>
</tr>
<tr>
<td><strong>MAXIMUM</strong></td>
<td></td>
</tr>
<tr>
<td>- Home Economics 60ft² or 600ft² (55741.8cm² or 16,990,080cm³)</td>
<td></td>
</tr>
<tr>
<td>- Technical Drawing 60ft² or 600ft² (55741.8cm² or 16,990,080cm³)</td>
<td></td>
</tr>
<tr>
<td>- Woods, Metals, Agricultural Science 125ft² or 1250ft² (116,128.75cm² or 35,396,000cm³)</td>
<td></td>
</tr>
<tr>
<td>- Home Economics 75ft² or 750ft² (69677.25cm² or 21,237,600cm³)</td>
<td></td>
</tr>
<tr>
<td><strong>WORKING GROUP SIZE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>MINIMUM</strong></td>
<td>- 10 students</td>
</tr>
<tr>
<td><strong>OPTIMUM</strong></td>
<td>- 15 students</td>
</tr>
<tr>
<td><strong>MAXIMUM</strong></td>
<td>- 20 students</td>
</tr>
</tbody>
</table>
## NON-ACADEMIC EDUCATION NORMS

### ACCOMMODATION FOR TEACHERS

<table>
<thead>
<tr>
<th><strong>FOCUS</strong></th>
<th><strong>EXPLANATORY NOTES</strong></th>
</tr>
</thead>
</table>
| **BENEFICIARIES GEOGRAPHIC CONSIDERATIONS)** | - Coastland residents appointed to teach in the Interior.  
- Coastland residents appointed to teach on the coastland, twenty or more kilometers away from home.  
- Interior residents appointed to teach on the coastland.  
- Interior resident appointed to teach in another interior location (over six kilometers away by cycle, 3 kilometers away by food, and 4 kilometer away by boat). |

| **STATUS CONSIDERATIONS** | - Headteacher, Deputy Headteacher, Senior Master/Mistress, Head of Department, Assistant Master/Mistress. |

| **TYPE OF ACCOMMODATION COTTAGE** | - For School Administrators and their families. |

| **DORMITORY** | - For single persons.  
- Four persons to each apartment |

| **SITE** | - Located as near as possible to the school.  
Well drained, free of bush, litter, rubbish.  
- Fenced with concrete, zinc, or chain link |
## NON-Academic Education Norms

### Accommodation for Teachers

<table>
<thead>
<tr>
<th>Focus</th>
<th>Explanatory Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Building</strong></td>
<td>Three bedroom cottage and Dormitory/Apartment. Painted in white or cream: Equipped with electricity (either fuel, hydro-or solar generated). Telephone or Radio Set. Curtains Roof must be close boarded or zinc sheeted. Provide with an adequate number of windows to facilitate the inflow of natural light and ventilation. Separate buildings (dormitory/apartments) must be constructed for male and female teachers.</td>
</tr>
<tr>
<td><strong>Water Facilities</strong></td>
<td>Potable water Tanks/Reservoirs</td>
</tr>
<tr>
<td><strong>Sanitary Facilities</strong></td>
<td>Toilets must be built within the cottage and apartment. COTTAGE Unit of a toilet and bath for the family. APARTMENT Unit of a toilet and bath for every four teachers living therein.</td>
</tr>
<tr>
<td><strong>Safety/Emergency Facilities</strong></td>
<td>COTTAGE - 2 Large Fire Extinguishers - 1 Fire Bucket APARTMENT - 1 Large Fire Extinguisher for each flat or storey. - 1 Fire Bucket in each apartment. ROOM: COTTAGE BEDROOM - Three bedrooms - 1 Double bed - 3 Single beds - 1 Vanity and stool. 3 built-in Wardrobes 3 Clothes hanger - 3 Wall mirrors - Bed linen.</td>
</tr>
</tbody>
</table>
# NON-ACADEMIC EDUCATION NORMS
## ACCOMMODATION FOR TEACHERS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DINING ROOM (COTTAGE)</strong></td>
<td>- 1 Dinette set (table and 4 chairs)&lt;br&gt;- 1 Large Refrigerator&lt;br&gt;- 2 Wall shelves&lt;br&gt;- 1 Dinner set&lt;br&gt;- Tea set&lt;br&gt;- Glasses, Table linen.</td>
</tr>
<tr>
<td><strong>WASH ROOM (COTTAGE)</strong></td>
<td>- Toilet and bath&lt;br&gt;- Porcelain sink&lt;br&gt;- Toilet paper rack&lt;br&gt;- Toilet brush and container&lt;br&gt;- Towel racks&lt;br&gt;- First-Aid Kit&lt;br&gt;- Scrubbing board&lt;br&gt;- Ironing board&lt;br&gt;- Washing Machine.&lt;br&gt;- Clothes baskets.&lt;br&gt;- 1 Three suite&lt;br&gt;- 1 Coffee table&lt;br&gt;- 1 carpet&lt;br&gt;- 4 Sitting chairs&lt;br&gt;- 1 Writing desk and chair&lt;br&gt;- 1 Radio/Television&lt;br&gt;- 1 Computer with accessories&lt;br&gt;- 1 Clock&lt;br&gt;- 1 Shelf/cupboard for library&lt;br&gt;- 1 Four-burner cooker&lt;br&gt;- 1 Hot plate&lt;br&gt;- 1 Stainless steel sink and draining board&lt;br&gt;- 1 Kettle&lt;br&gt;- 1 Kitchen storage cupboard&lt;br&gt;- Assorted cooking pots and pans&lt;br&gt;- Kitchen knives&lt;br&gt;- Pot spoons&lt;br&gt;- Wooden spoons&lt;br&gt;- Measuring spoons&lt;br&gt;- Grater&lt;br&gt;- Rolling pin&lt;br&gt;- Kitchen wares</td>
</tr>
</tbody>
</table>
# NON-ACADEMIC EDUCATION NORMS

## ACCOMMODATION FOR TEACHERS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Pastry board</td>
<td></td>
</tr>
<tr>
<td>- Mixing bowls</td>
<td></td>
</tr>
<tr>
<td>- Trays</td>
<td></td>
</tr>
<tr>
<td>- Plastic buckets</td>
<td></td>
</tr>
<tr>
<td>- Plastic bowls</td>
<td></td>
</tr>
<tr>
<td>- Rubbish bin</td>
<td></td>
</tr>
<tr>
<td>- Mop</td>
<td></td>
</tr>
<tr>
<td>- Broom Long/Hand</td>
<td></td>
</tr>
<tr>
<td>- Dry iron.</td>
<td></td>
</tr>
</tbody>
</table>

### ROOM: APARTMENT

#### BEDROOM

- For 4 persons each
- 4 Single beds or a double bunk with linen.
- 4 Bedside cupboard/table
- 4 Chest of-drawers
- 4 Clothes cupboards
- 1 Full length wall mirror.

#### KITCHENETTE (APARTMENT)

- 1 Four-burner cooker
- 1 Hot plate
- 1 Double sink with draining board
- 1 Large refrigerator/2 medium size
- 4 Sets of pots and pans
- 4 sets of cooking utensils
- 4 sets of dishes, cutlery, crockery
- 4 Plastic buckets
- 4 sets of bowls
- 1 Kitchen table
- 1 Storage cupboard
- Rubbish bin
- Mop
- Pail
- Broom (long and short)
- Dry iron
NON-ACADEMIC EDUCATION NORMS
ACCOMMODATION FOR TEACHERS

<table>
<thead>
<tr>
<th>LIVING ROOM (APARTMENT)</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOCUS</strong></td>
<td>1- Three-piece suite</td>
</tr>
<tr>
<td></td>
<td>Sitting chairs</td>
</tr>
<tr>
<td></td>
<td>1 Carpet</td>
</tr>
<tr>
<td></td>
<td>4 Writing desks and chairs</td>
</tr>
<tr>
<td></td>
<td>Radio/television</td>
</tr>
<tr>
<td></td>
<td>Clock</td>
</tr>
<tr>
<td></td>
<td>Shelves/cupboard for library</td>
</tr>
<tr>
<td><strong>DINING ROOM (APART MENT)</strong></td>
<td>Dinette set (table and 4 chairs)</td>
</tr>
<tr>
<td></td>
<td>Wall shelves</td>
</tr>
<tr>
<td></td>
<td>Glasses</td>
</tr>
<tr>
<td></td>
<td>Tea set</td>
</tr>
<tr>
<td></td>
<td>Dinner set</td>
</tr>
<tr>
<td><strong>WASH ROOM (APARTMENT)</strong></td>
<td>Set of toilet and bath</td>
</tr>
<tr>
<td></td>
<td>1 Porcelain sink</td>
</tr>
<tr>
<td></td>
<td>1 Toilet paper rack</td>
</tr>
<tr>
<td></td>
<td>1 Toilet brush and container</td>
</tr>
<tr>
<td></td>
<td>4 Towel racks</td>
</tr>
<tr>
<td></td>
<td>Mirror</td>
</tr>
<tr>
<td></td>
<td>1 First-Aid Kit.</td>
</tr>
</tbody>
</table>
**NONACADEMIC EDUCATION NORMS**
**DORMITORY FACILITIES - STUDENTS**

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUILDING</strong></td>
<td></td>
</tr>
<tr>
<td>- Roof must be close boarded or zinc sheeted.</td>
<td></td>
</tr>
<tr>
<td>- For a two-storied structure, the bottom of the second floor must be sealed.</td>
<td></td>
</tr>
<tr>
<td>- Provided with an adequate number of windows to facilitate the inflow of natural light and ventilation.</td>
<td></td>
</tr>
<tr>
<td>- Equipped with electricity-either solar-, hydro-, or fuel generated.</td>
<td></td>
</tr>
<tr>
<td>- Equipped with telephone Cs) or radio set (s)</td>
<td></td>
</tr>
<tr>
<td>- 2 large fire extinguishers for each flat.</td>
<td></td>
</tr>
<tr>
<td>- Must be within the school compound.</td>
<td></td>
</tr>
<tr>
<td>- Separate buildings must be constructed for boys and girls.</td>
<td></td>
</tr>
<tr>
<td>- Equipped with pressurised water pumps.</td>
<td></td>
</tr>
</tbody>
</table>

**SANITARY FACILITIES**

1. **WASHROOM - TOILETS**

   - Toilets must be built within the dormitory; not outside.
   - Each building or storey must have its own set of toilets.
   - Toilets must be equally distributed on each floor and in each building with separate toilets for the sexes.
   - Sanitary units be placed into toilets used by the females

   - 6 toilets for 150-250 students.
   - 8 toilets for 251-350 students

2. **SHOWERS**

   - Showers must be equally distributed on each floor and in each building with separate showers for the sexes.
   - 8 sets for 150-250 students
   - 10 sets for 251-350 students

**DRINKING OUTLETS**

- Tap for every 20 student
- 4 tanks (large) / reservoir

2. **BEDROOM**

   - Minimum Size:
   - 12 ft x 1241, — 144\(^2\) ft \(365.76\text{cm} \times 365.76\text{cm} = 133780.37\text{cm}^2\)
**NON-ACADEMIC EDUCATION NORMS**  
**DORMITRY FACILITIES - STUDENTS**

<table>
<thead>
<tr>
<th><strong>FOCUS</strong></th>
<th><strong>EXPLANATORY NOTES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPTIMUM SIZE</strong></td>
<td>- 18 ft x 18 ft = 324$^2$ ft (548.64 cm x 548.64 cm = 301005.84 cm$^2$)</td>
</tr>
<tr>
<td><strong>MAXIMUM SIZE</strong></td>
<td>- 24 ft x 24 ft = 576$^2$ ft (731.52 cm x 731.52 cm = 535121.51 cm$^2$)</td>
</tr>
</tbody>
</table>
| **BEDROOM**      | - For the bedroom of 144 ft$^2$ = (133 780.37 cm$^2$) there must be two double bunk beds; for 324 ft$^2$ = (301005.84 cm$^2$) three double bunk beds; and for 576 ft$^2$ = four double bunk beds.  
                   - 3 Sets of pillowcases per year per bed.  
                   - 3 Sets of bed linen per year per bed.  
                   - 1 Built-in wardrobe per student  
                   - 1 Mirror in each room.  
                   - 1 Mosquito net per bed per year.  
                   - 2 Sets of window curtains/runners per year.  
                   - 1 Door mat.  
| **ACCESSORIES**  |                                                                                                                                                      |
| **3. DINING HALL** | - Large communal tables  
                    - 1 chair per student  
                    - Table cloth for each table or place mat for each student  
                    - I Television and Video cassette recorder  
                    - Large refrigerator(s) — 1 for every 100 student  
                    - Fans  
                    - Lanterns  
                    - Rubbish bins and bags. |
| **ACCESSORIES**  |                                                                                                                                                      |
| **4. KITCHEN**   | - Four burner stoves (gas/electric/kero)  
                    - Large refrigerator  
                    - Large freezers  
                    - Stainless steel sink and draining board  
                    - Kettles  
                    - Kitchen storage cupboards  
                    - Assorted cooking pots and pans  
                    - Kitchen knives  
                    - Pot spoons |
## Non-Academic Mic Education Norms

### Dormitory Facilities - Students

<table>
<thead>
<tr>
<th>Focus</th>
<th>Explanatory Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooden spoons</td>
<td></td>
</tr>
<tr>
<td>Measuring spoons</td>
<td></td>
</tr>
<tr>
<td>Graters</td>
<td></td>
</tr>
<tr>
<td>Strainers</td>
<td></td>
</tr>
<tr>
<td>Rolling pins</td>
<td></td>
</tr>
<tr>
<td>Kitchen wares</td>
<td></td>
</tr>
<tr>
<td>Measuring boards</td>
<td></td>
</tr>
<tr>
<td>Sets of mixing bowls</td>
<td></td>
</tr>
<tr>
<td>Trays</td>
<td></td>
</tr>
<tr>
<td>Plastic buckets</td>
<td></td>
</tr>
<tr>
<td>Plastic bowls</td>
<td></td>
</tr>
<tr>
<td>Plastic basin</td>
<td></td>
</tr>
<tr>
<td>Pressure pots/cookers</td>
<td></td>
</tr>
<tr>
<td>Water pitchers</td>
<td></td>
</tr>
<tr>
<td>Ice boxes</td>
<td></td>
</tr>
<tr>
<td>Plates</td>
<td></td>
</tr>
<tr>
<td>Cups</td>
<td></td>
</tr>
<tr>
<td>Glasses</td>
<td></td>
</tr>
<tr>
<td>Colanders</td>
<td></td>
</tr>
<tr>
<td>Mops/brooms</td>
<td></td>
</tr>
<tr>
<td>Scales</td>
<td></td>
</tr>
<tr>
<td>Blenders/mixers</td>
<td></td>
</tr>
<tr>
<td>FOCUS</td>
<td>EXPLANATORY NOTES</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>RECEPTION ROOM</strong></td>
<td>Small or 1 large suite</td>
</tr>
<tr>
<td><strong>ACCESSORIES</strong></td>
<td>Centre/coffee tables</td>
</tr>
<tr>
<td></td>
<td>Sitting Chairs</td>
</tr>
<tr>
<td></td>
<td>Floral arrangements</td>
</tr>
<tr>
<td></td>
<td>Fan(s)</td>
</tr>
<tr>
<td></td>
<td>Sets of curtains/runners per year.</td>
</tr>
<tr>
<td></td>
<td>Carpet</td>
</tr>
<tr>
<td><strong>SICK BAY ASSESSORIES</strong></td>
<td>First Aid Kit</td>
</tr>
<tr>
<td></td>
<td>2 Single beds</td>
</tr>
<tr>
<td></td>
<td>Stainless steel sink</td>
</tr>
<tr>
<td></td>
<td>Fan(s)</td>
</tr>
<tr>
<td></td>
<td>Toilets boys/girls</td>
</tr>
<tr>
<td><strong>ACCESSORIES FOR</strong></td>
<td>Double bed (each)</td>
</tr>
<tr>
<td><strong>DORM MOTHER’S</strong></td>
<td>1 Full length wall mirror</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td>I Bed side cupboard/table (each)</td>
</tr>
<tr>
<td><strong>DORM FATHER’S</strong></td>
<td>1 Chest of drawers</td>
</tr>
<tr>
<td><strong>ROOM/APARTMENT</strong></td>
<td>1 Small suite with coffee table</td>
</tr>
<tr>
<td></td>
<td>4 Sitting chairs</td>
</tr>
<tr>
<td></td>
<td>1 Carpet</td>
</tr>
<tr>
<td></td>
<td>I Writing Desk and Chair</td>
</tr>
<tr>
<td></td>
<td>Toilet and bath (indoors)</td>
</tr>
<tr>
<td></td>
<td>1 Porcelain Sink (each)</td>
</tr>
<tr>
<td></td>
<td>I First Aid Kit (each)</td>
</tr>
<tr>
<td></td>
<td>I Clothes Cupboard</td>
</tr>
<tr>
<td></td>
<td>1 Four burner cooker</td>
</tr>
<tr>
<td></td>
<td>1 Hot plate</td>
</tr>
<tr>
<td></td>
<td>I Double sink with draining board</td>
</tr>
<tr>
<td></td>
<td>I Refrigerator (each)</td>
</tr>
<tr>
<td></td>
<td>4 Sets of Pots and Pans</td>
</tr>
<tr>
<td></td>
<td>4 Sets of Cooking utensils</td>
</tr>
<tr>
<td></td>
<td>4 Sets of dishes, cutlery and crockery</td>
</tr>
</tbody>
</table>
## NON-ACADEMIC EDUCATION NORMS

### DORMITOR FACILITIES - STUDENTS

<table>
<thead>
<tr>
<th>FOCUS</th>
<th>EXPLANATORY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- 1 Kitchen table (each)</td>
</tr>
<tr>
<td></td>
<td>- Buckets, bowls</td>
</tr>
<tr>
<td></td>
<td>- 2 Fans (each)</td>
</tr>
<tr>
<td></td>
<td>- 3 Sets of bed linen per year.</td>
</tr>
</tbody>
</table>

#### ACCESSORIES FOR

**DORM MOTHER’S AND DORM FATHER’S OFFICE**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Writing desk and Chair (each)</td>
</tr>
<tr>
<td></td>
<td>4 Chairs</td>
</tr>
<tr>
<td></td>
<td>1 Filing cabinet each</td>
</tr>
<tr>
<td></td>
<td>1 Kettle (each)</td>
</tr>
<tr>
<td></td>
<td>1 Hot plate (each)</td>
</tr>
</tbody>
</table>

**LAUNDRY ROOM ACCESSORIES**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Washing Machine (1 for every 50 students)</td>
</tr>
<tr>
<td></td>
<td>Stainless steel sinks</td>
</tr>
<tr>
<td></td>
<td>Ironing board (1 for every 20 students)</td>
</tr>
<tr>
<td></td>
<td>Wash basins</td>
</tr>
<tr>
<td></td>
<td>Clothes baskets</td>
</tr>
<tr>
<td></td>
<td>Long brooms</td>
</tr>
<tr>
<td></td>
<td>Mop pails and mops</td>
</tr>
<tr>
<td></td>
<td>Shelves</td>
</tr>
<tr>
<td></td>
<td>Cupboards</td>
</tr>
</tbody>
</table>
APPENDIX 1

EQUIPMENT/UTENSILS
THE FOOD AND NUTRITION LAB

MEASURING EQUIPMENT
6 Measuring spoon sets
6 Measuring cups for liquid (litres)
6 Sets measuring cups for dry ingredients
2 Kitchen scales (metric) 6 Funnels
3 Thermometers

MIXING AND BLENDING EQUIPMENT
2 Wooden spoons (assorted sizes)
6 Kitchen forks (two-pronged with wooden handle)
12 Metals, 12 plastic spatulas
6 Rotary, 6 balloons whisks (assorted sizes)
6 Vegetable brushes
6 Bottle brushes
6 Ladles
6 Skimmers
6 Tongs
12 Rolling Pins
3 Sets steel, 3 sets ware nested mixing bowls
6 Blenders

3 Can openers
6 Pastry boards
6 Chopping boards
3 Food mills
12 Skewers

DRAINERS/STRainers/Sieves
6 Slotted spoons
6 Tea strainers
6 Colanders (metal)
3 Metals, 3 nylon strainers/sieves
6 Fish slices (turner)
6 Juicers

COOKING EQUIPMENT

Dishes
3 Casseroles (1 large, 2 medium)
3 Souffle dishes; oven ware (1 Large)
12 Custard bowls (individual)
6 Platters 9 assorted sizes
3 Large, 3 medium vegetable dishes
4 Each serving trays (wood, metal)
6 Cruet sets

Pans
3 Sets cake pans (1 pound, ½ pound, ⅛ pound)
6 Cake racks
6 Swiss roll pans
12 Six-hole tartlet/patty pans
6 Sets Loaf tins (2 pound, 1 pound, ½ pound)
12 Baking sheets (buns & tarts)
6 Han tins/rings
6 Moulds (large shapes)
18 Moulds (small)

CUTTING AND CHOPPING

Knives (assorted types)
Cook knives
Vegetable knife 6

Carving knife 6
Bread knife 6
Grapefruit knife 6
6 Nutmeg graters
6 Grater/shredders
6 Rubber scrapers
3 Sets plain, 3 set Fluted pastry cutters
3 Kitchen scissors

**POTS**

3 Pots/ Saucepans (large, medium, small)
6 Omelet pans
2 Pressure cookers
• 6 Frying pans
.3 Etch Deep fat fryers & baskets
3 Steamers/double boilers
3 Kettles
12 Pot spoons (metal)

**APPLIANCES**

4 Four-burner Stove with oven & grill, electric/gas)
I Four-burner Stove (kerosene)
1 Microwave
1 Percolator
2 Toasters
3 Can openers

**CLEANING**

2 Double. Sinks with draining board (stainless steel)
6 buckets (plastic)
6 Basins (plastic)
3 Mop & pail
3 Pedal bins
3 Door mats
3 Brooms
3 Packets each- Sponge, steel wool, pot scrubber

**STORAGE**

Refrigerator
1 Freezer
2 Cupboards
2 Shelves
6 Sets Storage jars/tins

**KITCHEN LINEN**

6 Tea-towels
6 Dish cloths
6 Kitchen towels
6 Oven gloves
6 Pot holders

**GLASSES**

12 Tumblers
2 Water jugs
6 Sundae glasses
6 Wine glasses
6 Sherry glasses
6 Liqueur glasses
6 Whisky glasses
6 Brandy glasses
2 Metal trays
2 Ice Buckets

**CUTLERY**

6 Dinner knives
6 Butter knives
6 Dinner forks
6 Desert forks
6 Cake forks
6 Dessertspoons
6 Tablespoons
6 Tea spoons
6 Soup spoons
6 Salad servers
6 Serving spoons
6 Fish knives
6 Fish forks
1 Carving set
APPENDIX 11.

TOOLS, EQUIPMENT AND MATERIALS
CLOTHING AND TEXTILES LAB

MEASURING TOOLS

6 Meter rulers/yard sticks
6 Transparent rulers
3 Dozen reversible tape measures
6 French curve rulers
2 Skirt markers
6 Seam gauges

DRAFTING & CUTTING

6 Boxes Tailor’s chalk/markin pencils
6 Cutting tables
1 Box dressmaker’s carbon
6 Tracing wheels
6 Boxes stainless steel pins (assorted)
6 Boxes dressmaker’s pins
12 Dressmakers’ shears
6 Buttonhole scissors
6 Embroidery scissors
6 Trimming scissors
6 Seam rippers
Cotton fabric (bleached 40m in three colours
Cotton fabric (unbleached 20m)
1 Roll drafting paper (brown, newsprint)
6 Cutting tables

SEWING & FINISHING

12 Meters each cotton, rayon polyester cotton.
denim, velvet, toweline
3 Dozen thimbles
12 Packets needles (assorted)
2 Dozen each hangers-wood, plastic
5 Electric sewing machines & attachments
2 Treadle sewing machines & attachments
3 Steam irons
2 Dry irons
3 Irons boards
3 sleeve boards
3 Tailor’s hams

ACCESSORIES

1 Full length mirror
2 Base cupboards
2 Wall cupboards
2 Display cases with glass front & sides
NOTIONS

6 Dozen skein thread (assorted)
Thread-mercerised cotton- 2 dozen reels
Polyester- 2 dozen reels
Metallic- 1 dozen reels
6 Rolls bias tape (assorted widths)
2 Cones cording
2 Rolls rickrack. braid —25m each
1 Roll of each, elastic (\(\frac{1}{4}''\), \(\frac{1}{2}''\), 1" width)
12 Dozen buttons (assorted)
12 Dozen Hooks and Eyes (assorted sizes)
12 Cards press-studs (assorted sizes)
10 Yards Velcro (1" width)
3 Dozen parka zippers (assorted sizes)

CLEANING

3 Long Handled brooms
3 Hand brooms
3 Dustpans
1 Dust bin
APPENDIX III

EQUIPMENT AND MATERIALS
THE HOME ECONOMICS MANAGEMENT LAB

FURNITURE
I Bed (single or double)
2 Pillows
I Vanity/chest of drawers
I Living room suite (three-piece)
I Dinette set (dining table & 4 chairs)
   Center Table

FURNISHINGS
3 Pairs of sheet
2 Bedspreads
Table linen (Tablecloth 2, napkins 6, place mats 6)
1 Carpet/rug
2 Sets curtains
3 Bath mats
3 Door mats

ACCESSORIES
1 Mirror (for washroom)
I Complete dinner set
I Complete tea set
I Complete Cutlery set
12 Glasses (tumblers)
I Four-burner stove
1 Hot plat
I Kettle
2 Sewing kits
I Refrigerator

CLEANING & CARE
3 Brooms (hand)
3 Brooms (long handled)
6 Brushes (assorted)
6 Cheese cloths
1 Vacuum cleaner
3 Lavatory Brushes & holders
I Bathroom cabinet
3 Toilet roll holders
3 Bath towels
3 Each hand towels & face cloths
1 Mop and pail

LAUNDRY
Laundry Sink/washing machine
I Dryer/drying rack
1 iron Board
I Steam -iron
1 Cupboard

MISCELLANEOUS
1 Vase
2 Waste paper bins
2 Ashtrays
1 Magazine rack
1 Tool kit
I Set garden tools
1 Clock

81
WORKSHOP FACILITIES FOR PLUMBING

FURNITURE

10 Desks (Single)
10 Stools
1 Teacher Writing Desk
3 Teacher chairs
• 1 Whiteboard
1 Display Board
1 Cupboard (large)
1 B.R Drawing Instruments (set)
1 Waste Box/Bin
2 Dusting Brushes

TOOLS AND EQUIPMENT

2 Pipe Wrench (20")
2 Pipe Wrench (18")
2 Plumbers Pliers (12")
5 Adjustable hacksaws
2 Measuring tape
2 Cold Chisel (1")
2 Hammers (ball pein)
2 Hammers (claw 16oz)
2 Try Squares (12")
5 Spirit Levels (12")
2 Screw drivers (I)
2 Screw drivers (Phillips, sets)
2 Adjustable spanners (crescent) 6"
2 Adjustable spanners (crescent) 10"
2 Pliers, combination (8")

SAFETY WEAR

1 First Aid Kit
12 Clear goggles
12 Respirators (fume)
12 Gloves (rubber)

MATERIALS

26 G. Plain-Aluminum sheet
26 G. Plain Galv-alum sheet
26 G. Plain Galvanise sheet
Tinman’s solder
Heavy gauge Galvanise wire
Muriatic acid
Galvanise steel pipe & fittings (tee, bends, unions, couplings, reducers, nipples)
P.V.C Pipe & fittings (traps, bends, tees, adaptors, reducers
Resin-base paste flu
Fine sand paper
1 X '/8 Bracket Iron
Pipe clamps
’S’ and ’P’ traps W.0 suites
Lavatory Sinks (complete sets)
Kitchen Sinks (complete sets)
Bath Tubs (complete sets)
Bowl type urinals (complete sets)
Taps & Valves
APPENDIX V

WORKSHOP FACILITIES FOR MOTOR MECHANIC

FURNITURE

10 Desks (single)
10 Stools
1 Teacher’s writing desk
3 Teacher’s chairs
    White board (large)
I Display board
I cupboard (large)
1 B.B Drawing instruments (set)
I Waste bin/box
2 Dusting brushes.

TOOLS AND EQUIPMENT

2 Work benches
4 Safety stands
    Chain Hoist
2 Engine stands
2 Screw driver sets
2 Socket spanner sets
2 Ring Spanner sets
2 Flat spanner sets
5 Wire Brushes
2 Long nose pliers (6”)
2 Vice grip pliers (8”)
1 Gear puller set
2 Crescent spanners (6”)
2 Crescent spanners (12”)
2 Combination pliers (8”)
2 Tyre gauges
1 Compression Tester
1 Tap & Dye set (Metric)
2 Allen Key sets

MATERIALS

Gasoline
Diesel
Grease
Lubricating oil
Brake fluid
Gear oil
Liquid soap
Vehicle polish
Polishing compound
Shammy leather
Rags, cotton
Cheese cloth

2 Piston ring compressors
2 Wire strippers
2 Inside/outside calipers
1 Grease gun
1 Pop rivet Gun
    Hand drill (electric)
1 Drop cord (50”)
1 Valve spring lifter
2 Hand brushes
2 Hard Brushes
APPENDIX VI

CLASSROOM FACILITIES FOR TECHNICAL DRAWING

FURNITURE

40 Drawing-tables, single (5 left hand)
Stools
1 Teachers writing desk
3 Teachers chairs
  Whiteboard (large)
  I Display board
2 Cupboards (large)
2 B.B. Drawing Instruments (sets)
  Waste Bin/Box
5 Dusting Brushes

EQUIPMENT

40 Students Tee Squares, half imperial
  (5 left hand)
40 Students Set Squares 30/60°
40 Students Set Squares 45°
40 Students Protractors
40 Students Compasses
40 Students Rulers (metric)
2 Students pencil sharpener (bench type)
20 Students French carres (set)

MATERIALS

Checkers line exercise books
  (1 per student per term)
Plain page exercise books
  (1 per student per term)
Drawing paper (A2)
  (1 ream per term)
Tracing paper (1 roll per year)
Masking tape (1”/25mm)
  (3 rolls per term)
Pencils (grades HB, F,H & 2H)
  (40 each)
Erasers, good quality (40 each)
20 Drawing clip (pairs)
Computer paper (1 box per term)
All purpose paper (1 1” X 14”)
  (1 box each)
Printer cartridges
  (1 spare for each printer)

HARDWARE

PC filled with an Intel 80486 or Pentium C
  with a minimum of 16 Mbytes and hard
  disk with at least 70 Mbytes of free space for
  C.A.D files (1 set per 5 students)
A-17 inch VGA monitor (1 set per 5 students)
Mouse & keyboard (1 set per 5 students)
2 Laser Printer
I Plotter
U.P.S 5 canner (as required)

SOFTWARE

Auto CAD
Auto CAD LT for Windows 95/98
Any other CAD software package offering the
  advanced feature required to complete syllabus
  objectives
NB: The school edition of the software package
  selected should be purchased to facilitate its
  (legal) use on multiple computers
APPENDIX VII

WORKSHOP FACILITIES FOR 

FURNITURE

10 Desks (single)
10 Stools
1 Teacher's writing desk
3 Teacher's chairs
1 Black/chalk board (large)
1 Display board
1 Cupboard (large)
1 B,B Drawing instruments (set)
1 Waste bin/box
2 Dusting Brushes

5 Try squares (12")
5 Tip cleaners
2 Brooms (floor)

SAFETY WEAR

First Aid Kit
12 Welding Helmets/Face Shields
12 Gloves (pairs)
12 Welding goggles
6 Clear goggles
3 Welding aprons

MATERIALS

Hollow section.
\( \frac{1}{2} " \) M.S bars
\( \frac{3}{8} " \) M.S bars
\( \frac{1}{4} " \) M.S bars
\( \frac{5}{8} " \) M.S plate
Mild Steel sheets
M. S/Galvanise pipe
Soap
Files (assorted)
Welder (chalk)
WORKSHOP FACILITIES FOR MASONRY/BRICKLAYING

**FURNITURE**

- 10 Desks (Single).
- **10 Stools**
  - Teacher’s Writing Desk
- 3 Teacher’s chairs
- 1 White board (large)
- 1 Display board
  - Cupboard (large)
- 1 B.B Drawing Instruments (set)
- 1 Waste Bin/Box
- 2 Dusting brushes

**TOOLS**

- 10 Brick trowels (8”)
- 10 Pointing trowels
- 10 Lagging-on trowels
- 10 Tiling trowels
- 10 Club hammers (1½lb)
- **10 Chipping hammers**
- 10 Bolster chisels
- 5 Cold chisels
- 10 Spirit levels
- **10 Line & pins**
- **10 Spades 8” square mouth**
- 5 Buckets (2 gallons)
- 5 Wheel Barrows
- 5 Gauge rods
- 5 gauge boxes
- 1 Building square (24X16)
- 5 Mortar boards
- 1 Hose (100’)

**SAFETY WEAR**

- 10 Brick trowels (8”)
- 10 Pointing trowels
- 10 Lagging-on trowels
- 10 Tiling trowels
- 10 Club hammers (1½lb)
- **10 Chipping hammers**
- 10 Bolster chisels
- 5 Cold chisels
- 10 Spirit levels
- **10 Line & pins**
- **10 Spades 8” square mouth**
- 5 Buckets (2 gallons)
- 5 Wheel Barrows
- 5 Gauge rods
- 5 gauge boxes
- 1 Building square (24X16)
- 5 Mortar boards
- 1 Hose (100’)

**SAFETY WEAR**

- 2 Hammers (claw)
- 2 Saws (hand)
- 2 Try squares (12”)
- 10 Water Brushes
- 10 Floats
- 10 Measuring Tapes (steel 3m)
- Measuring Tape (steel 30m)
- 1 Tools Cabinet/Strong room (7’X5’X2’)
- 5 Boat levels
- 2 Brooms (floor)

**MATERIALS**

<table>
<thead>
<tr>
<th>Material</th>
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<tbody>
<tr>
<td>Cement</td>
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<tr>
<td>Sand</td>
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<tr>
<td>Stone</td>
</tr>
<tr>
<td>Hydrated Lime</td>
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<tr>
<td>Tiles (ceramic)</td>
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<tr>
<td>Tiles (rubber)</td>
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<tr>
<td>Tile (cement)</td>
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<tr>
<td>Tile paste</td>
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<tr>
<td>Soap</td>
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<td>White cement</td>
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<tr>
<td>N.P.C</td>
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<td>Form Boards</td>
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<tr>
<td>Lubricating oil</td>
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<tr>
<td>Grease</td>
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</tbody>
</table>
WORKSHOP/LABORATORY

(I) WOODS
(II) CONSTRUCTION
(III) CARPENTRY
(IV) JOINERY

MACHINES

1 Circular saw
1 Band saw (Minimum 350mm Dia)
1 Sabre (jig) saw
1 Radial-Arm (Min. Dia) saw
1 Jointer (150mm, Min)
1 Thickness Planer (300mm)
1 Drill Press (with morticing attachment)
1 Finishing Sander
1 Belt Sander (75 X 6000mm)
1 Portable Router (1 1/2 h.p)
2 Electric hand-drills
1 Wood Lathe – 3000mm Gap
1 Air compressor (1 h.p)

HANDTOOLS

Squares

5 Sliding Bevel
5 Try
5 Framing
2 Builders' Square (3:4:5)
(td be fabricated in workshop)

HAND SAWS

5 Hand: Rip, Cross Cut, Back
3 Coping

CLAMPS

12 G (100, 150 AND 200mm)
6 Bar (1200mm with extension)

BITS

3 Braces and 3 sets of bits sizes 6mm-32mm
3mm intervals
3 Expansion bits 1/2” to 1 1/4”
3 High speed drill sets
3 Drill sets (3m-13mm)

WOOD CHISEL

3 Bevel edges (3mm - 25mm)
3 Firmer (3mm — 25mm)
3 Mortising (6mm — 13:mm)
1 (Lathe) Turning tools-Heavy Duty

PLANES

6 Jack
4 Smoothing
1 Fore

HAMMERS

10 Claw hammers
2 Sledge Hammers (2kg)
2 Warrington Hammers

MALLETS

20 (Wooden) mallets
(to be fabricated in workshop)
2 Rubber Mallets
KNIVES

6 Utility knives
10 Marking knives
6 Putty knives

MEASURING & LAYOUT TOOLS

10 Marking gauges
10 Mortise gauges
6 Dividers
6 Callipers (internal & external)
6 Nail Punches
2-30m Measuring tapes
5-5m Measuring tapes
3 Spirit levels (600mm long)
3 Spirit levels (1200mm long)
4 Chalk lines
6 Line levels

SCREWDRIVERS

10 Flat (assorted sizes)
10 Phillips (assorted sizes)

SPOKE SHAVES

4 Flat
4 Round
1 Hatchet

ADDITIONAL TOOLS

2 Crowbars
2 Steel Fixers Nippers
  Pliers
  Shears
2 Pick-axes
3 Oil stones
4 Shovels (long & short handles)
6 Trowels
6 Steel Floats
6 Wood Floats
(to be fabricated in workshop)

Trammel
2 Hacksaws
(with replacement blades)
2 Cabinet Scrapers
1 Tile cutter

SAFETY

10 Clear goggles
20 Respirators
1 First Aid Kit
2 Fire Extinguishers

MATERIALS

Lumber, e.g. Crabwood, Dukali, Simarupa, Hlababali, Purpleheart, Cabucalli, Greenheart
Plywood
Arborite
Glue
Screws, asst
Sandpaper, asst grades
Nails asst
Lacquer c U.P.C and/or paint
Glass

FITTINGS

Locks -- mortise, night latch
Handles -- doors, cupboards & drawers
Bolts
Hinges
Catches, various
Castors
APPENDIX X

WORKSHOP/LABORATORY FACILITIES FOR MECHANICAL ENGINEERING AND METALS

MACHINE SHOP

1 Lathe 9”/225mm swing, quick change gear box 36”/900mm bed pedestal base (desirable)
1 Lathe 12”/300mm swing, quick change - gear box, 48”/1200mm pedestal base (desirable)

RECOMMENDED ACCESSORIES

2 Sets draw collect chuck assembly
(for 9”/225mm swing lathe)
2 Sets independent four jaw and universal chucks
1 Set (for 9”/225mm swing lathe) sizes 6”/150mm
(for 12”/300mm swing lathe)
size 8”/200mm
2 Sets Universal 3-jaw chuck Sizes 6”/150mm
1 Set (for 9”/225mm swing lathe)
sizes 8”/200mm
(for 12”/300mm swing lathe)
Lathe Dogs with cranked on straight tails to
Suit driving plates provided with Lathes-
1/2” /13mm, 3/ 4”/16mm, 1”/25mm,
1 1/ 2”/30mm
Jacobs's Chunk 0” – 1/ 2”/13mm complete
With taper shank and sleeve to fit tailstock
Of both lathes
2 Sets Tool holders – left, right and straight
2 Fixed steadies
2 Travelling steadies
6 Knurling Tools, with coarse medium and fine knurls (straight and diagonal)

2 Driving plates
2 Boring bars with holders
2 Rotating centers with taper shank and sleeves
2 Parting tools with holder
2 Threading tools
1 Set metric screw pitch gauge
2 Sets prepared tool bits
10 Pieces toll blanks to fit tool holders
2 Live centres
4 Dead centres
2 Face plates 8”/200mm

ADDITIONAL TOOLS

Callipers – 3 Outside 6”/150mm
3 Inside 6”/150mm
3 Hermaphrodite 6”/150mm
1 Rule depth gauge
3 Micrometers – 0- 25mm
1 Vernier calliper – 15cm
3 Surface gauge with fine adjustment
2 Sets vee blocks with clamps
2 Dial Test -Indicator with magnetic base
3 Engineer's square 16cm
2 Dividers 15cm
2 Sets Combination/Centre drill Nos.1-5
3 Lead hammers/mallets
1 Precision spirit level
Rules, steel, 15cm (8)
30cm (8)
MILLING MACHINE

I Universal model with longitudinal transverse and vertical feed, 1”/25 mm arbor with collars and spherical nut, guard for cutters, micrometer collars graduated in metric measure

RECOMMENDED ACCESSORIES

1 Set assortment of cutters for horizontal and vertical milling
I machine vice (6” jaw)

DRILL PRESS

Set drill press I 5”/375 mm floor type
0-1/2”/13 mm Jacob’s chuck with tapered shank, drill drift
1 Drill press vice – 4”n 00 mm jaw
2 G Clamp – 4”/100 mm
2 G Clamps – 6”/150 mm
2 Parallel clamps
2 Sets Counterink drills
10 Centre punches
16 Scribers
2 Sets Drills (metric sizes) 3-13 mm in steps of 0.2 mm
1 Set 13-20 in steps of 0.5 mm
(desirable)

GRINDER

I Grinder, bench type mounted on pedestal with eye shields 8”/200 mm wheels, 1/2 1hp
I 1 Wheel dresser
20 Safety glasses

ADDITIONAL

2 Oil cans (pump type)
1 Safety rags bin
1 Grease gun

SHAPER

1 Shaper 10”/250 mm - 12”/300 stroke standard (desirable)

RECOMMENDED ACCESSORIES

I Tool holder - swivel-
1 Vice – 4”/100 mm jaws with swivel base
2 Vee blocks with clamps
6 U Clamps and bolts

HORIZONTAL SPINDLE SURFACE GRINDING MACHINES

Table Travel – 18”/450 (desirable)
Cross Feed – 8”/200 mm (desirable)
1300 mm Permanent Magnetic Chuck - 2” or 300 mm (desirable)

BENCH METAL

20 Bench Vices
I Tap and die set – 1/8”/3 mm to 1/2”/12 mm
3/8”/10 mm – 3/4”/16 mm (optional)
2 Sets Chisels, Cold – flat, cape, round nose, diamond
WRENCHES

1 each Adjustable --6"/150mm and 8"/200mm
1 each Stilton -- 8"/200mm and 14"/350mm
1 Hand drill 0-1/476mm
2 Toolmakers clamps
2 Hand vices
I Vice grip pliers (small)
1 Vice grip pliers (large)
Files -- assorted sizes and cuts
1 Set Needle files
2 File cards
I hand lever shears to cut up to 1/8 materials
1 Set Pliers -- side cutting, diagonal, long nose
1 Feeler gauge
1 Extractor set
Drift punch
1 Set Pin punches

SOLDERING.

1 Soldering furnace (gas operated)
(operational)
1 Pair square pointed coppers 16oz
2 Electric soldering irons

SNIPS

6 Straight 6"/150mm -- 10"/250mm
2 Curved 6"/150mm -- 10"/250mm
2 Combination 6"/150" 10"/250mm

SAW

3 Hacksaws -- 12"/300mm
2 Sheet metal hacksaws
2 Jeweller's saws
2 Junior Hacksaws

HAMMERS

3 Ball pein -- 16oz
2 Ball pein -- 8oz
2 Cross pein -- 12oz
2 Cross pein 8oz
2 Straight pein

MALLETS

1 Rawhide
2 Rubber
4 Box wood, bussing
2 Raising

SCREWDRIVERS

1 each Phillips head (small, medium, large)
2 Standard (small, medium, large)
ADDITIONAL

2 Rivet Sets
3 Hand groovers assorted sizes
2 Hand seamers 3”/75mm jaws
1 Scroll former (optional)
1 Radius gauge
1 Wire gauge
1 Air Acetylene torch (optional)

FORGEWORK

Forge (optional)
2 Anvils – 121bs. On stand
1 Water trough
1 Swage Block on stand (optional)
1 Sledge hammer – 7lbs
1 Backing hammer – 3lbs
1 Ball pein hammer – 2lbs
1 Pair top and bottom fullers – 5”/6mm (optional)
1 Pair top and bottom fullers 3/8”/10mm (optional)
1 Pair top and bottom fullers – 1/2”/13mm (optional)
1 Pair top and bottom swage – 1/4”/5mm (optional)
1 Pair top and bottom swage – 5/16”/6mm (optional)
1 Pair top and bottom swage – 3/8”/10mm (optional)
1 Pair top and bottom swage – 1/2”/13mm (optional)
1 Hot sett
1 cold sett
2 Pairs rivet sets and snaps – 1/8”/3mm
2 Pairs rivet set and snaps – 3/16”/5mm
2 Pairs Universal tongs
2 Hollow bits, 5/16/8mm Bit (optional)
2 Hollow bits, 3/8”/10mm (optional)
2 Flat bits, 1/8”/3mm Bit (optional)

WELDING-OXY-ACETYLENE (COMPLETE)

6 WeWeis goggles with lenses
2 Spark lighter with flint
4 Steel brushes
1 Carver clamps, assorted sizes
2 Acetylene manifold
1 Oxygen manifold (optional)

ELECTRIC ARC WELDING

1 A.C./D.C. electric arc welder with cables. round clamp and electric holder 180-300 amps
10 Welding helmets with slide-in lens holder
Double station oxyacetylene work table, each working surface 3’X8”, covered with fire bricks
1 Metal table for arc welding with enclosure and canvas curtain
1 Chipping hammer

SAFETY EQUIPMENT

1 First Aid Kit
5 Clear goggles
2 Fire Extinguishers
MATERIALS

1" Diameter mild steel bars
1/4" Diameter mild steel bars
5/8" Diameter mild steel bars
7/8“ Diameter mild steel bars
1 1/2" Diameter mild steel bars
2 1/2" Diameter mild steel bars
5/8" Hexagonal bars
1/4” Hexagonal bars
7/4" width mild steel flats
1” width mild steel flats
1/4” Thick mild steel plate
1/2” Thick mild steel plate
28 G Plain Galvanise sheets
28 G Plain Aluminum sheets
Arc-welding rods
Oxy-Acetylene welding rods
Tinman’s solder
Tinman’s rivets
**APPENDIX XI**

*WORKSHOP/LABORATORY INFRASTRUCTURE FOR ELECTRONICS AND TELECOMMUNICATIONS TECHNOLOGY*

5 Work tables, complete with AC and DC variable voltages, socket outlets with main voltage. Storage space should be incorporated for storage of materials, tools and projects.

1 Test and repair bench, complete with facilities for sawing, boring, threading and testing devices for electrical repairs.

1 Half-inch drill press

2 director-on-line starters

1 motor DC shunt

1 each Motor-single-phase, capacitance start type, universal, split-phase, shaded pole, capacitor motor

1 Motor-three-phase, S.C. induction

1 Battery charger

1 Transformer: 120/240V 1KVA DRY TYPE

T/F 1 2:24V Secondary

**INSTRUMENTS**

2 Double beam 5” oscilloscopes

10 * Multimeters

2 Signal generators

2 Galvanometers

10 Ammeters, D.0 (-5S) scale

10 Ammeters, A.C. (0-5A) scale

10 Voltmeters, D.0 0-100V

10 Voltmeters, A.0 (0-100V)

1 Wattmeter (0-500W)

1 Lightmeter

1 Insulation tester (Megger)

1 kWm meter

1 Transistor tester

1 Tachometer

10 Continuity testers

10 Wire wound variable resistors

*Students should be encouraged to acquire own*

**TOOLS**

10 Electrician pliers - insulated

10 Slip joint pliers*°

10 Diagonal’ cutting pliers (nipper* insulated

10 Long nose pliers - insulated

30 Large and small screwdrivers, with assorted tips

5 Large adjustable wrenches

5 Small adjustable wrenches

4 Bending springs (PVC conduit)

10 Sets of open end spanners- metric

10 Small tweezers set

4 E.M.T benders (half inch; three-quarter inch)

2 Medium sized scissors

10 Plastic mallets

10 227g ball pein hammers

1 Portable drilling machine

5 * 40w. soldering irons

10 Metal files

5 Portable vices

5 Allen wrench sets

10 Hacksaws and blades

10 Centre punches

10 Small cold chiseles

2 Sets of taps and dies

2 Tin snips (assorted)
**MISCELLANEOUS**

Various sizes of cables, assorted lamps and sockets, compass needles, bar and horseshoe magnets, assorted screws and nuts, primary secondary cells, various values and types of capacitors.

- 'Students should be encouraged to acquire their own 40w soldering iron

**SAFETY EQUIPMENT**

1 First Aid Kit
1 Fire Extinguisher

**MATERIALS**

**MAGNETISM**

Conductor
Motor rewinding, enamelled insulated, cables, rolls

**PROTECTIVE DEVICES**

Fuse holders – (15A, 30A)
Fuse wire (5A, 1 OA, 15A, 20A)
Miniature circuit breaker, 1 pole (10A, 15A, 30A)

**SIGNAL CIRCUIT**

Electric bell: trembler (6-10V a.c 60HZ)
Bell transformers (120V/610V a.c D/wound 60HZ)
Electric buzzers (120V/6-10V – 60HZ)
Door chimes (6-10V a.c 60HZ)

**LIGHTING FIXTURES**

Lamp holders E.S latten type 250V
Lamp holders E.S with keys switch 250V
Lamp holders B.0 latten type 250V
Lamps E.S 120V various watts
Lamps B.0 120 V various watts
Switches, 1 way, 1 pole
Switches, 2 way
Ceiling rose & 3 pins, plastic
Lamps, pigmy type 12V E.S/B.C
Lamp holders pigmy type E.S/B.C
Lamps, fluorescent fittings 40W, single, switch-start
120C 60HZ complete
Fluorescent tubes, switch less start
40W, 120V, 60HZ bi-pins
Fluorescent tubes switch start
40W, 120V 60HZ, bi-pin
Ballasts, fluorescent, 40-W, 60HZ, 120V, switch less start
Starters – 2-pin, 40W thermal & glow type
Socket outlets – duplex 15A, surface 3-pins
WIRING INSTALLATION

Socket outlets 3 pin duplex (non reversal)
Plugs 3-pin duplex
Plugs 2-pin flat non-reversal
Plugs 2-pin flat reversal
Socket outlets-13A S.P.W, surface
Plugs 13A, 3-pin fused'
Socket outlets 15A 0.P switch, 3-pin surface
Fixing pins 15mm, 18mm
Cable clips # 1A metal and
#1
#2
#
# 4
#6

Cables 1 X 1.0 mm², PVC insulated
2 X 1.0 mm² PVC insulated
2 X 1.5 mm² with each PVC insulated
1 X 1.5 mm² PVC insulated
1 X 2.5 mm² PVC insulated
2 X 2.5 mm² with each PVC—insulated
3 X 1.5 mm² with each PVC insulated
3 X 2.5 mm² with each PVC insulated
1 X 4.0 mm²
Metal/PVC conduct 15mm
Metal/PVC conduct 20mm
Metal/PVC conduct 25mm
Metal/PVC bends 15.2A 25mm² (each)
elbow 15.20 25mm² (each)
tees 15.20 25 mm² (each)
couplers 15.20 25mm² (each)
saddles 15.20 25mm² (each)
straps 15.20 25mm² (each)
Inspection box, 15.20 25mm
1,2,3,4adj holes
PVC paste.
Cable PVC sheathed PVC insulated-3X60mm
Termination glands-PVC 3X60mm

LIGHTING FIXTURES CONT’D

Starter holders — plastic, flush pin
Fluorescent tube holders bi-pin
Fluorescent tube & starter holder, flush plastic
Ballasts, Fluorescent lamps switch
start type 120V, 40W, 60HZ.
Switches 5A with base S.P.S. throw
I way
Switch 5A with base D.P S. throw
1 way
Switch 5A with base S.P.S. throw
2 way
Switch 5A with base S.P intermediate

MOTOR CONTROL

Push Button station: surface/flush 15A,
Plastic/metal clad
Continued overload trips
Direct on line starters: 0-15A, 120V
S. phase, coil, 3 pole with hold
Switch fuse, 3 pole 15a, metal clad
Reverse push button station, 15A, plastic/metal clad
Star-delta starter unit, 15A, 3 pole
overload trip
Auto transformer starter: 0-15A
WORKSHOP FACILITIES FOR UPHOLSTERY

I Band saw
1 Drill
1 finishing Sander
1 Belt sander
1 Electric hand drill
5 Sliding bevel
5 Try squares
2 Framing squares
5 Hand saws, combination
5 Back saw
10 Coping saws
4 Each 0-clamp (100, 150, 200mm)
6 Bar clamp (1200mm with extension)
2 Brace, ratchet
2 Hand drill
2 Sets auger bits, asst
2 Sets twist drills — 1/16" -- 3/8"
4 Jack-planes
4 Smoothing planes
4. Hammers, claw
5 Utility knives
5 Marking gauges
5 Nail punches
2 Measuring Tapes, 10m
5 Measuring Tapes, 5m
2 Spirit levels, 600mm
5 Each flat Screw drivers — 3/16", 1/4"
3 Each Phillips screwdrivers — Nos. 1, 2, & 3
5 Spoke shaves- flat
5 Spoke shave- round
2 Pliers, combination
2 Oil stoves
1 Henry Duly Sewing Machine
5 Shears, 8"/9"
2 Staple guns, heavy duly
2 Socket Spanners, sets 1/4" to 3/8"
2 Ring/flat combination spanners
1 Set 1/4" to 1/2"

MATERIALS

Tapestry
Leatherette
Tack, upholstery
Thread (super grade)
Staples for above staple gun
Webbing
Cotton
Contact cement
Foam, 1"
Sandpaper, assorted
Lacquer/UPC
WORKSHOP FACILITIES FOR SHEETMETAL WORK

5 Each dividers 15 and 30cm
10 Mallets – rubber
10 Mallets – boxwood/bossing
10 Rules – steel 30cm
10 Tapes – 6m
10 Square 24" X 16
10 Scribes
10 Vice – metal
1 Drill Press 15"/375mm floor type,
0-1/2"/13mm Jacobs chuck with tapered shank, drill drift
1 Drill press vice 4"/100mm jaw
1 Hand clamp/vice
4 G-clamps 4"
G-clamps 8"
10 Centre punches
1 Drill (metric sizes) 3-13mm in steps of 0.2mm; 13-20mm in steps of 0.5mm
1 Grinder – bench 1/2 h.p
Wheel dressers
2 Oil cans (pump type)
2 Sets Cold chisels – flat, round nose, c diamond
1 Each Vice Grip pliers – small & large
10 Sets files – assorted sizes and cuts
1 File cards
1 Shears, hand lever to cut up to 1/8" material
5 Work benches, flat top
1 Set Pliers, side cutting, diagonal, long nose bar folder 24"/600mm slip roll forming machine with rollers for wired edge
Box and pan brake – 24".

1 Stake – solid mandrel
1 Stake – hatchet
1 Stake – creasing
1 Stake – pick iron
1 Stake – square head
1 Stake – round head
1 Bench Ear for stake in use
2 Soldering copper – square pointed, 16oz
2 Electric soldering iron
6 Snips – straight 6"
3 Each Snips – curved 6" left and right
2 Snips – combination 10"
5 Hacksaw – adjustable
2 Sheet-metal saw
2 Jewellersaw
5 Junior hawksaw
3 Hammers – ball pein – 160z
3 Hammers – ball pein
2 Hammers – cross pein – 2oz
2 Hammers – cross pein – 8oz
2 Hammer! – straight pein
2 Hammen – raising
5 Rivet set.
2 Hand gravers – assorted sizes
2 Hand seamers 3"/75mm jaws
1 Scroll former
1 Radius gauge
1 Wire gauge
1 Air acetylene torch
1 Oxy-acetylene welding set-complete
MATERIALS

22 G. Galvanise sheet
24 G. Galvanise sheet
26 G. Galvanise sheet
28 G. Galvanise sheet
20 G. Aluminum sheet
24 G. Aluminum sheet
30 G. Aluminum sheet
Tinman’s solder
Rivets, mild steel and aluminum
Lubricating oil
Oxygen gas
Acetylene gas
Paints
Turpentine
Paint Brushes

SAFETY

12 Safety glasses
2 Safety rags bin
1 Fire Extinguisher
**ALLIED ARTS**

**MUSIC ACCESSORIES**

- Piano or Large size keyboard (PSR 540 or CTK 540)
- 20 Keyboards with amplified system
- 20 Headsets
- 1 Control board
- 20 Guitars
- 21 Music stands
- Finger Castanets
- 1 Radio CD Player
- Audio and Video Cassettes

**PHYSICAL EDUCATION ACCESSORIES**

**INDOOR**

- 20 Keyboards with amplified system (C,G,F,G)
- 20 Headsets
- 1 Control board
- 20 Guitars
- 21 Music stands
- Finger Castanets
- 1 Radio CD Player
- Audio and Video Cassettes

**OUTDOOR**

- 1 Set Basketball rings
- 1 Volleyball set
- 1 Football sets
- 4 Cricket sets
- 4 Lawn Tennis sets
- 1 Swimming pool
- 2 Circle Tennis sets

**STEELBAND**

- 2 Sets Assorted balls-hard, soft, large, small
- 2-Six Base
- 2-Double Guitar
- 2-Double Second
- 4-Double Tenors
- 8-Single Tenors

**PERCUSSION BAND**

- 1 Drum Set (Including rum Stool)
- 1 Marching Bass
- 1 Xylophone Drum
- 2 Pairs maracas
- 2 Tambourines
- 4 Triangles
- 2 Conga Drums
- 1 Pair bongos
- 1 Pair table drums

- 2 Dhantals
- 1 Guiro
- 1 Car Weel Rim
- 4 Tubular Bells (C,G,F,D)
**TRACK AND FIELD**

6 Shot putt  
6 Discuses  
6 Javelins  
12 Relay Batons  
6 Stop-watches  
4 Whistles  
1 High jump standards  
2 Landing mats  
1 Broad jump pit

**DANCE ACCESSORIES**

1 Mirrored wall  
2 Moveable bars  
1 Radio-compact disc player  
Audio cassettes  
Video-cassettes  
Pre-recorded audio cassette  
Pre-recorded compact discs

**INDOOR GAMES**

6 Chess sets  
6 Scrabbles  
6 Dominos  
6 Monopolies  
12 Puzzles  
6 Checkers  
6 Drafts  
6 Cards  
6 Backgammons
APPENDIX XV

FACILITIES, EQUIPMENT AND MATERIALS FOR AGRICULTURE PICS AND PIDS

LABORATORY ACCESSORIES

Student tables 5'X3' —2.6' high
Stools 2' high
Cupboards
Display cupboards
2 Sinks and taps
2 Bunsen burners
6 100ml Measuring cylinders
6 500ml Measuring cylinder
6 1000ml Measuring cylinders
6 Glass beakers
12 Petri dishes
25 Test tubes
6 Hand lenses
2 Microscopes
1 Projector
1 Computer
6 Insect collection boxes
6 Insect catching nets
6 Insect killing jars
1 Soil auger
2 Soil testing kits
4 Display boxes

EQUIPMENT FOR CROP CULTIVATION

1 Four-wheel tractor (for centers with more with disc plough, harrow than 5 acres) and trailer
1 Two wheel tractor with mould-board, plough rotavator and ridger
2 Brush cutters
3 Knap sack sprayers
100 Cutlasses
25 Garden forks
24 Spades
24 Shovels
8 Wheelbarrows
2 100ft measuring tape
36 Hand forks
24 Hand shovels
24 Watering cans

PLUCKING AND SLAUGHTERING ANIMALS

2 Plucking machines
2 Large freezers
1 Large refrigerator
4 Water taps
Figure 15

Pen to house 800 layers

Poultry Pen
Figure 16

Pen to house 400 layers

Poultry Pen
Figure 17

Cattle Pen
**APPENDIX XVI**

**VISUAL ARTS**

### CERAMICS

- I Kiln & furniture
- I Wheel (electric)
- 2 Large dust bin
- 2 Spring scales
- 6 Pairs compasses
- 4 Long tables
- 20 Stools
- 6 Sets modelling tools
- 6 Rulers (metre)
- 5 Pen knives
- 3 Sieves
  - kg Cutting wire
- 5 Rolling pins
- 12 Sponges
- 12 Chamois leather
- 6 Each buckets, bowls, basins
- 12 Paint brushes (1/2", 1")
- I Roll Plastic sheeting
- 3 Each shelves, cupboards
- 10 kg Plaster-of-parts
- 12 Tins assorted glazes
- Cleaning agents

### LEATHER

- Heavy duty machine
- Revolving punch (6 way)
- 6 Skiving knife
- 6 Awls
- 6 Each mallet/hammer
- 6 Steel rulers
- 6 Set squares
- 3 Leather shears
- 6 Stitch spacer
- 6 Sets leather stamps
- 6 Sets modelling tools
- 12 Pkt leather needles
- 12 Pktthonging
- 24 Sheets cardboard
- 24 Each pencils & pens
- 6 Hand brooms
- 6 Dust pans

### SURFACE DECORATION

- 4 - 2 Litre pot
- 2 – 4 Litre pot (stainless steel)
- 4 --8 Litre pot
- I Double boiler
- 4 Buckets (plastic)
- 4 Basins/bowls (plastic)
- 1 Stove (four-burner gas)
- 2 Steam irons
- 2 Iron boards
- 4 Metal spoons
- 6 Sets measuring spoons
- 2 Measuring cups
- 20 Tatting needles
- 2 doz. each Stencil brushes (3 sizes)
- 2 doz. each art brushes (3 sizes)
- 3 doz. embroidery hoops (assorted)
- 12 Sewing needles
- 2 doz. Lino blocks
- 2 doz. Squeeze
- 4 doz. Plastic gloves
- 6 Pairs scissors
- 12 Boxes detergent
- 6 Pkt steel wool
- 2 kg Paraffin wax
- 2 kg Bees wax
SURFACE DECORATION CONT'D

6 doz. Tins'hot water dyes
(assorted colours)
6 doz. Tins cold dyes
(assorted colours)
6 doz. Pkts dye fix
6 doz. Jars Printing ink
(assorted colours)
25m White cotton fabric
(pink, light blue cotton)
25m Fabric
4 doz. Sheets cardboard
2 cones Twine
2 kg Tibisiri straw

DECORATIVE CRAFT

Equipment, tools materials from all the other crafts' can be used

TOOLS & EQUIPMENT

6 Pair scissors
6 Craft knives
6 Long ruler (metre)
2 Medium staple machine
1 Large staple machine
3 Pairs pliers (household)
3 Pair pliers (jewelry)
3 Wire cutter's
6 Awls
3 Paper punch
6 Each bowls, basins, buckets
6 Each wooden spoons
6 Each metal spoons
12 Rolls masking tape
12 Rolls cello tape
12 Bottles glue
6 Hand brooms
6 Dust pans

MATERIALS (in any quantity)

MAN-MADE

Plastic
Wire
Foam
Rubber
Paper
Fabric
Cardboard
Foil

FIBRE ARTS

4 Handlooms
1 Floor loom
24 Pairs knitting needles
24 Steel Crochet hook (for yarn)
24 Bone Crochet hook (for wool & straw)
24 Tatting shuttles
4 Cones twine
4 Cones cord
5 kg Tibisiri straw
10m Batting
15m Muslin
25 Plain fabric
25m Printed fabric
2 doz. Reels Thread (assorted colours)
6 Pkts sewing needles
4m Each felt (assorted colours)
MAN-MADE CONT’D

Buttons
Glass
Metals
String
Yarn
Waste materials

INDIGENOUS

Shells
Pebbles
Stones
Dry leaves
Clay
Seeds, beads
Bark
Fibres (leaf, stern, fruit)
Branches
Stalks
Pods
Bamboo
Mucra, Nibbi
Cow horn

DRAWING

GRAPHIC DESIGN
IMAGINATIVE COMPOSITION

1 Camera
1 Video
1 Computer
2 Drawing easel & board
6 Storage racks
6 Tables 24’X60’ (38-42’ high)
24 each Pencils (assorted)
144 Sheets art paper
6 Pencils sharpener
24 Erasers

12 Pkts crayons
12 Rulers (30cm)
12 Ruler (metre)
6 Tins spray fixative
24 Drawing pens (calligraphy)
24 Bottles drawing ink (assorted)
6 Craft knives
24 Each brushes (small, medium, large)
12 Palettes
12 Water paint sets (assorted colours)
12 Tin oil paints (assorted colours)
12 Tins acrylic paints (assorted colours)
12 Tins poster paints (assorted colours)
6 Pairs p’per scissors
6m Canvas
1 Roll paper (news print)

PRINT MAKING

6 Sets wood-blocks (assorted)
6 Sets lino blocks (assorted)
6 Sets gouge (different shapes)
12 Roller (brayer)
144 Each art paper
25m Each fabric (pain-3 colours)
Clean rags (for wiping spills)
Styrofoam
1 Cone each twine, cord
36 Sheets cardboard
36 Plastic sheeting (for stencil)
SCULPTURE/3 DIMENSIONAL

12 Sharp knives
12 Coping saw & extra blades
6 Sets chisels (assorted)
   Roll wire (for armatures)
1 Roll Plastic mesh
1 Barrel clay
24 Sponges
Soapstone
Soft wood
6 Hand brooms
6 Dust pans
6 Sets gouges different shapes