AFFILIATION

Regulations 2012



MIZORAM BOARD OF SCHOOL EDUCATION

No B. 11035/10/94 - EDN GOVERNMENT OF MIZORAM EDUCATION & HUMAN RESOURCES DEVELOPMENT DEPARTMENT Dated Aircoul the 12th June 2

Dated Aizawl, the 12th June, 2012

NOTIFICATION

In exercise of the powers conferred by clause(iv) of sub-section(2) of section 22 of the Mizoram Board of School Education Act, 1975 (Mizoram Act.No 2 of 1976) read with clause (ix) and (x) of section 11 of the said Act, the Mizoram Board of School Education is pleased to make the following regulations, the same having been approved by the Government of Mizoram namely :-

Short title and commencement	1	(1)	These regulations may be called the Mizoram Board of School Education (Conditions for Affiliation of Institutions) Regulations, 2012	
		(2)	They shall came into force at once.	
Definitions 2		In these regulations, unless the context otherwise requires :-		
		(a)	'Act' means the Mizoram Board of School Education Act, 1975 (Mizoram Act No. 2 of 1976);	
		(b)	'Board' means the Mizoram Board of School Education established under the Act;	
		(c)	'Head of Institution' means the head of an institution by whatever name he or she may be designated;	
		(d)	'Institution' means any affiliated High School, Higher Second ary School or District Institute of Education & Training in Mizoram;	
		(e)	'affiliated' means affiliated by the Board for the purpose of admission to the privileges of the Board;	
		(f)	'Affiliation Committee' means the Affiliation Committee appointed by the Board under clause (iv) of sub-section (1) of section 21 of the Act;	
		(g)	'School Education' has the same meaning as in clause (zd) of section 2 of the Act;	
		(h)	'Secretary' means the Secretary of the Board;	
		(i)	'Government' means the State Government of Mizoram;	
		(j)	'Public examinations' means an examination conducted by the Board.	
Duty of the Affiliation Committee	3	matter of reg	I be the duty of the Affiliation Committee to advise the Board on all rs concerning affiliation of institutions and subject to the provisions ulation 15, the Board shall be the competent authority to accord ation to institutions on the recommendation of the Affiliation nittee.	

Institution desiring to prepare candidates for examinations to submit application	4	Any educational institution which desire to prepare candidates for the examinations conducted by the Board shall submit an application to the Secretary in the prescribed form for affiliation of the institution as per annexure II.
Institution seeking affiliation to satisfy the need of the area etc.	5	An institution seeking affiliation must satisfy the real need of the area/ locality and it shall not adversely affect the enrolment and financial stability of neighbouring institution already affiliated, and it must satisfy the stipulation in regard to minimum and maximum enrolment as prescribed in these regulations.
Institution seeking affiliation to have a Managing Committee.	6	An institution seeking affiliation shall have a Managing Committee or Governing Body as provided in Sec.5 of the Mizoram Education Act, 2003 or as prescribed by the Director,Department of School Education, Government of Mizoram from time to time.
Institution seeking affiliation to have sufficient financial resources.	7	An institution seeking affiliation should have sufficient financial resources to justify its continued existence. It shall have a regular source of income to meet running expenses of the institution to main- tain it at a reasonable standard of efficiency.
Income from the Institution seeking affiliation not to accrue to indivi- dual etc.	8	No part of the income from the institution seeking affiliation shall accrue to any individual or group of individuals running the institution.
Institution seeking affiliation to satisfy condition for affiliation	9	An institution seeking affiliation shall have to satisfy the minimum conditions laid down for affiliation in these regulations. It shall have suitable land, building, furniture, equipments and teaching aids for im- parting effective education. The site of the institution shall be free from objectionable surroundings and shall be peaceful and conducive to the smooth working of the institution.
Instituion seeking affiliation to maintain reserve fund.	10	An institution seeking affiliation shall have to maintain a Reserve Fund as prescribed in these regulations. This condition will not, however, apply in the case of Government institutions.

Institutions to observe certain provisions.

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- No institution seeking affiliation shall be accorded affiliation by the Board unless -
 - (a) it is opened to inspection by -
 - (i) Officers of the Board or any other person authorised by the Board.
 - Officers of the School Education Department or any other person authorised by the School Education Department;
 - (b) all information and returns called for from the institution by the Board within the provision of the Act and rules and regulations thereunder are furnished promptly by the Head of the institution;
 - (c) the institution maintains adequate and efficient staff as prescribed in these regulations for imparting instruction;
 - (d) the institution follows the curriculum (courses of studies) and other co-curricular activities as prescribed by the Board from time to time;
 - (e) the institution follows the list of textbooks and suggested reading materials prescribed/recomended by the Board.

An institution seeking affiliation as District Institute of Education & Training with permission to present candidates for the Diploma in Elementary Education must fulfil the following conditions

(a) Enrolment

- (i) The minimum enrolment for Diploma in Elementary Education shall be 60 in urban areas and 30 in rural areas in each year;
- (ii) The minimum class-wise enrolment in each class/section shall not be less than 30 in urban areas and 15 in rural areas;
- (iii) The maximum enrolment in each section of the class shall not exceed 50;
- (iv) Relaxation in regard to minimum and maximum enrolment may be made by the Board in special cases/ circumstances.

Conditions for affiliation of District Institute of Education & Training

(b) Site and Accomodation :

- The site should be adequate to provide space for all necessary buildings as well as space for physical education activities and sports;
- (ii) The school building shall have at least a semi-pucca structure with G.C.I. sheet roofing, sawn timber structure with tile or sawn timber or G.C.I. sheet walls with adequate number of doors and windows for proper ventilation. The school shall not be accomodated in rented building except with special permission of the Board;
- (iii) Provision shall be made for separate rooms for
 (a) Principal (b) Office (c) Teachers' common room
 (d) Library (e) Work Experience (f) Laboratory for
 subjects having practicals (g) Computer room
 (for institutions offering computer) and
 (h) Auditorium in addition to classrooms for all classes/
 sections;
- (iv) Each classroom shall be well-lit and well-ventilated and it must have at least a carpet area of 10 square feet per student subject to the minimum dimension of each classroom being 20feet x 18feet.
- (v) Provision shall be made for separate toilets both for boys and girls;
- (vi) Provision shall be made for easy availability of clean drinking water both for staff and students.

(c) Teaching Staff

- Every District Institute of Education & Training seeking affiliation shall have an adequate teachers as specified under (iv) below including a qualified Principal to ensure proper teaching of all subjects offered by the institutions and effective management of all scholastic and non-scholastic activities;
- (ii) A Principal of a District Institute of Education & Training shall be at least a Master Degree holder with a professional degree (M.Ed. is preferred) from a recognised University and has at least 5 years of teaching experience in an affiliated District Institute of Education & Training;
- (iii) All the lecturers must have at least a second class Master Degree in the concerned subject of teaching with a professional degree (M.Ed. is preferred) from a recognised University;

- (iv) Excluding the Principal, there shall be at least one lecturer for each subject. There may be additional lecturers for special subjects like Population Education, Education of Children with special needs, Health and Physical Education, Work Education etc, unless such subjects can be effectively handled by other lecturers of the institution within the limit of their normal work-loads;
- (v) The Principal shall teach at least 3 periods per week and all other lecturers shall teach at least 12 periods per week, each period being 40 minutes duration;
- (vi) The minimum qualifications and the strength of faculty members mentioned above may be relaxed by the Board in special cases/circumstances.

(d) Infrastructure/Equipment

A District Institute of Education & Training shall have the following infrastructure, equipments and teaching aids, etc., whichever is applicable as listed below or as per the prescription of the Board from time to time -

- (i) A laboratory room to conduct science practicals accommodating a minimum of 24 students at a time, providing a minimum carpet area of 20 (twenty) square feet per student with necessary equipments. A separate room for Physics, Chemistry and Biology is desirable;
- (ii) A store room measuring a minimum carpet area of 256 square feet for the laboratory or laboratories to store respective practical instruments/chemicals/equipments with proper inventory and recording registers;
- (iii) A dust free Computer room with a minimum of 5(five) computers and necessary accessories, providing a minimum carpet area of 20 (twenty) square feet per computer and keeping a ratio of computer to student as 1:5 (minimum), if the institution offers computer course;
- (iv) A practising elementary school with adequate staff and facilities applicable to Primary and Middle School stage;
- (v) The minimum requirement of the infrastructure/equipment/teaching aid may be relaxed by the Board in special cases/circumstances.

(e) Applying for Affiliation

An institution seeking affiliation of the Board

- (i) has to submit an application, in a prescribed form of the Board duly filled in and signed by the head of the institution, to the Secretary of the Board;.
- (ii) must possess a permission document issued by the Government of Mizoram;
- (iii) must have presented their candidates for three public examinations consecutively;
- (iv) must have not below three consecutive years' result of the Diploma in Elementary Education at the rate of 35% in each year;
- (v) has to pay a processing fee of Rs.100.00 (rupees one hundred) only or an amount fixed by the Board from time to time, to the Board along with the application;

(f) Fees payable by an affiliated institution

An institution approved to accord affiliation shall have to submit the following fees to the Board;

- (i) Affiliation fee of Rs.2000.00 (rupees two thousand) only or an amount fixed by the Board from time to time, at the time of affiliation;
- (ii) Annual affiliation fee @ of Rs.500.00 (rupees five hundred) only or an amount fixed by the Board from time to time on or before 30th September every subsequent year failing which the affiliation shall be temporarily withdrawn until the dues are cleared.

(g) Reserve Fund

- Every non-government Institution shall maintain a reserve fund in the Board. The amount of the fund shall not be less than Rs. 12,000/- (rupees twelve thousand) only or an amount fixed by the Board from time to time and no withdrawal shall be made from the reserve fund except with the written permission of the Secretary of the Board;
- (ii) The reserve fund shall be forfeited if the institution is found to have transgressed or evaded the conditions laid down for affiliation and the privilege of affiliation is permanently withdrawn by the Board;
- (iii) The reserve fund shall be refunded to those institutions as and when the institution attains the status of a Government institution or ceases to exist.

Conditions for 13 affiliation of Higher Secondary School

An institution seeking affiliation as Higher Secondary School with permission to present candidates for the Higher Secondary School Leaving Certificate Examination must fulfil the following conditions :

(a) Enrolment

- (i) The minimum total enrolment for Classes XI & XII shall be 60 in rural areas and 100 in urban areas;
- (ii) The minimum class-wise enrolment in each class/ section shall not be less than 30 in rural areas and 50 in urban areas and normally not more than 60;
- (iii) Relaxation in regard to minimum and maximum enrolment may be made by the Board in special cases/ circumstances.

(b) Site and Accomodation :

(i) The site should be adequate to provide space for all necessary buildings as well as space for physical education activities and sports;

(ii) The school building shall have at least a semi-pucca structure with G.C.I. sheet roofing, sawn timber structure with tile or sawn timber or G.C.I. sheet walls with adequate number of doors and windows for proper ventilation. The school shall not be accomodated in rented building except with special permission of the Board;

(iii) Provision shall be made for separate rooms for

(a) Principal (b) Office (c) Teachers' common room

(d) Library (e) Work Experience (f) Laboratory for

subjects having practicals and (g) Computer room

(for schools offering computer) in addition to classroom

for all classes/sections;

(iv) Each classroom shall be well-lit and well-ventilated and it must have at least a carpet area of 10 square feet per student subject to the minimum dimension of each classroom being 20feet x 18feet. At least two or three such rooms shall have adjustable partition walls to enable their conversion into a hall as and when necessary for school gathering, unless a separate hall is made available in the school for such gathering;

(v) Provision shall be made for separate toilets both for boys and girls;

(vi) Provision shall be made for easy availability of clean drinking water both for staff and students.

*(vii) Provision shall be made for Rain water harvesting containing 2000 litres of water.

*Inserted in 2021

(c) **Teaching Staff**

- Every Higher Secondary School seeking affiliation shall have an adequate number of qualified teachers as specified under (iv) below including a qualified Principal to ensure proper teaching of all school subjects offered by the School and effective management of all scholastic and non-scholastic activities ;
- (ii) A Principal of Higher Secondary School shall be at least a Master Degree holder with a professional degree from a recognised University and has at least 5 years of teaching experience in an affiliated Secondary or Higher Secondary School(s);
- (iii) All the teachers must have at least a second class Master Degree in the concerned subject of teaching with a professional degree from a recognised University;
- (iv) Excluding the Principal, there shall be at least one teacher for each subject. There may be additional teachers for special subjects like Physical and Health Education, Work Education etc. unless such subjects can be effectively handled by other teachers of the school within the limit of their normal work-loads ;
- The Principal shall teach at least 5 (five) periods per week and all other teachers shall teach at least 15 (fifteen) periods per week each period being 40 minutes duration;
- (vi) The minimum qualifications and the strength of teaching staff mentioned above may be relaxed by the Board in special cases/circumstances.

(d) Infrastructure/Equipment

Higher Secondary School offering subjects with practicals shall have the following infrastructure, equipments and teaching aids, etc., whichever is applicable as listed below or as per the prescription of the Board from time to time -

- (i) A laboratory to conduct Geography practicals, accommodating a minimum of 30 students at a time, providing a minimum carpet area of 10(ten) square feet per student, with necessary equipments as per Annexure I;
- (ii) A laboratory to conduct Psychology practicals, accommodating a minimum of 30 students at a time, providing a minimum carpet area of 10(ten) square feet per student with necessary equipments as per Annexure 2;
- (iii) A dust free Computer room with a minimum of

5(five) computers and necessary accessories, providing a minimum carpet area of 20(twenty) square feet per computer and keeping a ratio of computer to student as 1:5 (minimum);

- (iv) A Home Science laboratory to accommodate a minimum of 30 students at a time, providing a minimum carpet area of 15(fifteen) square feet per student with necessary utensils and equipments as per Annexure-3;
- (v) A laboratory room to conduct Physics practicals, accom modating a minimum of 24 students at a time, providing a minimum carpet area of 20(twenty) square feet per student with necessary equipments as per Annexure-4;
- (vi) A laboratory room to conduct Chemistry practicals, accommodating a minimum of 24 students at a time, providing a minimum carpet area of 20(twenty) square feet per student with necessary equipments as per Annexure-5;
- (vii) A laboratory room to conduct Biology practicals, accommodating a minimum of 24 students at a time, providing a minimum carpet area of 20(twenty) square feet per student with necessary equipments as per Annexure-6;
- (viii) A store room measuring a minimum carpet area of 256(Two hundred fifty six) square feet for the laboratory or laboratories to store respective practical instruments/ chemicals/ equipments with proper inventory and recording registers;
- (ix) The minimum requirement of the Infrastructure/Equipment/Teaching Aid may be relaxed by the Board in special cases/circumstances.

(e) Applying for Affiliation

An institution seeking Affiliation of the Board

- (i) has to submit an application, in a prescribed form of the Board (see annexure 11) duly filled in and signed by the head of the institution, to the Secretary of the Board;
- (ii) must possess a permission document issued by the Government of Mizoram;
- (iii) must have presented their candidates for three public examinations consecutively;
- (iv) must have minimum 35 pass percentage each year in three consecutive years result of the Higher Secondary School Leaving Certificate Examination;
- (v) has to pay a processing fee of Rs.100.00 (rupees one hundred) only or an amount fixed by the Board from time to time to the Board along with the application.

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(f) Fees payable by an affiliated institution

An institution approved to accord affiliation shall have to submit the following fees to the Board:

- (i) Affiliation fee of Rs.1500.00 (rupees one thousand five hundred) only or an amount fixed by the Board from time to time, at the time of affiliation;
- (ii) Annual affiliation fee @ of Rs.400.00 (rupees four hundred) only or an amount fixed by the Board from time to time on or before 30th September every subsequent year failing which the affiliation shall be temporarily withdrawn untill the dues are cleared.

(g) Reserve Fund

- Every non-government Higher Secondary School shall maintain a reserve fund in the Board. The amount of the fund shall not be less than Rs.10,000/- (rupees ten thousand) only or an amount fixed by the Board from time to time and no withdrawal shall be made from the reserve fund except with the written permission of the Secretary of the Board;
- (ii) The reserve fund shall be forfeited if the institution is found to have transgressed or evaded the conditions laid down for affiliation in these regulations and the privilege of affiliation shall be permanently withdrawn by the Board;
- (iii) The reserve fund shall be refunded to those institutions as and when the institution attains the status of a Government institution or ceases to exist.
- or14.An institution seeking affiliation as High School with permission to
present candidates for the High School Leaving Certificate Examination
must fulfil the following conditions :

(a) Enrolment :

- (i) The minimum total enrolment from Classes IX to X shall be 40 in rural areas and 60 in urban areas;
- (ii) The minimum Class-Wise enrolment in each Class/ Section shall not be less than 20 in rural areas and 30 in urban areas and normally not more than 40 students;
- (iii) Relaxation in regard to minimum and maximum enrolment may be made by the Board in special cases/ circumstances.

Conditions for affiliation of High Schools

- (b) Site and accomodation :
 - The site should be adequate to provide space for all necessary buildings as well as space for physical education activities and sports ;
 - (ii) The school building shall have at least a semi-pucca structure with G.C.I. sheet roofing, sawn timber structure with tile or G.C.I. sheet walls with adequate number of doors and windows for proper ventilation. The School shall not be accomodated in rented building except with specific permission of the Board.
 - (iii) Provision shall be made for separate rooms for
 (a) Headmaster (b) Office (c) Teachers' common room
 (d) Library (e) Work Experience (f) Laboratory for
 subjects having practicals and (g) Computer
 room (for Schools offering Computer) in addition to
 class rooms for all classes/sections;
 - (iv) Each classroom shall be well-lit and well-ventilated and it must have at least a carpet area of 10 square feet per pupil subject to the minimum dimension of each classroom being 20 feet x 18 feet. At least two or three such rooms shall have adjustable partition walls to enable their conversion into a hall as and when necessary for school gathering, unless a separate hall is made available in the school for such gathering;
 - (v) Provision shall be made for separate toilets both for boys and girls;
 - (vi) Provision shall be made for easy availability of clean drinking water both for staff and students.
 - *(vii) Provision shall be made for Rain water harvesting containing 2000 litres of water.
- (c) Teaching Staff :
 - A High School seeking affiliation shall have an adequate number of qualified teachers as specified under (iv) below including a qualified Headmaster/Headmistress to ensure proper teaching of all subjects offered by the school and effective management of all scholastic and non-scholastic activities;
 - (ii) A Headmaster/Headmistress of a High School shall be at least a Graduate with a professional degree from a recognised University and has at least five years of teaching experience in an affiliated Secondary School;
 - (iii) All the teachers of a High School shall be Graduates with a professional degree from a recognised University and at least two of them shall be Science graduates, one being capable of teaching either Mathematics or both;

^{*} Inserted in 2021

- (iv) Excluding the Headmaster, the ratio of the number of teachers as to the classes/sections shall normally be 3:2. There may be additional teachers for special subjects like Hindi, Physical and Health Education, Work Education, etc. unless such subjects can be effectively handled by the other teachers of the school within the limit of their normal work-loads;
- The Headmaster of a High School shall teach at least 10 periods per week and all other teachers shall teach at least 20 periods per week, each period being 40 minutes duration;
- (vi) The minimum qualifications as also the minimum strength of teaching staff mentioned above may be relaxed by the Board in special cases/circumstances

(d) Infrastructure/Equipment :

A High School offering subjects with practicals shall have the following infrastructure, equipments, teaching aids, etc. whichever is applicable as listed below or as per the prescription of the Board from time to time :

- A laboratory room to conduct science practicals, (Physics/Chemistry/Biology) accomodating a minimum of 20 students at a time, providing a minimum carpet area of 20 (twenty) square feet per student with necessary equipment as per Annexure 7,8 and 9. A separate room each for Physics, Chemistry and Biology is desirable;
- (ii) A Home Science laboratory to accomodate a minimum of 15 students at a time, providing a minimum carpet area of 15 (fifteen) square feet per student with necessary utensils and equipments as per Annexure 10;
- (iii) A dust-free Computer room with a minimum of 5 (five) computers and necessary accessories, providing a minimum carpet area of 20 (twenty) square feet per computer and keeping a ratio of computer to student as 1:5 (minimum).
- (iv) A store room measuring a minimum carpet area of 256 square feet for the laboratory/laboratories to store respective practical instruments/chemicals/equipment with proper inventory and recording registers;
- (v) The minimum requirement of the Infrastructre/ Equipment/Teaching Aid may be relaxed by the Board in special cases/circumstances.

(e) Applying for Affiliation :

An institution seeking affiliation of the Board

- has to submit an application, in a prescribed form of the Board (See Annexure 11) duly filled in and signed by the head of the institution, to the Secreary of the Board;
- (ii) must possess a permission document issued by the Government of Mizoram;
- (iii) must have presented their candidates for three public examinations consecutively;
- (iv) must have three consecutive years' result of the High School Leaving Certificate Examination at the rate of 35% in each year;
- (v) has to pay a processing fee of Rs 100.00 (rupees one hundred) only or an amount fixed by the Board from time to time to the Board along with the application

(f) Fees payable by an affiliated institution :

An institution approved to accord affiliation shall have to submit the following fees to the Board :

- (i) Affiliation fee of Rs1000.00 (rupees one thousand) only or an amount fixed by the Board from time to time, at the time of affiliation ;
- (ii) Annual affiliation fee @ Rs 300.00 (rupees three hundred) only or an amount fixed by the Board from time to time on or before 30th September every subsequent year failing which the affiliation shall be temporarily withdrawn until the dues are cleared.

(g) **Reserve Fund** :

- Every non-government High School shall maintain a reserve fund in the Board. The amount of the fund shall not be less than Rs 6,000.00 (rupees six thousand) only or an amount fixed by the Board from time to time and no withdrawal shall be made from the reserve fund except with the written permission of the Secretary of the Board;
- (ii) The reserve fund shall be forfeited if the institution is found to have transgressed or evaded the conditions laid down for affiliation and the privilege of affiliation shall be permanently withdrawn by the Board;
- (iii) The reserve fund shall be refunded to those institutions as and when the institution attains the status of a Government institution or ceases to exist.

Grant of Affiliation/ Provisional Affiliation	15	receipt of all informations required for affiliation of an institution, the retary shall place the same before the Affiliation Committee for sideration. Institutions which fulfil broadly the requisite conditions Il be granted affiliation by the Chairman of the Board on the ommendation of the Affiliation Committee and on payment of the owing as mentioned in these regulations:		
		 (i) Reserve Fund; (ii) Affiliation fee; and (iii) Annual Affiliation fee. Ordinarily no institution which does not satisfy the major conditions shall be granted affiliation. Affiliation Committee may, however, rec ommend to the Board grant of provisional affiliation in special cases subject to fulfilment of the major conditions within a period of one year from the date of the provisional affiliation. 		
Withdrawal suspension of Affiliation	16	 The privilege of affiliation already granted by the Board may be withdrawn permanently or for any period from any institution if it - (i) fails to impart reasonably effective teaching; (ii) fails to maintain good discipline amongst the students and the staff; (iii) fails to comply with the conditions laid for affiliation and ; (iv) fails to abide by the regulations prescribed by the Board for affiliated institutions or instructions issued from the Board from time to time in regard to any matters concerning the institutions. 		
Right of the Board for making additional regulations, etc.	17	The Board reserves the right of making additional regulations concerning affiliation of institution; with the approval of the Govern- ment and also to issue detailed instructions not inconsistent with these regulations for carrying out the provisions of these regulations.		
Difficullty in interpretation to be referred to Board	20	If any difficulty arises in the interpretation of these regulations, it shall be referred to the Board and the decision of the Board shall be final.		

On and from the commencement of these regulations Mizoram Board of School Education (Conditions for Recognition of Institutions) Regulations, 1979 vide Education & Social Welfare Department, of Mizoram Notification No.ESS/MBSE/23/77 dated Aizawl the 19th October 1979 stand repealed.

Provided that any order made or anything done or any action taken under these regulations so repealed or under general orders ancilliary thereto shall be deemed to have done or taken under the corresponding provisions of these regulations.

By Order and in the name of Governor of Mizoram

Sd/- ESTHER LAL RUATKIMI Commissioner & Secretary School Education Department

Memo No. B. 11035/10/94 - EDN Copy to :-

Repeal

Saving

and

Dated Aizawl, the 12th June, 2012

- 1. The P.S. to the Governor for information of His Excellency, Governor of Mizoram.
- 2. The P.S. to the Minister, i/c School Education, etc. for information of the Hon'ble Minister with 5 spare copies.
- 3. The Chief Secretary to the Government of Mizoram with 5 spare copies.
- 4. The Chairman, Mizoram Board of School Education, Chaltlang, with 20 spare copies.
- 5. The Director of School Education, Government of Mizoram, Aizawl.
- 6. All District Education Officers, School Education Department, Govt. of Mizoram.
- 7. All Sub-Divisional Education Officers, School Education Department, Govt. of Mizoram.
- 8. The Controller, Printing & Stationary, Government of Mizoram, Aizawl with 5 spare copies for publication in Mizoram Gazette.

Sd/- ESTHER LAL RUATKIMI Commissioner & Secretary School Education Department

Annexure 1

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGHER SECONDARY EDUCATION (GEOGRAPHY)

Sl.No	Particulars	
	Unit	
1.	World Map (Physical – RF 1:20,00,000 – Laminated)	Each
2.	Geological Map of India	Each
3.	India Map (Physical – RF 312500/3.2cm=100km – Laminated)	Each
4.	Asia Map (Physical – Wall maps covering the size of 100x75)	Each
5.	Weather Map	Each
6.	India Map (Three Dimensional)	Each
7.	Globe (Three Dimensional)	Each
8.	World Map (Three Dimensional – RF 1:8,800,000)	Each
9.	Contour Map	Each
10.	Topo graphical Sheet	Each
11.	Tracing Paper (Carson – Best quality)	Each
12.	Graph Paper (1/10 inch division, 56x76cms)	Each
13.	Tracing Board	Each
14.	Surveyor Umbrella	Each
15.	Theodolite	Each
16.	Dumpy Level	Each
17.	Rolling Board	Each
18.	Drawing Paper	Each
19.	Paper Clip	Each
20.	Show Case	Each
21.	Electronic Globe for Map Projection	Each
22.	Ranging Rod	Each
23.	Aneroid Barometer	Each
24.	Chain & Tape Survey Instrument - Comp. Set	Each
25.	Plain Table Survey – Comp. Set	Each
26.	Wind Vane	Each
27.	Wet and Dry Thermometer	Each
28.	Mathematical Instrument – Large Size Set	Each
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Annexure 2

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGHER SECONDARY EDUCATION (PSYCHOLOGY)

1.MAP – Form T (Teenagers)Each2.EPQ-R (English Version)Each3.Scale for Introversion – Extroversion Dimension (SIED) By Psy.ComEach4.DEO- Mohan Achievement Motivation Scale by PDEO &Each4.Asha Mohan (English Version)Each	Sl.No	Particulars	Unit
2.EPQ-R (English Version)Each3.Scale for Introversion – Extroversion Dimension (SIED) By Psy.ComEach4.DEO- Mohan Achievement Motivation Scale by PDEO &Each	1.	MAP – Form T (Teenagers)	Each
4. DEO- Mohan Achievement Motivation Scale by PDEO &	2.		Each
•	3.	Scale for Introversion – Extroversion Dimension (SIED) By Psy.Com	Each
Asha Mohan (English Version) Each	4.	DEO- Mohan Achievement Motivation Scale by PDEO &	
		Asha Mohan (English Version)	Each
5. Emotional Maturity Scale by Wy.Singh & M.Bhargava (English Version) Each	5.	Emotional Maturity Scale by Wy.Singh & M.Bhargava (English Version)	Each
6. Frustration Scale by Chauhan & Tiwari(English Version) Each	6.	Frustration Scale by Chauhan & Tiwari(English Version)	Each
7. Aggression Scale by Pal & Nagvi (English Version) Each	7.	Aggression Scale by Pal & Nagvi (English Version)	Each
8. Style of Learning & Thinking (SOLAT) by D. Venketeraman (English Version) Each	8.	Style of Learning & Thinking (SOLAT) by D. Venketeraman (English Version)	Each
9. Adjustment Inventory for School Students (AISS) By A.K.P. Sinha	9.	Adjustment Inventory for School Students (AISS) By A.K.P. Sinha	
& R.P.Singh (English Version) Each		& R.P.Singh (English Version)	Each
10.Global Adjustment Scale (GAS) Form - SEach	10.	Global Adjustment Scale (GAS) Form – S	Each
11.Guidance Need Inventory By J.S.Grewal & M. Sharma (English Version)Each	11.	Guidance Need Inventory By J.S.Grewal & M. Sharma (English Version)	Each
12.Self Concept Questionnaire by R.K.Sharawati (English Version)Each	12.	Self Concept Questionnaire by R.K.Sharawati (English Version)	Each
13.Koh's Block Design Test (English Version)Each	13.	Koh's Block Design Test (English Version)	Each
14. Thematic Apperception Test (TAT) (Indian) By L.P. Malhotra	14.	Thematic Apperception Test (TAT) (Indian) By L.P. Malhotra	
(English Version) Each		(English Version)	Each
15. Sinha Comprehensive Anxiety Test By A.K.P. Sinha & L.N.K. Sinha	15.	Sinha Comprehensive Anxiety Test By A.K.P. Sinha & L.N.K. Sinha	
(English Version) Each		(English Version)	Each
16. Stop Watch 5	16.	Stop Watch	5
17.Photographs of PsychologistsEach	17.	Photographs of Psychologists	Each
18.Human Psychology Chart (Italian)Each	18.	Human Psychology Chart (Italian)	Each
19.Steel Almira (Big)Each	19.	Steel Almira (Big)	Each

Annexure-3

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGHER SECONDARY EDUCATION (HOME SCIENCE)

	(HOME SCIENCE)			
Sl.No	Particulars	Unit		
1.	Hand Sewing Machine	Each		
2.	Mixer/Grinder	Each		
3.	Electric Oven	Each		
4.	Pressure Cooker			
	a) 2 Lts.	Each		
	b) 12 Lts.	Each		
5.	Water Filter	Each		
6.	Toaster (Electric)	Each		
7.	Plastic Bucket (Large and medium with lid)	Each		
8.	Compound Microscope (Good quality)	Each		
9.	Balance Scale (Beam Balance)	Each		
10.	Chopping Board (Wooden)	Each		
11.	Scissors and Sears	Each		
12.	Steel Almirah (Big)	Each		
13.	Set of Casseroles (Set of 3)	Each		
14.	Spoon Set			
	a) Table Spoon	Each		
	b) Tea Spoon	Each		
15.	Serving Spoon Set	Each		
16.	Plastic Container (Airtight) Set	Each		
17.	Serving Bowls (Borosil – Big and Small)	Each		
18.	Kitchen Towel	Each		
19.	Dinner Set	Each		
20.	Crusher	Each		
21.	Tray			
	a) Small Size	Each		
	b) Medium Size	Each		
22	c) Large Size	Each		
22.	Kettle	El.		
	a) Small Sizeb) Medium Size	Each		
	/	Each Each		
23.	c) Large Size White Cambric	Each		
23. 24.	Set of Knives	Each		
25. 26	Plates (Rice Plates – Melamine)	Dozen		
26. 27	Tea Cups (Melamine)	Dozen		
27.	Glasses (Borosil – Medium Size)	Dozen		
28.	Degchi (Aluminium) a) Small Size	Each		
	a) Small Sizeb) Medium Size	Each		
	c) Large Size	Each		
	c) Large Size	Laun		

Sl.No	Sl.No Particulars				
	1.	Table for reagent (Wooden – 2x6ft – 3ft high)	Each		
	2.	Almirah (Wooden – 4x6ft)	Each		
	3.	Almirah (Wooden – 3x6ft)	Each		
	4.	Table with chair (Wooden)	20		
	5.	Kitchen working table	5		
		(4x6 with marble slap top for Home Science)	1		

Annexure - 4

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGHER SECONDARY EDUCATION (PHYSICS)

A. APPARATUS AND EQUIPMENTS

SI.N	o Particulars	Unit
1.	Cylindrical Body (2.5 cm)	Each
2.	Rectangular Block (Wooden)	Each
3.	Vernier Callipers - Adjustable Steel	Each
4.	Screw Gauge (Least count 0.001cm – Brass)	Each
5.	Metallic Wire	Each
6.	Spherical Ball with hook (Brass)	Each
7.	Clamp Stand	Each
8.	Resonance Tube (Brass)	Each
9.	Rubber Pad/Cork – 10,12,14, 15, 17 mm bottom diameter	Per 100
10.	Thermometer –	
	(a) Having half and one degree	Each
	(b) Having maximum and minimum	Each
11.	Traveling Microscope	Each
12.	Capillary Tube	Each
13.	Searl's Apparatus	Each
14.	Fortin's Barometer with enough mercury	Each
15.	Helica's Spring up to 1 Kilogram	Each
16.	Metre Scale	Each
17.	Crocodile Jaw (Clips)	Each
18.	\mathcal{E}	Each
19.	Extension Cord	Each

Sl.No	Particulars	Unit
20.	Ammeter (0-500) MA, (0-1.5) A	Each
22.	Voltmeter 0-3, 0-5, 0-10	Each
23	Meter Bridge (Complete with Jockey)	Each
24.	Post Office Box	Each
25.	Potentiometer (4 wire with Jockey)	Each
26.	Resistance (diff.Ohm), Carbon Resistors	Each
27.	Sonometer (A.C.) with slotted weight and hanger 0.5Kg	Each
28.	Tangent Galvanometer $(30 - 0.30 - Moving coil type)$	Each
29.	Optical Bench (Steel – 1 meter length, double rod with 4 metal)	Each
30.	Spherometer (0.5mm – Pitch – 70-7 Scale)	Each
31.	Glass Prism (Equilateral 25mm each side)	Each
32.	Transistor PNP/NPN (AC 187)	Each
33.	Illuminator	Each
34.	Multimeter (Analogue)	Each
35.	Spirit Level	Each
36.	Zener Diodes/Diode	Each
37.	Rheostat (Long)	Each
38.	Daniel Cell	Each
39.	Leclanche Cell	Each
40.	Magnetic Compass	Each
41.	Concave and Convex Lenses having short focal length	Each
42.	Drawing Board	Each
43.	Keys (Plug keys – Reversing keys)	Each
44.	Lead Acid Accumulators/Rechargeable (0-6 volt)	Each
45.	Step Up/Down Transformer	Each
46.	Light Emitting Diode (L.E.D.)	Each
47.	L.D.R.	Each
48.	Wrench Box	1 Set
49.	Self Adjusting Cutter	Each
50.	Striper (MT –02)	Each
51.	Stabilizer (Manual)	Each
52.	Tester Set	Each

Unit

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGHER SECONDARY EDUCATION (CHEMISTRY)

A. APPARATUS AND EQUIPMENTS

Sl.No	Particulars	Unit
1.	Burette (Torson) - 50ml (Plastic)	Each
2.	Beakers - 500ml, 250ml, 100ml	Each
3.	Conical Flask - 250ml, 100ml	Each
4.	Pipette - 10ml	Each
5.	Test Tube - 10ml, 20ml	Each
6.	Reagent Bottle - 1000ml, 250ml, 500ml	Each
7.	Funnel (Small Size - Glass)	Each
8.	Glass Rod - 300x10mm – 4mm dia	Each
9.	Glass Tube - 300x5mm	Each
10.	Volumetric Flask - 1000ml, 500ml, 250ml	Each
11.	Almirah (Wooden – 3x6ft)	Each
12.	Water Tanky (Syntex – 2000lts – Export quality)	Each
13.	Burette Stand (Plastic)	Each
14.	Tripod Stand (Triangular iron top – 9mm)	Each
15.	Blow Pipe (Metallic Standard)	Each
16.	Cork Borer (Set of 6 standard – Iron)	Each
17.	Wire Gauge (Abestos coated)	Each
18.	China Dish (Porcelain dish –70mm dia)	Each
19.	Mortar & Pestle (Porcelain)	Each
20.	Test Tube Brush (Good quality)	Each
21.	Burette Brush (Galvanised wire with handle)	Each
22.	Wash Bottle (Plastic – LD Polythene - Good quality with nozzle)	Each
23.	Platinum Wire embodied in glass rod	Each
24.	Hot Plate (Good quality)	Each
25.	Hot Water Bath (Good quality with at least 8 holes)	Each
26.	Spatula (Iron)	Each
27.	Filter Paper (Whatman's)	Each
28.	Refrigerator (1000 Lts)	Each
29.	Electronic Balance	Each
30.	Universal Indicators (Solution or paper)	Each
31.	pH Paper	Pkt
32.	Measuring Cylinder - 10ml, 50ml, 100ml, 500ml	Each
33.	Long Form of Periodic Table	Each
34.	Watch Glass (Big Size – Glass)	Each
35.	Thermometer 100°C & above (Plastic)	Each
36.	Litmus Paper – Red and Blue	Each
37.	Overhead Projector	Each
38.	Bunsen Burner with accessories	Each

B. CHEMICALS

Sl.No	Particulars	Unit
1.	Ammonium Molybdate	500 g
2.	Ammonium Carbonate (Purified or AR)	500 g
3.	Ammonium Chloride AR	500 g
4.	Ammonium Sulphate AR	500 g
5.	Ammonium Nitrate AR	500 g
6.	Ammonium Phosphate	500 g
7.	Ammonium Ferrous Sulphate AR	500 g
8.	Ammonium Ceric Nitrate AR	500 g
9.	Ammonium Oxalate AR	500 g
10.	Ammonium Thiocyanide AR	500 g
11.	Ammonium Acetate AR	500 g
12.	Ammonium Sulphide	500 g
13.	Aluminium Nitrate AR	500 g
14.	Aluminium Chloride (Hydraded AR)	500 g
15.	Aluminium Sulphate AR	500 g
16.	Acetic Acid (Glacial AR)	500 g
17.	Aniline AR	500 g
18.	Acetone (EL)	500 ml
19.	Acetanilide	500 g
20.	Acetaldehyde (Soln.)	500ml
21.	Ammonia Solution	500ml
22.	Bromine Water (AR 5x20ml)	500ml
23.	Barium nitrate AR	500 g
24.	Barium chloride AR	500 g
25.	Barium carbonate AR	500 g
26.	Benzoic acid AR	500 g
27.	Benzaldehyde AR	500ml
28.	Benzene AR	500ml
29.	Boric acid (Crytals AR)	500g
30.	Benzene crystallizable	500ml
31.	Barium sulphate AR	500 g
32.	Copper sulphate (Crytals/ Solution)	500 g
33.	Cupric carbonate	500 g
34.	Cupric chloride AR	500 g
35.	Cupric nitrate	500 g
36.	Calcium chloride (Dihydrate AR)	500 g
37.	Calcium sulphate (Dihydrate AR)	500 g
38.	Calcium oxide (Lumps AR)	500 g
39.	Calcium nitrate (Tetrahydrate AR)	500 g
40.	Calcium carbonate	500 g
41.	Carbon di – sulphite AR	500 ml
42.	Cadmium sulphate AR	500 g
43.	Cadmium chloride	500 g
44. 45	Carbon tetrachloride AR	500 ml
45.	Copper metal turning	500 g

		Annexure - 5 Condt.
Sl.No	Particulars	Unit
46.	Chloroform (AR/Dry AR)	500 ml
47.	Cobalt nitrate	500 g
48.	Charcoal Block (Activated Charcoal AR)	500 g
49.	Dimethyl glyoxime AR	500 g
50.	Di sodium hydrogen phosphate	500g
51.	Diethyl ether AR	500ml
52.	2,4 dinitrophenyl hydrazine	500g
53.	Formaldehyde (Diethyl Acetal AR)	500ml
54.	Ferrous sulphide	1 kg
55.	Ferrous sulphate AR	500g
56.	Fehling solution A	500ml
57.	Fehling solution B	500ml
58.	Ferric chloride	500g
59.	Ferric nitrate AR	500g
60.	Ethyl alcohol Absolute 99.9% (omnis)	500ml
61.	Glycerol – (Glycerine) AR	500 ml
62.	Hydrogen peroixide	500ml
63.	Hydrochloric acid	50ml
64.	Iron metal powder	1 kg pd
65.	Iodine (resublimed)	100g
66.	Lead dioxide or peroxide	500g
67.	Lead acetate AR	100g
68.	Lead bromide	500g
69.	Lead nitrate	500g
70.	Lead chloride	500g
71.	Manganous sulphate	500g
72.	Magnesium suphate	500g
73.	Manganese dioxide	500g
74.	Mercury metal	250g
75.	Mercuric chloride	250g
76.	Mercurous nitrate	100g
77. 78.	Methanol Methyl erange	500ml
78. 79.	Methyl orange	25g
79. 80.	Manganous chloride Mercuric Nitrate	500g 100g
80. 81.	Magnesium chloride	500g
82.	Nickel chloride	500g
82. 83.	Nickel sulphate	500g
84.	1 – napthol	100g
85.	2 - napthol	500g
85. 86.	M- nitrobenzene	100g
80. 87.	Ninhydrin	100g
88.	Nessler's reagent	10g
89.	Nitric Acid	500ml
90.	Oxalic acid	500ml
200		200111

Annexure	-	5
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Carl		Annexure
Condt. Sl.No	Particulars	Unit
91.	Potassium chloride	500g
92.	Pot hydroxide	500g
93.	Pot iodide	100g
94. 05	Pot dichromate	500g
95. 06	Pot chromate	500g
96. 07	Pot nitrate	500g
97. 08	Pot carbonate	500g
98. 00	Pot ferricyanide	100g
99. 100	Pot sulphocynaide	500g
100.	Pot Pyroantimonate	250g
101.	Pot ferrocyanide	500g
102.	Pot thiocyanide Picric acid	500g
103.		500g
104. 105.	Phenolphthalein Pathallia anhydrida	50g
	Pathallic anhydride Sodium bicarbonate	500g
106. 107.	Sodium carbonate	5 kg
107.		500g
108.	Sodium sulphite Sodium bromide	500g
109. 110.	Sodium acetate	500g 500g
110. 111.	Sodium iodide	100 g
111.	Sodium nitrate	500g
112.	Sodium hydroxide	500g
11 <i>3</i> . 114.	Sodium nitropruside	100g
114.	Sodium chloride	500g
11 <i>5</i> . 116.	Sodium sulphate	500g
110.	Sodium bisulphate	100g
117.	Sodium thiosulphate	100g 1 kg
110.	Sodium metal	500g
120.	Salicylic acid	500g
120.	Stannous chloride	100g
121.	Starch soluble	500g
123.	Strontium chloride	500g
124.	Schiff's powder	500g
125.	Sulphur powder	500g
126.	Silver nitrate	25g
127.	Sulphuric acid	500ml
128.	Sodium sulphide	500g
129.	Strontium nitrate	500g
130.	Sodium bisulphate	500g
131.	Urea	500g
132.	Universal indicator (solution or paper)	1.25ml
133.	Xylene	500ml
134.	Zinc sulphate	500g
	1	6

		Annexure - 5 Condt.
Sl.No	Particulars	Unit
135.	Zinc chloride	500g
136.	Zinc metal	500g
137.	Zinc carbonate	500g
138.	Zinc nitrate	500g
139.	Sodium citrate	500g
140.	Atomic model set	500g
141.	Potassium hydrogen sulphate	500g
142.	Potassium bromide	500g
143.	Potassium sulphocyamide	500g
144.	Nickel carbonate	500g
145.	Cobalt acetate	250g
146.	Magnesium acetate	500g
147.	Magnesium nitrate	500g
148.	Cobalt chloride	100g
149.	Sodium cobalt nitrate	100g
150.	Thiourea	500g
151.	Litmus blue (solid)	1 box
152.	Diphenylamine	250 g
153.	Pot permanganate	500g
154.	Ph paper	1 box
155.	Spirit	500ml
156.	Furfugal solution	500ml
157.	Citric acid	500g
158.	Acetyl chloride	500ml
159.	Benzine sulphonyl chloride	500ml
160.	Phenol	500g
161.	Lucas reagent	250ml
162.	Tollen's reagent	250ml

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGHER SECONDARY EDUCATION (BIOLOGY)

A.APPARATUS AND EQUIPMENTS

Sl.No	Particulars	Unit
1.	Incubator	Each
2.	B.O.D. Bottles	Each
3.	Burette Stand (Plastic – White)	Each
4.	Centrifugator	Each
5.	Bell Jar	Each
6.	Dryer (Phillips)	Each
7.	Cotton Wool	Rolls
8.	Filter Paper	Box
9.	Ph Meter	Each
10.	Gas Connection	Each
11.	Dissecting Tray (300mmx250mmx65mm – Complete white	
	enameled complete with wax – Good quality)	Each
12.	Dissecting Set (Comprising 14 instruments,	
	stainless steel – Good quality)	Each
13.	Compound Microscope (Standard quality eye piecex10x15	
	(noth mygenian) magnification 100x675x with bx, lock and	
	key – Good quality)	Each
14.	Simple Microscope (Good quality)	Each
15.	Slides (In box – 25 slides size 130mmx108mm, 38mm	
	standard with index sheet)	Box
16.	Cover Slips (Circular)	Box
17.	Petri Dish (100mmx15mm depth)	Each
18.	Cancet	Each
19.	Test Tube Stand (At least 10 holders)	Each
20.	Crucible	Each
21.	Droppers – 5ml	Each
22.	Wide Mouth Bottles – 1000ml	Each
23.	Maximum & Minimum Thermometer (Dimple Brand)	Each
24.	Hammer (Small – Good quality)	Each
25.	Rubber Stopper fit for 10,20,30mm diameter	Each
26.	Pipette – 5ml, 10ml, 20ml	Each
27.	Lab Stand Set	Each
28.	Test Tubes – 20ml, 50ml (Hard Glass)	Each
29.	Test Tube Holder (Iron – Good quality) set	Each

B. CHEMICALS

	Sl.No Particulars	Unit
1.	Aceto- Carmine	100ml
2.	Carmine MS	5g
3.	Iodine Pellets	1g
4.	Starch – Powder	100g
5.	Leishman's Stain	250ml
6.	Sucrose Powder	500g
7.	Glucose Powder	500g
8.	Benedict's Reagent	250ml
9.	Sulphosalicylic Acid	500g

C. PERMANENT SLIDES

Sl.No	Particulars	Unit
1.	T.S. of Nerve Cells	Each
2.	T.S. of Hydra	Each
3.	Mitosis Cell Division (All Stages)	Each
4.	Meiosis Cell Division (All Stages)	Each
5.	Human Blood Smear	Each
6.	Frog Blood Smear	Each
7.	Striated Muscles	Each
8.	Un-Striated Muscles	Each
9.	Cardiac Muscles	Each
10.	Squamous Epithelium	Each
11.	T.S. of Dicot Stem	Each
12.	T.S. of Monocot Stem	Each
13.	T.S. of Dicot Root	Each
14.	T.S. of Monocot Root	Each
15.	Bacteria	Each
16.	Leaf Stomata	Each
17.	Sclerenchyma, Parenchyma, Xylems, Phloem, Nostoc,	
	Spirogyra, Oscillatorin, Rhizopus, Anabourn	Each
18.	Amoeba	Each
19.	Paramecium	Each
20.	Euglena	Each

D. SPECIMENS

Sl.No	Particulars	Unit
1.	Mosses	Each
2.	Fern Plant	Each
3.	Pitcher Plant	Each
4.	Mildew	Each
5.	Rust	Each
6.	Smut	Each
7.	Potato Blight	Each
8.	Life Cycle of Silk Moth	Each
9.	Life Cycle of Frog	Each
10.	Life Cycle of Honey Bee	Each
11.	Life Cycle of House Fly	Each
12.	Life Cycle of Butterfly	Each
13.	Root Nodules of Legumes	Each
14.	Liverworts	Each
15.	Rhizobium	Each
16.	Fungi (Mushroom)	Each
17.	Cuscuta	Each
18.	Hydrilla	Each
19.	Drocera	Each
20.	Cactus	Each
21.	Euphorbia	Each
22.	Fishes – Shark, Rohu, Anabus, Catla, Common Carp, Grass Crap	Each
23.	Salamander	Each
24.	Toad	Each
25.	Snakes, Lizards, Tortoise, Octopus	Each
26.	Octopus	Each
27.	Torpedo	Each
28.	Pigeon, Parrot, Sparrow	Each
29.	Rat, Rabbit	Each

E. CHARTS

Sl.No Particulars Unit

	-	
1.	Cell Division (Mitosis & Meiosis) – Different Stages	Each
2.	Biogeochemical Cycles (Nitrogen, Co ₂ , O ₂ , Phosphorus, Sulphur)	Each
3.	T.S. of Stem – Dicot and Monocot	Each
4.	T.S. of Root – Dicot and Monocot	Each
5.	Secondary Growth of Dicot and Monocot Stem	Each
6.	Plant Cell and Animal Cell	Each
7.	Classification of Animal Kingdom	Each
8.	Classification of Plant Kingdom	Each
9.	Internal Structure of Heart, kidney, Lungs and Ovary	Each
10.	Different types of Tissue Systems (Animal & Plant)	Each
11.	Respiratory System, Reproductive System, Circulatory	
	System, Skeletal System, Excretory System and Muscular System of Man	Each
12.	Cell Organelles (Mitochondria, Nucleus, Chloroplast,	
	Cell Wall, Ribosomes, Endoplasmic Recticulum, Golgi Body,	
	Cilia, Flagella, Centriole, Plasma Membrane, Plastids)	Each
13.	Life Cycle of Frog, Silk Moth, Mushroom, Fern, Moss,	
	Rhizopus, House Fly, Butterfly	Each
14.	Inflorescence (Different Types)	Each
15.	Digestive System of Human Beings	Each
16.	Floral Parts (China Rose, Mustard)	Each
17.	Structure of Human Brain	Each
18.	Models of DNA	Each
19.	Models of RNA	Each

F. FURNITURES

Sl.No	Particulars	Unit
1.	Steel Almira (Big – Godrej)	Each
2.	Towels	Each
3.	Wooden Stools (3ft Height)	Each
4.	White Board	Each
5.	Practical Tables (6ft x 3ft – Wooden)	Each
6.	Table with Chair (Wooden)	Each
7.	Wooden Almira (6ftx3ft)	Each
8.	Buckets (Big-Plastic)	Each
9.	Plastic Mugs (Big)	Each
10.	Table for reagent (Wooden – 2x6ft, 3ft high)	Each

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGH SCHOOL (PHYSICS)

A. APPARATUS AND EQUIPMENTS

Sl.No Particulars

Unit

1. Concave Mirror F.L. – 15cm	Each
 Convex Mirror 5m diameter @ F.L. – 10cm @ F.L. – 20cm 	Each
 Convex winter sin diameter @ 1.L. = roem @ 1.L. = 20em Plane Mirror (10cmx5cmx3mm) 	Each
4. Convex Lens (Plano) (a) F.L. – 100cm (b) F.L. – 50cm	Each
 Concave Lens (Plano) (a) 1.2. – Toochi (b) 1.2. – Soehi Concave Lens (Plano) 5cm diameter 	Each
 Glass Prisms (Equilateral 40mm each side) 	Each
7. Glass Slab (7.5x5x1.25cm)	Each
8. Slide Calipers	Each
9. Rheostat	Each
10. Voltmeter DC with stand $0 - 10$ volts	Each
11. Ammeter DC with stand $0 - 50 \text{ MA}$	Each
12. Galvanometer (Weston Type)	Each
13. Physical Balance (Double Pan Balance with glass case)	Each
14. Bar Magnet 100mm length/ Alnico & 75mm length	Each
15. Horse Shoe Magnet	Each
16. Electromagnet	Each
	Each
17. Magnetic Needle	Each
 Metallic Bob (Pendulum bob with hook) Clinical Thermometer 	Each
20. Tuning Fork – (a) 340Hz (b) 480 Hz (c) 256-512 Hz	Each
21. Resistance Wire (Eureka Constant 225w)	Each
22. Maximum & Minimum Thermometer	Each
23. Steel Almira (6'x3')	Each
24. Stop Watches 0-60 sec x 1/5 sec	Each
25. Tester (Electric)	Each
26. Multimeter (Analogue)	Each
27. Battery Eliminator	Each
28. Extension cord (ISI Mark with indicator)	Each
29. Flexible Wire (0.4mm Copper)	Coil
30. Experiment Table (6'x4')	Each

Annexure - 8

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGH SCHOOL (CHEMISTRY)

A. APPARATUS AND EQUIPMENTS

Sl.No	Particulars	Unit
1.	Beakers (Borosil) - 500ml, 250ml, 100ml	Each
2.	Conical Flask (Borosil) - 250ml, 100ml	Each
3.	Test Tube (Borosil) – 20ml	Gross
4.	Funnel (Big and Small - Glass)	Each
5.	Glass Rod - 300x10mm (Bundle of 50)	50 Each
6.	Glass Tube - 300x5mm (Bundle of 50)	50 Each
7.	Measuring Cylinder (Borosil – Glass upto 500ml)	Each
8.	Spirit Lamp (Brass – Good quality - Hard)	Each
9.	Tripod Stand (Triangular top iron 9mm)	Each
10.	Test Tube Holder (Iron – Good quality)	Each
11.	Test Tube Stand (Plastic – at least 10 holders)	Each
12.	Weight box	Each
13.	A pair of Tongs	Each
14.	Wire Gauge (Abestos coated)	Each
15.	China Dish 70mm diameter	Each
16.	Dropper (5ml holder)	Each
17.	Volumetric Flask (Borosil) – 500ml, 250ml	Each
18.	Filter Paper (Standard Quality)	Gross
19.	Funnel Stand with ring clamp	Each
20.	Ball & Stick Model (Plastic Set)	Each
21.	Hypodermic Syringe (Plastic) – 2ml Holder	Dozen
22.	Glass Trough	Each
23.	Beehive Shelf	Each
24.	Gas Jar	Each

B. <u>CHEMICALS</u>

$\underline{\mathbf{D}}$			
1.	Cobaltous Nitrate	-	500 g
2.	Anhydrous Copper Sulphate	-	500 g
3.	Common Salt	-	500 g
4.	Ammonium Chloride	-	500g
5.	Acetic Acid	-	500 ml
6.	Ammonia Solution	-	500 ml
7.	Copper Sulphate (Crystal) -		500 g
8.	Calcium Carbonate	-	500 g
9.	Copper Metal Turning	-	500 g
10.	Fermaldehyde	-	500 ml
11.	Ferrous Sulphate	-	500 g
12.	Ethyl Alcohol Absolute 99.9%	-	500 ml
13.	Hydrogen Peroxide	-	500 ml
14.	Hydrochloric Acid (Con)	-	500 ml

Annexure - 8 Condt.

15.	Iron Metal Powder	-	1 kg
16.	Iodine	-	100 g
17.	Magnesium Sulphate	-	500 g
18.	Mangnese Dioxide	-	500 g
19.	Mercuric Chloride	-	250 g
20.	Magnesium Chloride	-	500 g
21.	Nitric Acid (Con)	-	500 ml
22.	Potassium Chloride	-	500 g
23.	Potassium Permangenate	-	500 g
24.	Phenolphthalein	-	50 g
25.	Sodium Bicarbonate	-	500 g
26.	Sodium Carbonate	-	500 g
27.	Sodium Nitrate	-	500 g
28.	Sodium Hydroxide	-	100 g
29.	Sodium Metal	-	500 g
30.	Starch Soluble	-	500 g
31.	Silver Nitrate	-	500 ml
32.	Sulphuric Acid (Con)	-	500 ml
33.	Zinc Sulphate	-	500 g
34.	Zinc Chloride	-	500 g
35.	Zinc Metal	-	500 g
36.	Zinc Carbonate	-	500 g

Annexure - 9

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGH SCHOOL (BIOLOGY)

	A. APPARATUS AND EQUIPMENTS	
Sl.No	Particulars	Unit
1.	Mortar & Pestle (Medium Size)	Each
2.	Pipette (Borosil) – 10ml	Each
3.	Dissecting Tray (300mmx250mmx65mm – Complete white	
	enameled complete with wax – Good quality)	Each
4.	Dissecting Box (Comprising 14 instruments, stainless steel – Good quality)	Each
5.	Compound Microscope (Standard quality eye piecex10x15	
	(Hygenian) magnification 100x675x with bx, lock and key)	Each
6.	Simple/Dissecting Microscope (Good quality)	Each
7.	Hand Lens (Sample Required)	Each
8.	Glass Slides Box (13mmx108mmx38mm standard and index	
	sheet with Blue Star)	Each
9.	Cover Slip (Optically flat in log pack rectangular 20) Blue Star	Each
10.	Permanent Slides with Box (Labeled) 25 S	lides in a Box
11.	Watch Glass (Heat proof, transparent 60,80 mm diameter)	Each
12.	Charts - Vitamins, Food Chain, Food - Web	Each
13.	Wide Mouth Bottle - Good quality – 1000ml	Each
•	B. <u>CHARTS</u>	
1.	Charts - Cell Division (Mitosis & Meiosis) -	Each
2.	Plant Cell & Animal Cell	Each
3.	Charts, Model, Diagrams, Specimen of Ancestral Forms of Man,	
	Canine & Incisors, Hands of Man & Monkey	Each
4.	Chart/Diagram – Microscope (Compound & Simple)	Each
5.	Chart – Human Heart, Reproductive System, Urinary System, Kidney Section	on Each
	C. <u>CHEMICALS</u>	TT 1 /
Sl.No	Particulars	Unit
1.	DPX Mountant	500ml
2.	Conc. HCl	500ml
3.	Methylene Blue	250ml
4.	Safranin Le dine Selection	250ml
5.	Iodine Solution	250 ml
6. 7	Distilled Water	5 L
7.	Conc. HNO ₃	500 ml
8.	Ammonium hydroxide	500ml
9. 10	Buirette Reagent	100ml 125ml
10.	Millon's Reagent	-
11. 12.	Sudan III Formalin	10g 500 ml
13. 14.	Eosin Ammonium chloride	250ml
	Cotton Blue	500g 250ml
15. 16.	Zinc metal	250ml
10. 17.	Marble chips	500 g 1 kg
1/.	matore emps	1 kg

Annexure-10

LIST OF ITEMS FOR SCIENCE LABORATORY OF HIGH SCHOOL (HOME SCIENCE)

	(HOME SCIENCE)					
Sl.No	Particulars	Unit				
1.	Hand Sewing Machine					
2.	Mixer/Grinder					
3.	Electric Oven	Each				
4.	Pressure Cooker					
	a) 2 Lts.					
_	b) 12 Lts.	Each				
5.	Water Filter	Each				
6.	Toaster (Electric)	Each				
7.	Plastic Bucket (Large and medium with lid)	Each				
8.	Compound Microscope (Good quality)	Each				
9.	Balance Scale (Beam Balance)	Each				
10.	Chopping Board (Wooden)	Each				
11.	Scissors and Sears	Each				
12.	Steel Almirah (Big)	Each				
13.	Set of Casseroles (Set of 3)	Each				
14.	Spoon Set					
	a) Table Spoon	Each Each				
	b) Tea Spoon					
15.	Serving Spoon Set	Each Each				
16.	Plastic Container (Airtight) Set					
17.	Serving Bowls (Borosil – Big and Small)					
18.	Kitchen Towel					
19.	Dinner Set	Each				
20.	Crusher	Each				
21.	Tray					
	a) Small Size	Each				
	b) Medium Size	Each				
22.	c) Large Size	Each				
22.	Kettlea)Small Size	Each				
	b) Medium Size	Each				
	c) Large Size	Each				
23.	White Cambric	Each				
24.	Set of Knives					
25.	Plates (Rice Plates – Melamine)					
26.	Tea Cups (Melamine)					
20. 27.	Glasses (Borosil – Medium Size)					
27. 28.	Glasses (Borosil – Medium Size) Dozen Degchi (Aluminium)					
	a) Small Size	Each				
	b) Medium Size	Each				
	c) Large Size	Each				

Sl.No	Particulars	Unit
1.	Table for reagent (Wooden – 2x6ft – 3ft high)	Each
2.	Almirah (Wooden – 4x6ft)	Each
3.	Almirah (Wooden – 3x6ft)	Each
4.	Table with chair (Wooden)	20
5.	Kitchen working table	5
	(4x6 with marble slap top for Home Science)	

The Secretary, Mizoram Board of School Education, Chaltlang, Aizawl - 796 012. Sub: Affiliation of ______ School/Institution (High School/Higher Secondary School/DIET) Sir. I request your kind consideration of the School/Institution mentioned below as High School/Higher Secondary School,/DIET for Board's affiliation. 1. Name of School : (in Capital) 2. Date of Establishment : 3. Date of obtaining permission of Govt. of Mizoram 4. Permission Order No. from the Directorate of School Education. (Attach photo copy duly attested by a Gazetted Officer) _____ _____ District _____ 5. Postal Address : Pin : _____ Telephone _____ 6. Location (under which Division/Sub-Division/District) Which Syllabi & Curricula followed 7. 8. Medium of Instruction 9. Management (Govt./Private)_____ Is the School in need of a site? Yes 10. (If the answer is YES, the school shall furnish full justification as ENCLOSURE 'A') 11. **ENROLMENT**: Latest class-wise enrolment of the School shall be attached in a separate sheet mentioning :-(a) Class (b) No. of Section (c) No. of students in each section/class as ENCLOSURE 'B' at par with the Inspection Report/Note. 1. For Higher Secondary and High Schools, the competent authority for inspection shall be [NB: District Education Officer and upwards or any competent officer appointed by the Board.

2. In case of DIET, an officer appointed by the Board or Joint Director of School Education and upward.]

То

Annexure -11 Condt.

11. **RESULTS OF THE SCHOOL** : Mention the last three consecutive years school result under the Mizoram Board of School Education as under

Year of	No. candidates appeared			No. candidates Passed			Pass percentage			Centre No.
Examination	Male	Female	Total	Male	Female	Total	Male	Female	Total	

The minimum pass percentage in each year should be 35% in a public examination conducted by the Board.

- 12. **STATEMENT OF TEACHING STAFF** : Details of teaching staff of the school shall be furnished in a separate sheet as ENCLOSURE 'C' giving the following particulars : [Note : Substitute Teachers or Part-Time Teachers should be separately mentioned]
- 1. Name and address (starting from the head of institution)
- 2. Designation
- 3. Educational and Professional qualification (Date of Qualifying each level)
- 4. Date of birth
- 5. Date of joining in the service
- 6. Date of joining to the present post
- 7. Present pay with total emoluments
- 8. Subjects taught classwise
- 9. Total number of periods taken per week
- 10. Any other relevant information
- 13. **BUILDING/MANAGING COMMITTEE :** Is the school being run by the Managing Committee/Building Committee regularly constituted in accordance with the relevant Rules of School Education Department ? Yes/No

If yes, furnish the list of members of the framed Committee with their designation, occupation and permanent address as ENCLOSURE 'D'

- 14. **FINANCIAL POSITION** : (This is meant for non-government schools only). Non-government school shall mention the statements showing the amount of income/grants received from the Government of Mizoram and other sources during the last one year (1st jan.-31st Dec.) as ENCLO SURE 'E' as under :
 - a. Whether it is receiving Adhoc/Deficit grant
 - b. The total amount of recurring grant thus received
 - c. The total amount of fee-remission grant received
 - d. Sources of income other than government indicating the amount and the purpose for which grant received
 - e. Total expenditure for general maintenance of school
 - f. Is any part of the income of the school recurring to any individual or group of individuals running the school?

Annexure - 11 Condt.

- 15. **RESERVE FUND**: Every non-government school shall deposit a reserve fund in the Board after the approval of the application of affiliation by the Affiliation Committee.
 - Rs. 12,000/- for District Institute of Education and Training (DIET)

Rs. 10,000/- for Higher Secondary School

Rs. 6,000/- for High School

16. **SITE AND ACCOMODATION** : (A separate sheet as ENCLOSURE 'F')

- (a) total area of land with a neat sketch map owned by the School
- (b) type of building, accomodation made for class-room, Headmaster/Head Teacher/Teachers' Common room, Science Laboratory, Computer Room, Teaching Aids, Work Experience, Library and School Hall, Rain Water Harvesting containing 2000 litres of water, if any, with dimensions.
- 17. **SCHOOL LIBRARY** : Does the shool maintain a school library ? If so, state the number of different books thus maintained in the library or any relevant information as :

a.	Textbooks	:
b.	Reference books	·
c.	Educational reference book :	
d.	Others :	
	Total number of books :	
e.	Name of the Librarian/Library	/ Incharge

f. Source of Income for the Library :

- 18. **FURNITURE/EQUIPMENT/TEACHINGAIDS** : Statement showing the details of furniture and equipments maintained by the school shall be furnished as ENCLOSURE 'G'.
- 19. **HOSTEL** : Is hostel attached to the School ? If so, give the details regarding number of beds and accomodation provided, name of warden, area of the hostel, location of the hostel, fee charged for the hostelers etc.
- 20. **SCHOOL INSPECTION NOTE** : Latest school inspection/Visit Notes (if any) paid by any competent Inspecting Officer shall be attached as ENCLOSURE 'H'.
- 21. **FEE** : Fee shall be paid in the Board's Office at the rates fixed by the Board here under : 1. A processing fee shall be paid by each institution at the time of submission of this application as under

a. District Institute of Education and Training (DIET), Higher Secondary School and High School Rs 100.00 (Rupees one hundred only)

- 2. Annual Affilation for each year
 - a. Rs. 500/- for District Institute of Education and Training (DIET)
 - b. Rs. 400/- for Higher Secondary School.
 - c. Rs. 300/- for High School.

I certify to the best of my knowledge that the particulars furnished herewith are correct and if the Board's affiliation is accorded, the school authority shall abide by the Rules and Regulations laid down by the Board for affiliated institutions.

Yours faithfully,

Signature of School Secretary

(*Name in Block Letters*) official seal

Name of School ______ With official seal

FOR BOARD'S OFFICE USE ONLY

The application for ______ School/Institution (High School/Higher Secondary School/DIET) has been checked carefully and entered in the Affiliation Register bearing No ______ date _____. The application is found eligible to present in the Affiliation Committee.

Further the grant of Board's affiliation to any institution is subject to the final scrutiny and decision of the Affiliation Committee and on payment of Reserve Fund as per Sl.No 15 of the application form and annual affiliation fee per Sl. No 21 thereof.

Processing Fee Paid : Receipt No _____ Date : _____ for Rs _____ (Receipt attached)

Checked by : _______ (Signature)

(Name in Block Letters)

Date : _____

Signature of Superintendent (ACADEMIC) (Name in block letters)

Place : Date :