MEGHALAYA BOARD OF SCHOOL EDUCATION
HEADQUARTERS ::: TURA.

No.MBOSE/HSSLC/Cl-XI/95/12/103/Vol-II 3160/ Dated Tura, the 25th Nov., 2024.

From : Shri T. R. Laloo,
Director Accreditation and Controller of Examinations,
Meghalaya Board of School Education,
Tura.

To : The Principals of Institutions offering Higher Secondary Level of education.

Subject: Guidelines/instructions for conduct of class XI Promotion Practical Examination, 2024

Madam/Sir,

As you are aware that as per Notification No. 966 Dated Tura, the 6th September, 2024 MBOSE shall no longer supply practical question papers for class XI Internal/promotion Examination from academic session 2024-25 onwards. The question papers for the said practical examinations are to be set by the subject teachers of the schools.

MBOSE has prepared guidelines/instructions for the conduct of class XI promotion practical examinations, for the subjects where question papers were supplied earlier (namely, Physics, Chemistry, Biology, Geography, Home Science, Anthropology, Geology, Computer Science and Informatics Practices).

All higher secondary schools are hereby directed to adhere to the said guidelines/instructions.

(T.R Laloo)
Director Accreditation and Controller of Examinations,
Meghalaya Board of School Education,
Tura.

No.MBOSE/HSSLC/Cl-XI/95/12/103/Vol-II 3160 2 Dated Tura, the 25th Nov., 2024.

Copy to:

1. The Director, MBOSE, Regional Office, Shillong.

(T.R Laloo)
Director Accreditation and Controller of Examinations,
Meghalaya Board of School Education,
Tura.

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MEGHALAYA BOARD OF SCHOOL EDUCATION
HEADQUARTERS ::: TURA.

Guidelines for the conduct of Class XI Practical Examinations in the subjects, Physics, Chemistry, Biology, Geography, Anthropology, Home Science, Computer Science, Informatics Practices and Geology.

Introduction:

The NEP 2020 and the NCF 2023 have emphasized on competency/skill based education. As such, 20% or 30 % marks have been allotted for practical/internal assessment in all the subjects with a view to develop competencies/skills in the students. Therefore, it is necessary that the practical examinations, project work and internal assessments are taken seriously so that our students are equipped with all necessary skill sets to meet the demands of the ever-evolving world.

General Instructions:

1. Practical Examination shall be conducted in the schools as per the schedule given by the Board.
2. If numbers are more, students may be divided in to groups and practical examination may be conducted in shifts. A simple schedule of grouping students(into Group A, B, C D, …..) and conducting different subjects (Sub 1,2,3…..) simultaneously in a day, is shown in the table below.

Date	Sub 1		Sub 2		Sub 3		Sub 4	
	Shift 1	Shift 2	Shift 1	Shift 2	Shift 1	Shift 2	Shift 1	Shift 2
4.11.2024	A	B	C	D	E	F	G	H
5.11.2024	C	D	E	F	G	H	A	B
6.11.2024	E	F	G	H	A	B	C	D
	And	so	on					

3. No external examiners shall be appointed.
4. Question papers are to be set, printed, packed and kept in the safe custody of the school principal.

5. All reagents, equipment, specimens, maps, charts, etc. required for practical examinations are to be kept ready.
6. Answer scripts and all other requirements shall be supplied by the school. Evaluation shall also be undertaken by the school.
7. The Board shall not bear the expenses whatsoever, of conducting the class XI Practical examination.
8. The practical question papers and answerscripts of the students are to be preserved in the school for at least 3 months. The Board may undertake inspection of the same within this period.
9. Maintain a record of the shifts of examination like date, students per shift, the questions/sets used in the shift etc.
10. As far as possible, avoid repetition of questions/specimens in different shifts of the examination.
11. For ease and for uniformity, the prepared template/format for practical question paper must be used. However, the template/format of question paper may be changed according to the assessment scheme suggested in the latest prescribed syllabus.
12. It will be the sole responsibility of the school to maintain confidentiality and to ensure proper conduct of the practical examination.
13. Subject-specific instructions are to be strictly followed.
14. Refer to the latest syllabus for the list of experiments/activities and for the changes in practical assessment schemes.

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CHEMISTRY(**Practical**)

Class XI Promotion Examination

Full Marks: 30 ***Time: 3 hours***

Instruction to Examiners:

Chemistry Practical AssessmentScheme	Marks
Volumetric Analysis	**08**
Salt Analysis	**08**
Content Based Experiment	**06**
Project Work	**04**
Class record and viva	**04**
Total	**30**

1. Fixed amount of the required chemicals must be supplied to each candidate for preparation of any one of the given substances. Procedure for preparation of substances may be given. Substances to be prepared are **Potash Alum, Copper Sulphate or Benzoic Acid.** **6**

Distribution of Marks:

Writing Procedure	2
Physical appearance of the product	1
Completion of experiment	3
Total	**6**

Or

Any other content-based experiment may be given **6**

2. Volumetric Analysis:

Prepare 1 (*N*) solution of Hydrochloric acid and provide 20 mL to 30 mL of this solution in a 250 mL volumetric flask to the students. A minimum of three variations on the volume of the above supplied solution is recommended for a group of 20-30 students. Provide 0.1 (*N*) standard Sodium Carbonate solution for titration. Procedure may be supplied.

Distribution of Marks:

Completion of experiment	2
Correction procedure for calculation	2
Chemical equation	1
Result/Accuracy	3
Total	**8**

For error up to ± 3%, award full marks and deduct ½ mark for each 0.5% error beyond 3%.

3. Any ***one*** the following salts should be supplied to the students for detection of anion and cation. Avoid repetition of the salt as far as possible. However, examiner may add some more or change, subject to their availability, so as to bring in varieties: **8**

$Pb(NO_3)_2$,	$CuCO_3$,	$CuSO_4$,	$Cu(NO_3)_2$,
$CuCl_2$,	$FeSO_4$,	$Al_2(SO_4)_3$,	$Al(NO_3)_3$
$ZnSO_4$,	$NiSO_4$,	$NiCl_2$,	$BaCl_2$,
$Ba(NO_3)_2$,	$SrCL_2$,	$Sr(NO_3)_2$	$MgSO_4$,
$Mg(NO_3)_2$,	$MgCl_2$	$CaCl_2$,	NH_4Cl,
$(NH_4)_2CO_3$,	$(NH_4)_2SO_4$		

Distribution of Marks:

Physical appearance(State/colour and solubility)	½ + ½ = 1
Dry test for acid radical	1
Wet test for acid radical	2
Dry test for basic radical	1
Group Separation and confirmatory test for basic radical	2
Conclusion/result with correct formula of the salt	½ + ½ = 1
Total	**8**

[Note: If any student fails to identify the cation and gets precipitate in the right group, then he/she must be awarded 2 marks for group separation.]

4. Investigatory Project: (Assessment to be done by the internal examiner) 4

5. Sessional work [Regularity of the student in the practical classes should be taken into consideration.] 4

6. Viva voce 2
[Related to the knowledge of the experiments allotted]

******

(Format for question paper-to be printed and distributed to each examinee)

Class XI Internal Promotion Examination,_____(year)		
Name of the school: _____		
Subject: CHEMISTRY (Practical)		
Class XI	**Full Marks: 30**	**Time: 3 hours**

The figures in the margin indicate full marks for the questions

1. Prepare any ***one*** of the following samples allotted to you: 6

   (i) Potash Alum

   (ii) Copper Sulphate

   (iii)Benzoic Acid

   Write the procedures of preparation and submit the pure sample.

2. Determine the strength of a given solution of Hydrochloric Acid by titrating it against standard solution of 0.1(N) Na_2CO_3. 8

3. Make a complete systematic analysis of the given salt containing one cation and one anion only and record your findings systematically. 8

4. Investigatory Project 4

5. Sessional Work 2

6. Viva voce 2

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Class XI

BIOLOGY (Practical)

Marks: 30 Time: 3 Hours

Instructions to the Examiner

Biology Assessment Scheme		Marks
One Major Experiment Part A (Experiment No- 1,3,7&8)		5
One Minor Experiment Part A (Experiment No- 6,9,10,11,12&13)		4
Slide Preparation Part A (Experiment No- 2,4,5)		5
Spotting Part B		2x4=8
Practical Record + Viva Voce	(Credit to the student's work over the academic session may be given)	2+2=4
Project Record + Viva Voce		2+2=4
Total		**30 Marks**

I. Instructions:

i. All the experimental setups and specimens prescribed in the syllabus should be kept ready prior to commencement of the examination.

ii. Adjacent students should be given alternate experiments.

iii. Laboratory notebooks and project reports should be collected from the candidates before the examination begins.

iv. An additional sheet of answer script should be supplied to each student for spotting (Question No. 4) and collected back from the students after the completion of the process of identification (spotting) and writing comments by the students.

Note:

(i) Three minutes should be allotted for each spot.

(ii) No marks to be given if identification is wrong.

(iii) Items for spotting are to be changed between different shifts of the examination.

(iv) Refer to the latest syllabus for the list of Experiments.

II. Instructions for questions:

1. **Specimen 'A'** should be any flower prescribed in the syllabus. 5

Distribution of Marks:	
Dissection and display	*1*
Description	*2*
Diagram	*1½*
Identification	*½*
Total	***5***

Or

For **Experiment 'B'** any one from the following experiments may be allotted to the students by lots.

(a) Study of Osmosis by Potato Osmometer. 5
(b) Test for presence of sugars/proteins/fats in plant/animal materials. 5
(c) Separation of plant pigments through Paper Chromatography. 5

Distribution of Marks:	
Principle	*1*
Procedure	*1*
Observation	*1*
Result	*1*
Discussion	*1*
Total	***5***

2. **Experiment 'C'** may be selected from any one of the following 4

(a) Comparative study of the rates of transpiration in the upper and lower surface of the leaves.
(b) Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.
(c) Test for presence of urea/ sugar/ albumin/ bile salts in urine.

Distribution of Marks:	
Experimental set up	*1*
Principle	*1*
Results	*1*
Discussion	*1*
Total	***4***

3. **Experiment 'D'** should be to prepare temporary slide of monocot stem/root or dicot stem/root. **5**

Distribution of Marks:	
Slide Preparation	*1*
Diagram	*1½*

Description	*2*
Identification	*½*
Total	***5***

Or

Experiment 'E' should be selected from one of the following: 5

(a) Study of plasmolysis in epidermal peels (e.g. *Rhoeo*/lily leaves or fleshy scale leaves of onion bulb).
(b) Study of distribution of stomata on the upper and lower surfaces of leaves.

Distribution of Marks:	
Slide Preparation	*1*
Description	*2*
Results	*1*
Discussion	*1*
Total	***5***

4. Spotting (**4 Nos**) 2x4=8

Select ***one*** for each spotting, from the list given against each spot.

Spot F: Bacteria,*Oscillatoria*,*Spirogyra*, *Rhizopus*, mushroom, yeast, liverwort, moss, fern, lichen or pine.
Spot G:*Amoeba*, Hydra, liver fluke, *Ascaris*, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon or rabbit.
Spot H: Any stage of mitosis or inflorescence (racemose/cymose)
Spot I: Bones and joints of human body with the help of virtual images/models (humerus, radio-ulna, femur, tibia, ball and Socket joint, vertebral column).

Distribution of Marks:	
Identification	*1*
Comments	*1*
Total	***2x4= 8***

5. Practical record and viva voce 2+2 =4

Assessment of Practical Records must be done based on regularity and content. Questions for viva are to be asked from practical syllabus only.

6.Project report and viva voce 2+2=4

Project report must be accessed on originality, result and discussion. Questions for viva must be related to the project work undertaken by the student.

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(Format for question paper-to be printed and distributed to each examinee)

Class XI Internal Promotion Examination,_____(year)		
Name of the school: _____		
Subject: Biology (Practical)		
Class XI	**Full Marks: 30**	**Time: 3 hours**

Figures in the margin indicate full marks

1. Dissect and display the floral parts of the flower allotted to you (**Specimen 'A'**). Write the description. Draw labelled diagrams and identify. 1+2+1½+½ =5

   Or

   Perform the **Experiment 'B'**allotted to you. Write the principle, observation and discuss the result. 1+1+1+1+1=5

2. Perform the physiological **Experiment 'C'**allotted to you. Write the principle, discuss the results. 1+1+1+1=4

3. Perform the anatomical **Experiment 'D'** (Slide preparation). Draw labelled diagrams, describe and identify. 1+1½+2+½=5

   Or

   Study of Physiological **Experiment 'E'** allotted to you (Slide preparation). Describe and discuss the results. 1+2+1+1=5

4. Identify and comment on **spots F, G, H and I.** 2 x 4=8

5. Practical record and viva voce. 2+2=4

6. Project report and viva voce. 2+2=4

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Class XI

Subject: Physics (Practical)

Full Marks: 30 Time: 3 Hours

Instructions to Examiners

I. EVALUATION SCHEME

Topic	Marks
Two experiments one from each section	7+7
One activity from any section	3
Practical record (experiment and activities)	5
Investigatory Project	3
Viva on experiments, activities and project	5
Total	**30**

II. Procedural Instructions:

1. The internal examiners should check and ascertain that all the instruments required for the conduct of experiments and activities are in proper working condition.
2. Experiments of Section A are to be assigned Experiment Nos with prefix AE for example AE1, AE2, AE3……. and so on and like-wise Activities of Section A are to be numbered as AA1, AA2, AA3….. and so on. Experiments of Section B are to be assigned Experiment Nos with prefix BE for example BE1, BE2, BE3……..and so on and like-wise Activities of Section B are to be numbered as BA1, BA2, BA3….. and so on.
3. Print and keep the aims of experiments and activities (with assigned numbers) ready.
4. Refer to the latest syllabus of CBSE for list of experiments and activities under Section-A and Section-B.
5. Each examinee has to perform Two experiments- one each from Section-A and Section-B and one activity from either Section-A or Section-B in 3 hours.

6. The aims of experiments/activities (with assigned numbers) are to be pasted on the cards or put inside the envelopes. The number of such cards/envelopes should not exceed the number of candidates by more than three per batch.
7. The cards (kept upside down) or envelopes for experiments as well as activities are to be kept section wise on a table.
8. Examinees are to be called in order of Roll No. for selecting experiment and activity.
9. (a) For selecting the experiment, each examinee will draw four cards/envelopes (Two from Section-A and Two from Section-B) at a time and choose one from each section.
   (b) For selecting the activity, each examinee will draw two cards/envelops and choose one activity, either from Section A or Section B.
10. After selecting and before starting to do the experiments, students must be made to write the theory and working principles first. Students must be allowed to perform the experiments and activity only when the theory/principles or diagrams, etc., are seen and signed by one of the examiners.
11. Examiners will assess the procedures undertaken by the examinees while performing the experiment and activity and by asking oral questions on the basic facts relating to the experiment and the activity (spot verification).

III. Instruction for Questions

1. Experiment 'A' should be one experiment from Section A. 7
2. Experiment 'B' should be one experiment from Section B. 7
3. Activity 'C' should be any activity either from Section A or Section B. 3

Distribution of marks:

Theory/principle:	1
Completion of the activity:	1
Results & discussion	1

4. Practical record. 5

   Practical Record must contain at least 8 Experiments [with 4 from each section] and record of at least 6 Activities [with 3 each from section A and section B]
5. Investigatory project. 3
6. Viva voce 5

   (For viva, questions may be asked from experiments, activity and investigatory project under taken by the student)

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(Format for question paper-to be printed and distributed to each student)

Class XI Internal Promotion Examination,_____(year)		
Name of the school: _____		
Subject: Physics (Practical)		
Class XI	**Full Marks: 30**	**Time: 3 hours**

Instructions:

i. *Copy the experiment number and activity number along with the section (Section A or B) to which they belong and the aims of the experiment and activity on the answer script.*

ii. *Write the theory and working formula of the experiment. All ray diagrams/circuit diagrams are to be drawn with pencil. You will be allowed to perform the experiment and activity only when the theory, diagrams, etc., are seen and signed by one of the examiners.*

iii. *Procedure of the experiment/activity are not required to be written down on the answer script.*

iv. *You are required to record the readings with pen/ball point pen in tabular form and to get at least one reading verified by the examiner. All calculations should be done on the answer script.*

1. Perform the experiment 'A' from Section A allotted to you (write the Experiment No). Write the theory and working formula of the experiment. Discuss the results. 7

2. Perform the experiment 'B' from Section B allotted to you (write the Experiment No). Write the theory and working formula of the experiment. Discuss the results. 7

Distribution of marks for Question Nos 1 and 2	
Theory	**2**
Procedure	**2**
Tabulation Calculation, Diagrams, graph etc	**1½**
Sources of error and precautions	**1**
Result	**½**
Total	**7**

3. Perform the activity 'C' allotted to you. Write the theory/principle, and discuss your results. 3

Distribution of marks:

Theory/principle:	1
Completion of the activity	1
Results and discussion	1

4. Practical Record 5

5. Investigatory project. 3

6. Viva voce (on experiments, activity and project) 5

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Class XI
COMPUTER SCIENCE **(Practical)**
(Science/Arts/Commerce)

Full Marks: 30 Time: 3 hours

Instructions to Examiners

Computer Science Practical Assessment scheme			
S.No	Unit Name		Marks
1	Lab Test	Group A	8
		Group B	4
2	Laboratory record		7
3	Project Work		8
4	Viva		3
5	**Total marks**		**30**

1. Ensure that:
   i. Python interpreter 2.6 or above and MySQL 5.0 or above are installed on all computers that will be used for practical examination.
   ii. None of the computers in the lab is connected with Internet.
   iii. Students do not carry mobile phone/tablets/memory card/pendrives or any other electronic gadget in the laboratory.
   iv. The ratio of computer to student should be 1:1
   v. All previously written programs are to be removed from the computers and the students should not have access to previously written soft copies as well as hard copies of the programs.
2. Each shift can have a maximum of 30 students (depending on the number of computers available) with different sets of question paper.
3. Different sets of Question papers, differing in data sets(named as SET 1, SET 2, SET 3…. and so on) shall be set and printed at least 3 days ahead of the examination. The Question papers are to be packed, set-wise, sealed and kept securely in the custody of the school Principal. Only one set of question paper is to be taken out per shift of the examination. The principal shall randomly pick any one set of question paper for each shift of practical examination. Total number of question paper sets to be prepared shall be as per the number of students/number of shifts of the practical examination.
4. Each set of question paper shall consist of two parts, **Group A** and **Group B**. Group A contains 2 questions of 8 marks each, and Group B contains 2 questions of 4 marks each. One question from each Group is to be answered by the students.
5. Due weightage should be given for proper documentation and completion as per requirement of the Question, which should be conveyed to the students at the start of the examination.
6. Questions for viva-voce shall be based on either project work or lab tests.
7. Laboratory Record must have at-least 20 (Twenty) Python programs (which includes programs using user define functions, Data files programs and stack implementation using python list with proper exceptional handling codes).

8. On the day of practical examination, students must submit Laboratory Report file along with the Project Report file before the start of the examination.

9. Examiner has to evaluate the lab test programs as per the following criteria:

   - Logic of the program - 60%
   - Documentation/indentation - 20%
   - Output/presentation - 20%

10. All schools shall maintain record like dates of the examination, date-wise number of students in each shift and the SET of question paper used for the shift.

* * * *

(Format for question paper-to be printed and distributed to each examinee)

Class XI Internal Promotion Examination,_____(year)		
Name of the school:		
Subject: COMPUTER SCIENCE (Practical)		**SET _____**
Class XI	**Full Marks: 30**	**Time: 3 hours**

The figures in the margin indicate full marks for the questions

Group-A

1. Write a Python program to _____. 8

Or

2. Write a Python program to _____. 8

Group- B

3. Write a Python program to _____. 4

Or

4. Write a Python program to _____. 4

5. Project work report. 8

6. Practical Record File. 7

7. Viva voce. 3

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Class XI
INFORMATICS PRACTICES **(Practical)**
(Science/Arts/Commerce)

Full Marks: 30 Time: 3 hours

Instructions to Examiners

11. Ensure that:
    vi. Python interpreter 2.6 or above and MySQL 5.0 or above are installed on all computers that will be used for practical examination.
    vii. None of the computer in the lab is connected with Internet.
    viii. Students do not carry mobile phone/tablets/memory card/pendrives or any other electronic gadget in the laboratory.
    ix. The ratio of computer to student should be 1:1
    x. All previously written programs are to be removed from the computers and the students should not have access to previously written soft copies as well as hard copies of the programs.
12. Each shift can have a maximum of 30 students (depending on the number of computers available) with different sets of question paper.
13. Different sets of Question papers, differing in data sets(named as SET I, SET II, SET III…. and so on) shall be set and printed at least 3 days ahead of the examination. The Question papers are to be packed, set-wise, sealed and kept securely in the custody of the school Principal. Only one set of question paper is to be taken out per shift of the examination. The principal shall randomly pick any one set of question paper for each shift of practical examination. Total number of question paper sets to be prepared shall be as per the number of students appearing the practical examination.

14. Each set of question paper should consist of two parts, **Group A** and **Group B**.
    Group A contains 2 questions, one of 4 marks and the other of 7 marks, each (with internal choices). Group B contains1 question of 7 marks (with choice/options).Two questions from Group A and one question from Group B is to be answered by the students.
15. Due weightage should be given for proper documentation and completion as per requirement of the Question, which should be conveyed to the students at the start of the examination.

16. Questions for viva-voce shall be based on either Project work or lab tests

17. Laboratory Record must have at-least :

    i. 14 (Fourteen) Python programs (which includes programs using user define functions, Data files programs and stack implementation using python list with proper exceptional handling codes).
    ii. 14 (Fourteen) sets of SQL query using one or two tables.

18. On the day of practical examination students must submit Laboratory Report file along with Project report file before the start of examination.

19. Examiner has to evaluate the lab test programs as per the following criteria:

- Logic of the program - 60%
- Documentation/indentation - 20%
- Output/presentation - 20%

20. Award of marks for the Project assessment/Laboratory Report assessment/Viva Voce/lab test should be given as per the **marking scheme** given below.

Informatics Practices Practical Assessment Scheme.			
S.No	Unit Name		Marks
1	Lab Test Group A	Simple Python program	4
		Python Program with list/dictionary	7
2	Lab Test Group B (MySQL)		7
3	Laboratory record		7
4	Viva		5
5	**Total Marks**		**30**

21. All schools shall maintain record like dates of the examination, date-wise number of students in each shift and the SET of question paper used for the shift.

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(Format for question paper-to be printed and distributed to each examinee)

Class XI Internal Promotion Examination,_____(year)		
Name of the school: _____		
Subject: Informatics Practices (Practical)		**SET _____**
Class XI	**Full Marks: 30**	**Time: 3 hours**

The figures in the margin indicate full marks for the questions

Group -A
(PYTHON PROGRAMMING :: 11 marks)

8. Write a Python program to _____. 4

Or

Write a Python program to _____. 4

9. Write a Python program to_____. 7

Or

Write a Python program to _____. 7

Group – B

(SQL COMMANDS ::7 Marks)

10. Create a table _____. 7

Or

Create a table _____. 7

11. Laboratory Records. 7

12. Viva voce. 5

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Class XI

ANTHROPOLOGY(Practical)

Full Marks: 30 Time: 3 hours

Instruction to Examiners

1. Refer to the latest syllabus for the list of experiments/activities.

2. **Practical Assessment Scheme:**

Activity	Marks
Somatometry (2 measurements)	7x2=14
Somatoscopic observation (give any 6 characters)	1x6=6
Laboratory record	5
Viva voce	5
Total	**30**

3. For somatometry, any two measurements should be given to each student. The measurements must be assigned by drawing of lots.

4. Students should be asked to observe on any 6 somatoscopic characters and observation should be done in front of the examiner. Marks should be allotted accordingly.

5. The examiner shall assign subjects to each student for somatometry and somatoscopic observation.

6. Examiner should observe the candidates while taking the measurements. Marks should be allotted on the basis of proper selection of the instruments and the procedure followed by the candidates.

7. Laboratory notebook should be checked and assessed by the examiner on the basis of neatness, regularity and the correct procedures followed by the student.

8. For viva voce, question should be asked on the basis of practical syllabus only.

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(Format for Question Paper- to be printed and supplied to all examinees)

Class XI Internal Promotion Examination,_____(year)		
Name of the school: _____		
Subject: Anthropology (Practical)		
Class XI	**Full Marks: 30**	**Time: 3 hours**

The figures in the margin indicate full marks for the questions

1. Take *2 (two)* measurements allotted to you on the subject assigned to you and record the readings. 7x2=14

Mark Distribution:

Measurement and mentioning the landmarks	-	4
Proper Selection of Instruments	-	1
Reading	-	2
Total	-	**7 x 2= 14**

2. Record the 6 somatoscopic observations on the subject assigned to you. 1 x 6 = 6

3. Laboratory notebook. 5

4. Viva voce. 5

***

Class XI

GEOGRAPHY (Practical)

Full Marks: 30 Time: 3 hours

Instruction to Examiners

1. Assessment Scheme:

Assessment scheme		**Marks**
Fundamental of Maps		6+5= 11
Topographic and Weather Maps Remote sensing		6+5 = 11
Practical record book	Practical record book and viva voce to be based on Practical syllabus only	5
Viva voce		3
Total		**30**

1. Different sets of Question Papers, differing in data sets, (named as SET I, SET II, SET III….. and so on) shall be set and printed at least 2 days ahead of the examination. Question papers are to be packed, set-wise, sealed and kept securely in the custody of the school Principal. Different sets of question papers will vary in the data sets given for each question. The principal shall randomly pick ***any two*** sets of question papers for each shift of the practical examination. Total number of question paper sets to be prepared shall be as per the number of students appearing/number of shifts of practical examination. Adjacent students must be given questions from alternate sets.
2. Topographical maps, weather maps are to be kept ready for use during the examination.

Instruction for the Questions:

Each set of question paper shall have two sections. Section-A shall have two questions. Question number 1 shall have three questions of 6 marks each, out of which students will have to answer just one question. Question number 2 will be of 5 marks.

Section -B shall have two questions. Question No. 3 shall have two questions of 5 marks each, out of which students will have to answer just one question. Question No. 4 shall have 8 questions of 1 mark each out of which students are required to answer any 5 questions.

SECTION-A

1. (a)To construct a Plain Scale with the given R.F and measure the given distance.

Distribution of Marks

Calculation	--	*2*
Drawing	--	*2*
Marking the distance	--	*2*
Total	--	*6*

Sample Question: Construct a Plain scale to read kilometres when the given R. F. is **1: 2,00,000** and measure the distance of **5.2 kilometers.** (Appropriately change the underlined values to generate variant questions in different sets of question papers).

OR

(b)To construct the graticule for the given map projection.

Distribution of Marks		
Calculation	--	*2*
Drawing	--	*2*
Properties/Uses/limitations	--	*2*
Total	--	*6*

Sample question: Construct a conical projection with one standard parallel for an area bounded by **10° N to 70° N** latitude and **10° E to 130° E** longitudes when the scale is **1:250,000,000** and latitudinal and longitudinal **interval is 15°**. Write the **properties and uses** of conical projections.(appropriately change the underlined values/words to generate variant questions in different question sets)

Or

(c) To draw a Mercator's projection.

Marks distribution:		
Calculation:	--	*2*
Drawing:	--	*2*
Properties/uses/limitations:	--	*2*
Total	--	*6*

Sample Question: Draw a Mercator's projection for the world map on the scale of **1:250,000,000 at 20° interval**. Write its properties and limitations.(Change the underlined words/values to generate variant questions in different sets).

Marks distribution:		
Calculation:	--	1
Drawing:	--	2
Properties/uses/limitations:	--	1+1 =2
Total	--	**5**

2. Determine the local time of **Singapore**, located at **104° East** longitude when the time at Greenwich (0°) is **12:00 noon**. (Change the underlined words/values to generate variant questions).

Marks distribution:

Calculation:	--	*3*
Time:	--	*2*
Total:	--	*5*

SECTION-B

3. (a) To draw contours and their profiles (Two landforms)

Distribution of Marks

Contours	--	*1½x2=3*
Profiles	--	*1½x2=3*
Total	--	*6*

Students should be asked to draw contours for 2 **landforms** (landforms: Slopes, hills, valleys, waterfalls, cliffs).

Sample question: Draw contours and their profiles for (i)**V-shaped valley** and (ii) **Conical Hill**(Change the underlined landforms to generate variant questions in different sets).

Or

(b) Interpretation of a topographical map. Headings may be combination of **any two** from the following: relief, natural vegetation, settlements, drainage, etc.

Distribution of Marks

Interpretation	--	*2x2=4*
Sketch map	--	*2*
Total	--	*6*

Sample Question: Interpret the topographical map under the headings:**(i) Settlements** and **(ii) Drainage**. Draw a sketch map to illustrate your answer.

(Change the underlined headings to generate variant questions in different sets)

Or

(c)Interpretation of a Weather map. Headings may be combination of **any two** from the following: pressure, sky condition, cloud cover, rainfall distribution, wind, etc

Distribution of Marks

Interpretation	--	*2x2=4*
Sketch map	--	*2*
Total	--	*6*

Sample Question: Interpret the topographical map under the headings: **(i) Pressure** and **(ii) Rainfall**. Draw a sketch map to illustrate your answer.(Change the underlined headings to generate variant questions in different sets)

4. Question for which written answers are to be given. Questions are to be based on Satellite images and Remote sensing. 1x5=5

5. Practical Record Book 3

Distribution of marks:

Neatness	--	*1*
Completion of work	--	*1*
Signature of teacher	--	*1*

6. Viva voce on Practical Notebook 3

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Question paper format (to be printed and distributed to each student)

Class XI Internal Promotion Examination,_____(year)		
Name of the school: _____		
Subject: Geography (Practical)		**Question SET: _____**
Class XI	**Full Marks: 30**	**Time: 3 hours**

Figures in the margin indicate full marks for a question.

SECTION-A

1. (a) Construct a Plain scale to read kilometers when the given R. F. is _____ and measure the distance of _____ **kilometers.** 6

Or

(b) Construct a conical projection with one standard parallel for an area bounded by _____ latitude and _____longitudes when the scale is **1:**_____ and latitudinal and longitudinal interval is_____°. Write the _____of conical projections. 6

Or

(c) Draw a Mercator's projection for the world map on the scale of **1:**_____at ____° interval. Write the _____ of Mercator's projection. 6

2. Determine the local time of _____, located at _____ longitude when the time at Greenwich (0°) is _____. 5

SECTION-B

3. (a) Draw contours and their profiles for (i)_____ and (ii) _____. 3x2=6

Or

(b) Interpret the topographical map under the headings: **(i)** _____ and **(ii)**_____. Draw a sketch map to illustrate your answer. 2x3=6

Or

(c) Interpret the weather map under the headings: **(i)** _____and **(ii)** _____. Draw a sketch map to illustrate your answer. 2x3=6

4. . Give written answers to the Following questions (***any 5***). 1x5=5

(i).
(ii)
(iii)
(iv)
(v)
(vi)
(vii)
(viii)

5. Practical Record Book 5

6. Viva voce 3

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Class XI

HOME SCIENCE (Practical)

Time: 3 Hours Marks: 30

Instructions to the Examiner

Practical Assessment Scheme	Marks
Observe developmental norms: (Physical, Motor, Language and social emotional) birth to three years. Or List and discuss 4-5 areas of agreement and disagreement with a) Mother b) Father c) Siblings/ Friends d) Teacher.	5
Preparation of healthy snacks for an adolescent.	7
Plan a budget for a given situation/purpose.	3
Prepare a time plan for yourself.	3
Relationship of fibre properties to their usage: (a) Thermal property and flammability (b) Moisture absorbency and comfort Or Prepare one care label of any garment.	5
Practical record file	5
Viva voce	2
Total	**30**

1. (a) Each student should be given **1 (one)** developmental norm for certain age/stage (from birth upto 3 years). Students will list down the milestones of the given developmental norm for that stage and discuss. At least 3 developmental norms must be given per shift of the examination and change some developmental norms in different shifts of the examination.

   Sample question: List and discuss the milestone of **language development** in **12 months old baby.** (appropriately change the unlined developmental norm and underlined stage/age to generate variant questions)

   Or

   (b) Each student must be given one relation (mother/father/siblings/friends/ teacher) for which they will list down 4-5 areas of agreement and disagreement on the given issue. Different students should be allotted different relations and different issues.

   Sample question: List down 5 areas of agreement and disagreement with your **mother** on the issue of **eating food from the college canteen instead of carrying home-cooked food.**(appropriately change the underlined words/situations to generate variant questions)

2. Students should be provided with ingredients and necessary equipments for preparing a snack. Students should be given one food item from the following (by lottery) for preparing a snack:*(a)* Pulses *(b)* Cereals *(c)* Egg

3. Students should be made to prepare a budget for a given situation/purpose with a specified amount of money. 2-3 variants in this question may be included.
Sample question: **Plan a monthly budget of Rs. 3000 for a college student.**(appropriately change the unlined values/words to generate variant questions)

4. Sample question for time plan: **Prepare a time plan for the days of your exam.** (change the underlined words to create variant questions)

5. Sample question for preparation of care label: **Prepare one care label for a silk garment.**(appropriately change the underlined fabric type to create variant questions)

6. Practical Journal should be assessed on neatness, regularity and proper procedures followed by the students.

7. Questions for viva should be asked from the practical syllabus only.

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(Format for question paper (to be printed and distributed to each examinee)

Class XI Internal Promotion Examination,_____(year)		
Name of the school: _____		
Subject: Home Science (Practical)		
Class XI	**Full Marks: 30**	**Time: 3 hours**

Figures on the margin indicate full marks

1. (a) List and discuss the milestones of _____development in _____stage of development. 5

Or

(b). List and discuss 4 areas of agreement and disagreement with regards to the issue of _____ with your _____ 5

2. Prepare a healthy snack for an adolescent. 7
3. Plan a budget for Rs. _____for _____. 3
4. Prepare a time plan for yourself to be followed during _____. 3
5. Prepare one care label for a garment made of _____fabric. 5
6. Practical record. 5
7. Viva voce 2

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Class XI

GEOLOGY(Practical)

Full Marks: 30 ***Time: 3 hours***

Instruction to Examiners

Geology Practical Assessment Scheme	Marks
Crystallography	**3**
Identification of Minerals based on physical and chemical characteristics	**1½ x 4=6**
Identification based on optical characters	**4**
Identification of rocks	**1½ x 4 = 6**
Description of geological maps	**6**
Field work	**3**
Viva voce	**2**
Total	**30**

1. Supply crystal models to the students to draw clinographic sketch and identification. Supply ***any one*** of the following: hexagonal prism, tetragonal pyramid, octahedron, etc

Mark Distribution:

Clinographic sketch	:	2
Form(s)	:	1
Total	**:**	**3**

2. Supply ***any four*** of the following mineral hand specimens for identification:

Plagioclase, calcite, hornblende, garnet, muscovite, quartz, orthoclase, biotite, olivine, augite, gypsum, tourmaline, sillimanite, kyanite.

Mark Distribution:

Physical properties	:	1
Name (identification)	:	½
Total	**:**	**1½ x 4=6**

3. Supply ***any one*** of the following in thin section for identification:

Quartz, plagioclase, biotite, orthoclase, microcline, augite, hornblende, olivine

Mark Distribution:

Characters underplane polarised light	:	1½
Characters under Crossed-Nicols	:	1½
Name	:	½
Sketch	:	½
Total	**:**	**4**

4. Supply ***any four*** of the following rock hand specimens for identification:
   Diorite, pegmatite, dolerite, slate, marble, granite, gneiss, schist, rhyolite, gabbro, basalt, phyllite

Mark Distribution:

Mineral constituent	:	½
Texture/structure	:	½
Name	:	½
Total	**:**	**1½ x 4 =6**

5. Supply a geological map with tilted strata for drawing of cross-section along X-Y.

Mark Distribution:

Workings on map	:	1
Profile	:	1
Strata	:	1
Succession	:	1
Dip and Strike	:	1
Geological history	:	1
Total	:	**6**

6. Field work 3
7. Viva voce 2
8. Change the specimens/maps for different shift of the examination.

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Question paper format (to be printed and distributed to each student)

Class XI Internal Promotion Examination,_____(year)		
Name of the school: _____		
Subject: Geology (Practical)		
Class XI	**Full Marks: 30**	**Time: 3 hours**

Figures in the margin indicate full marks for the questions

1. Draw a clinographic sketch of the supplied crystal model. Name the form(s) developed. 2+1=3

2. Identify the supplied (4) mineral hand specimens on the basis of their physical properties. 1½ x4=6

3. Identify the mineral under the microscope on the basis of its optical characters. Draw a neat labeled-sketch. 3+1=4

4. Identify the supplied (4) rock hand specimens on the basis of their mineral constituents and texture/structure. 1½ x 4 =6

5. Draw a profile along X-Y of the supplied geological map. Find the dip and strike of the rocks. Write a note on the topography of the area. 2 + 2 +2=6

6. Field work. 3

7. Viva voce. 2

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