

HSLC

Section

ENGLISH

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
21418	17693	82.61%

Comparison of performance in English to last year:

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	88 - 97	88 - 97	193	235	1.12	1.33	+0.21
A1	81 - 87	81 - 87	868	996	5.06	5.63	+0.57
A2	72 - 80	73 - 80	2396	2370	13.97	13.40	-0.57
B1	64 - 71	66 - 72	2869	3101	16.72	17.53	+0.81
B2	55 - 63	58 - 65	3982	4262	23.21	24.09	+0.88
C1	48 - 54	51 - 57	4084	4398	23.81	24.86	+1.05
C2	40 - 47	40 - 50	2764	2331	16.11	13.17	-2.94

Analysis:

Number of Institutions = 10 (Government & Private)
Number of Questions = 5
Number of scripts = 100

- i. SA II question no. 11 – (4 marks)
- ii. SA III question no. 5 i or 5 ii or 5 iii – (5 marks)
- iii. SA III question no.13 – (5 marks)
- iv. LA I question no. 14 – (7 marks)
- v. LA II question no. 9 – (8 marks)

General remarks:

Question no. 11 (SA II – 4 marks)

11. Vision School, Shillong is in need of a Physical Education teacher. Draft an advertisement to be published in a local newspaper. Give details of the qualification required, salary offered, contact details etc.

Or

4

You are Vito, the cultural secretary of St. Andrew School, Zunheboto. Write a notice for the students of classes 9 and 10 regarding an ensuing singing competition. Give details of time, place and the prizes to be awarded.

Out of the 100 scripts, 10% of the students did not attempt the question, whereas 90% of the students attempted the question. Majority were unable to score good marks since they had failed to give the full answer. Out of the 100 students, more than 50% of the students secured between 2 marks to 3½ marks out of the allotted 4 marks.

Some common errors committed were:

Box missing (for notice writing)

Name and designation of the issuing authority had not been mentioned.

Box missing (for advertisement)

Heading was not given

Contact address not written

* It would help the students write and score better marks if they had more practice with the proper format of notice/advertisement writing.

Not Attempted	0	½	1	1½	2	2½	3	3½	4
11	-	1	2	8	40	16	19	2	1

Question no. 5i or 5ii or 5iii (SA III – 5 marks)

5. Answer either 5(i) or 5 (ii) or 5(iii) 5
- (i) Read the lines and answer the questions that follow:
- ‘Ironic that your homologues
Pollute our land and stock our smogs
Benzene – your hydroxyl daughters
Need locking up, they pollute our waters’
- (a) Why does the poet say that Benzene’s hydroxyl daughters need locking up? (2)
- (b) ‘The mountains of Mopongchuket
Shining like emerald and sparkling jade
The hills of the Ao that echo like gongs
And even today call out in songs
To follow the jaunty footprints
And the eternal loving glint
In the eyes of the amber-faced Etiben
And the ravine-hearted Jina, man among men!’
- (i) What songs echo in the Ao hills? (1)
- (ii) What do the colours emerald and jade symbolize? (2)
- (ii) Give the summary of the poem, ‘Music’. (5)
- (iii) According to Ogden Nash, what are the risks and injuries athletes and players have to face? (5)

98% of the students attempted this optional question. Though almost everyone attempted this question, they lost marks since they had answered two or more options. *For example, In some cases, question 5i was answered first and 5ii after that. Even though 5i had fetched 2 or 2½ marks for the student, the second answer would have fetched more marks but since 5i was written first it is corrected and the second answer given is marked as repeated- no marks is allotted for a repeated answer.* Many of the students were confused with this question; some had even answered all the three options. Out of the 100 scripts, more than 60% scored between 3 to 4 marks.

- * Students should be advised to have thorough understanding of the text
- * To read and understand the question before answering
- * Not to repeat answers and to answer only the question he/she is most comfortable with.

Not Attempted	0	½	1	1½	2	2½	3	3½	4	4½	5
-	2	5	7	2	10	8	27	12	24	2	1

Question no. 13 (SA III- 5 marks)

13. Based on the visual input given below, write on 'Mobile phones- advantages and disadvantages'

5



-has made life so much easier - saves time - help for the fast pace of modern society - problems to users- emits harmful radiation- causes cancer- stress etc- distracts studies-effects social life.

13% of the students did not attempt this question, whereas 87% attempted the question but could not give the full answer. In many cases, the heading to the passage was missing. Some lost marks since the proper order and sequence had not been followed. Out of the total scripts checked, more than 70% of the students secured 2 to 4 marks out of the allotted 5 marks.

- * More practice in the schools using different visuals along with inputs would benefit the students.

Not Attempted	0	½	1	1½	2	2½	3	3½	4	4½	5
10	3	0	5	9	25	15	31	2	0	0	0

Question no. 9 (LA II – 8 marks)

Read the passage given below and answer the questions:

A wise woman who was travelling in the mountains found a precious stone in a stream. The next day she met another traveller who was hungry, and the old woman opened her bag to share her food. The hungry traveller saw the precious stone in the old woman's bag, admired it and asked the old woman to give it to him. The old woman did so without hesitation. The traveller left, rejoicing in his good fortune. He knew the jewel would be worth enough to give him security for the rest of his life. But a few days later he came back, searching for the wise woman. When he found her, he returned the precious stone and said, "I have been thinking. I know how valuable this stone is, but I give it back to you in the hope that you can give me something much more precious. If you can, give me what you have within you that enabled you to give me the stone."

“Sometimes it is not the wealth you have but what is inside you that others need.”

(i) Questions:

- a. Where did the old woman find the stone? 1
- b. What according to the traveller is more precious than the stone? 1
- c. How did the traveller feel when the old woman gave him the stone? 1
- d. Why did the traveller give the stone back to the old woman? 2

(ii) Find words in the passage that has the same meaning as: 3x1=3

- a. river
- b. celebrate
- c. dear

Everyone attempted this question; some were able to score good marks here.

Some common errors committed were: many could write the direct answers which could be directly taken from the passage but some lost marks in questions where the students had to give answers based on their understanding of the passage. More than 60% secured between 4 to 7 marks.

* Students can write and score better marks if they had more practice with similar exercises.

Not Attempted	0	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8
-	-	0	5	0	9	5	10	9	19	9	11	6	11	0	5	0	1

Question no. 14 (LA I – 7 marks)

You are Alem and you wish to enroll yourself for a short computer course. Write a letter to the programme in-charge of Computech Institute, Dimapur enquiring about the course duration, timing, fees etc. 7

28% of the students did not attempt this question, whereas 72% attempted. Many of the students answered this question well however there were students, who could not secure good marks because of certain errors. Some common mistakes that were committed are given below:

- Proper format was not followed
- Address and date was missing
- Salutation was missing
- Subscription was missing

Out of the total 100 scripts checked, majority of the students who attempted the question were able to score between 3 to 5 marks out of the total 7 marks.

* The students can score more marks if they have more practice with the proper format of letter writing.

Not Attempted	0	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7
28	2	1	4	2	12	5	20	3	12	2	8	1	0	0	0

MATHEMATICS

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
21361	12147	56.86%

General observations in reference to the Question Paper

The general performance in Mathematics is fair. The students scored fairly well in SA-II, MCQ, LA and scored poorly in SA-I.

Comparison of performance in Mathematics to last year

Table 1

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	96 - 100	94 - 100	135	127	1.20	1.05	-0.15
A1	81 - 95	80 - 93	577	622	5.11	5.12	+0.01
A2	62 - 80	62 - 79	1430	1573	12.67	12.95	+0.28
B1	50 - 61	53 - 61	2568	2377	22.75	19.57	-3.18
B2	47 - 49	49 - 52	3428	2844	30.37	23.41	-6.96
C1	42 - 46	46 - 48	2900	3017	25.69	24.84	-0.85
C2	40 - 41	40 - 45	250	1587	2.21	13.06	+10.85

Questions:

- Q19. If two dice are rolled simultaneously, then the probability of getting the sum as a prime number is $\frac{5}{12}$ **2**
- Q21. Solve the system of equations $8x + 5y - 9 = 0$ and $3x + 2y = 4$ by cross-multiplication method. **3**
- Q22. Find the A.P. whose 9th term is 51 and 14th term is 81 **3**
- Q23. If $\cot \theta = \frac{3}{4}$, show that the value of $\sqrt{\frac{\sin \theta + \cos \theta}{\sin \theta - \cos \theta}} = \sqrt{7}$ **3**
- Q25. From the top of a 60 m high lighthouse, the angle of depression of two ships are 30° and 45° on the same side of the lighthouse. Find the distance between the two ships. [Use $\sqrt{3} = 1.73$] **3**
- Q26. Find the area of the quadrilateral whose vertices are $(-4, -2)$, $(-3, -5)$, $(3, -2)$ and $(2, 3)$ taken in order. **3**
- Q30. a. Solve $\frac{x}{x-1} + \frac{x-1}{x} = \frac{5}{2}$ by using quadratic formula. **5**

Or

- b. Solve the system of equations $3x + 2y - 11 = 0$ and $2x - 3y + 10 = 0$ graphically. Also shade the region bounded by these lines and the y-axis.

Q34. b. The number of English newspapers sold daily in a town are:

5

Name of newspaper	Number of papers sold
Eastern Mirror	350
The Times of India	150
The Morung Express	500
Nagaland Post	600
Nagaland Page	200

Draw a pie-chart to represent the data.

Observations on selected questions where students gave varied/wrong answers

Table 2

Q.No	Diffi- culty level	No. of students who attempted	No. of students who omitted	No. of students who scored the following mark											Mean score	
				0	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5		
19.	A	78	22	48	21	1	2	6								0.34
21.	E	87	13	21	6	13	6	5	3	33						1.63
22.	A	76	24	13	-	10	4	7	5	37						2.02
23.	A	81	19	17	2	1	3	2	4	52						2.18
25.	A	79	21	20	1	11	2	12	11	22						1.67
26.	A	59	41	35	3	8	1	4	-	8						0.73
30.	A	76	24	21	4	12	4	6	2	1	1	7	5	13		2.09
34.b	E	99	1	-	-	2	1	-	1	2	2	9	6	76		4.67

Note:

- This data is taken from 100 answer-scripts; with 50 answer-scripts each from both Govt. & private institutions (rural and urban).
- Difficulty level: A - Average, E - Easy
- The mean score is calculated from the number of students who attempted the question.

Common mistakes

Table 3

Q.No.	Common mistakes
19.	Total number of outcomes = $6 + 6 = 12$
21.	Most common mistake in writing the plus/minus signs in the formula
22.	a) Most common mistake in handling the minus sign. b) Not finding the sequence of the A.P.
23.	a) Taking $\cos \theta = 3$ and $\sin \theta = 4$ by equating the ratios. b) Not drawing the right angled triangle and not labelling the base and opposite sides. c) Not finding the value of the hypotenuse side using Pythagoras theorem.
25.	a) Not drawing the ray of angle of depressions in the diagram. b) Incorrect values of $\tan 45^\circ$ and $\tan 30^\circ$ c) Not using the value of $\sqrt{3}$ as specified in the question. d) Interchanging the values of angle of depressions of the two ships from the lighthouse.

26.	a) Incorrect formula. b) Wrongly putting the value of the vertices (variables) in the formula.
30(a).	a) Mistake in simplifying the given expression to quadratic equation. b) Incorrect formula.
30(b).	a) Mistake in writing the simultaneous system of linear equations, either in terms of x or y . For example: Writing $3x + 2y - 11 = 0$ as $y = \frac{3x - 11}{2}$, $3x-11$, etc b) Incorrectly shading the region bounded by the two given lines and the x -axis, instead of the y -axis. The concept of the two perpendicular axes in the coordinate axes seems to be not clear.
34(b).	a) Incorrect formula. b) Not labelling or shading the different sectors.

Suggestions/Remedial measures:

- From Table 1, it is observed that the number of students scoring B1, B2 and C1 have reduced significantly as compared to last year. Therefore, it is urgently required that special attention be given to the average students. Also, the high scorers, i.e. students scoring A+ have reduced.
- Questions least attempted or writing the full answers were SA-I, i.e. Q.No. 14-19.
- Some common mistakes committed by the examinees are shown in Table 2 & 3. Subject teachers are advised to be cautious while transferring these concepts to the students.
- To generate interest in the subject, situations should be created in the classrooms where students are given the opportunities to relate the concepts learnt to real-life situations.

SCIENCE

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
21376	13567	63.47%

General observations on performance of the students in reference to the question paper:

- There is a general improvement in the performance of the students comparing to last year's examination.
- The students find it difficult to connect the theoretical classroom concepts and the practical things they observe in everyday life.
- Most of the students find difficulty in answering the numerical problems.

Comparison of performance in Science to last year:

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	91 - 100	93 - 100	143	163	1.17	1.20	+0.03
A1	74 - 90	81 - 92	645	722	5.28	5.32	+0.04
A2	60 - 73	66 - 80	1553	1671	12.71	12.32	-0.39
B1	51 - 59	56 - 65	1965	2190	16.08	16.14	+0.06
B2	48 - 50	50 - 55	3477	3789	28.46	27.93	-0.53
C1	45 - 47	46 - 49	3083	3628	25.23	26.74	+1.51
C2	40 - 44	40 - 45	1352	1404	11.07	10.35	-0.72

Statistical analyses of 100 answer scripts:

50 scripts from 5 Government schools (rural & urban) and 50 scripts from 5 Private schools (rural & urban) were taken and analysis was carried out with 5 questions. The data of the analysis is as follows:

1. **Question No. 20.** Which type of mirror is used as a rear view mirror in automobiles? Give reason why?

Type of Question	Marks	Difficulty level
SA I	2	Easy

Performance level

No. of stds not attempted	No. of students getting marks					Mean score
	0	½	1	1 ½	2	
16	33	-	38	-	13	0.76

2. **Question No. 25.** What is logging? Mention any two adverse effects of logging.

Type of Question	Marks	Difficulty level
SA I	2	Easy

Performance level

No. of stds not attempted	No. of students getting marks					Mean score
	0	½	1	1 ½	2	
22	17	4	14	6	37	1.27

3. **Question No. 33.** Distinguish between presbyopia and astigmatism. How can these defects be corrected?

Type of Question	Marks	Difficulty level
SA II	3	Average

Performance level

No. of stds not attempted	No. of students getting marks							Mean score
	0	½	1	1 ½	2	2 ½	3	
44	16	3	10	12	5	-	10	1.24

4. **Question No. 38.** Suggest any six measures that can be taken up for protecting the environment.

Type of Question	Marks	Difficulty level
SA II	3	Easy

Performance level

No. of stds not attempted	No. of students getting marks							Mean score
	0	½	1	1 ½	2	2 ½	3	
16	12	8	15	8	15	4	22	1.63

5. **Question No. 39.** Explain the construction of a solar water heater with the help of a suitable labelled diagram.

Type of Question	Marks	Difficulty level
LA	4	Easy

Performance level

No. of stds not attempted	No. of students getting marks									Mean score
	0	½	1	1 ½	2	2 ½	3	3 ½	4	
41	15	5	10	2	9	6	6	-	6	1.53

A. General remarks:

1. In question no. 20, most of the students could not give the correct answer for the second part of the question and score the full mark though the question is easy and inquires something that is seen every day.
2. Most of the students were able to score the full mark in question no. 25.
3. In question no. 33, most of the students did not attempt the question though the question asks the basic key concept of human eye defects.
4. In question no. 38, the students gave varied answers and they were able to score at least some mark if not the full mark.
5. Most of the students could not answer question no. 39.

B. Errors committed:

1. Students could not answer the second part of question no. 20, implying that they are not able to make a connection between the theoretical learning in the classroom and the practical things they observe in everyday life.
2. In question no. 25, most of the students wrote the definition for water logging, whereas logging was asked, implying that the students do not read the question properly.
3. Most of the students gave the definition for myopia and hypermetropia instead of presbyopia and astigmatism, suggesting that there is selective study of the concepts.
4. In question no. 39, construction of solar water heater was asked, some students wrote the working, it maybe because the students are not very clear about which part of the concept to answer.

C. Remedial measures:

1. Students should read the question and understand what is asked and answer accordingly.
2. Teachers should give proper practice to students during internal examinations in schools, so that they are clear about value points, technical terms and keywords that are required in the answers.
3. Improve classroom teaching strategy. In teaching of science, teachers should utilize language of inquiry, constructivism and active learning. Practical classes/activities should be conducted alongside the concepts taught in theory classes.

SOCIAL SCIENCES

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
21397	14185	66.29%

1. **General Observation:** The Teachers as well as the students felt that the question paper this year is relatively better. The students have shown much improvement in answering the descriptive questions compared to the previous years.

2. Comparison of performance in Social Sciences to last year

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	90 - 98	88 - 98	147	145	1.04	1.02	-0.02
A1	79 - 89	74 - 87	806	767	5.71	5.41	-0.30
A2	68 - 78	62 - 73	1695	1809	12.02	12.75	+0.73
B1	59 - 67	55 - 61	2339	2495	16.58	17.59	+1.01
B2	50 - 58	52 - 54	3690	3376	26.16	23.80	-2.36
C1	47 - 49	48 - 51	3271	3670	23.19	25.87	+2.68
C2	40 - 46	40 - 47	2156	1923	15.29	13.56	-1.73

3. Methodology :

- (a) 5 Schools from Government and 5 schools from private were selected. (Rural and Urban) 50 scripts from each category.
- (b) 6 questions , 1 from each category i.e. MCQ, VSA, SA-I, SA-II, LA-I and LA-II was taken for the analysis.

(c) Analysis of the different questions :

Question No.1 Young Italy was founded by-

Type	Marks	Difficulty level
MCQ	1	Easy

Performance level :

Not attempted	0	½	1	Mean Score
-	-	-	100	1

Question No. 14 What are vertical divisions of power ?

Type	Marks	Difficulty level
VSA	1	Easy

Performance level :

Not attempted	0	½	1	Mean Score
49	32	1	18	0.36

Question No. 25 Write any two features of National Political Parties.

Type	Marks	Difficulty level
SA-I	2	Easy

Performance level :

Not attempted	0	½	1	1½	2	Mean Score
26	44	5	9	4	12	0.64

Question No. 28 Mention the three needs for conservation of energy resources.

Type	Marks	Difficulty level
SA-II	3	Average

Performance level :

Not attempted	0	½	1	1½	2	2½	3	Mean Score
13	31	7	25	4	8	2	10	0.98

Question No. 34

What is communalism? Mention any three thoughts involved with Communalism.

Or

What is caste system? Explain how politics can take various forms in caste system.

Type	Marks	Difficulty level
LA-I	4	Average

Performance level :

Not attempted	0	½	1	1½	2	2½	3	3½	4	Mean Score
17	27	6	39	2	7	-	1	-	1	0.79

Question No. 39

“Naga Bamboo works are popular all over the world”. Substantiate your answer with five points. **Or** Write a note on any five food crops of Nagaland.

Type	Marks	Difficulty level
LA-II	5	Difficult

Performance level :

Not attempted	0	½	1	1½	2	2½	3	3½	4	4½	5	Mean Score
24	12	7	12	3	10	8	7	2	9	1	5	1.82

General remarks & Errors Committed:

- Question No. 1 was a multiple choice question which was attempted by all correctly.
- Question No. 14 was a VSA question where only 18 students could answer correctly. Many of the students who attempted the question gave the answer for horizontal instead of vertical.
- Question No. 25 only 12 students gave the correct answer .
- Question No. 28. 50% of the students gave partially correct answers. Many got confused and gave answer of ‘how to conserve energy resources’ instead of the ‘need for conservation of energy resources’.
- Question No. 34. An internal choice question where many went for the second option. About 50% of the students could answer the first part of the question correctly but could not give the right answer for the second part since many got confused with *castes in politics* and *politics in caste*.
The question asked was politics in caste where many of the answers were caste in politics.
- Question No. 39, also an internal choice question from Nagaland Text, where most of the students attempted the first option but only few could give the correct answer. The answer shows that many of them are still not using the revised edition of the text.

Remedial measures :

1. Students to be more thorough with their text book.
2. Teachers should make the concept of each topic clear to the students.
3. All the schools to use the revised edition of the Nagaland Text.

ALTERNATIVE ENGLISH

1. General observations on performance in reference to the Question Paper:

Most students performed well in Alternative English paper, HSLC 2014 but statistics show that the scores were better in HSLC 2013. This may be generally for many reasons and one of the reasons may be for that the 4 marks questions were broken up, eg. 1+3=4, 2+2=4 in 2013.

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
16478	13253	80.43%

2. Comparison of performance in Alternative English to last year: Table 1

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	84 - 93	87 - 97	129	160	1.04	1.21	+0.71
A1	75 - 83	80 - 86	656	731	5.31	5.52	+0.21
A2	66 - 74	72 - 79	1660	1704	13.43	12.86	-0.57
B1	59 - 65	65 - 71	2066	2379	16.72	17.95	+1.23
B2	51 - 58	57 - 64	3176	3201	25.70	24.15	-1.55
C1	46 - 50	51 - 56	3398	3155	27.49	23.81	-3.68
C2	40 - 45	40 - 50	1275	1923	10.32	14.51	+4.19

Questions:

Q17.b. Complete the following sentence using the correct form of verbs given in bracket:

- They_____ the accident. (see) 1
- Q3. What did Father David do during his spare time? 2
- Q6. Why did the zoo keepers have to open the stable door with extreme caution? 2
- Q10. What does the poem 'Nightingales' tell you about man and his relationship with nature? 3
- Q11. How is virtue immortal according to George Herbert? 3
- Q21. Expand the idea contained in any one of the following in not less than 50 words: 5
- a) Great talkers are never great doers.
 - b) Better alone than in bad company.

3. Table 2

Q.No.	Type of Q	Marks allotted	Diffi-ulty level	Not attempt ed	No. of students securing marks											
					0	½	1	1½	2	2½	3	3½	4	4½	5	
17b.	VSA	1	E	1	23	-	76									

3.	SA I	2	D	24	32	13	15	7	9						
6.	SA I	2	A	31	22	10	19	10	8						
10.	SA II	3	A	17	19	8	13	9	13	17	4				
11.	SA II	3	E	14	8	10	14	11	27	9	7				
21.	LA I	5	D	10	6	5	9	7	16	6	20	8	7	4	2

General Remarks:

Some of the common mistakes that students made in the questions analyzed are as follows:

Q.17b: Many students could write the right answer to Q17b. However, there were also some who scored no marks for this question as the correct form of verb was not used.

Eg. They sawing.... / They will have see.... / They will see..... etc

Q.3: Father David was roaming in the jungle and feeding animals during his spare time.

Q.6: Dr. Barnard's father showed him a mouldy biscuit. (This is a right answer but is an incomplete answer where most examiners allotted only ½ mark at the most.)

Q.10 & 11: Many students could not score well here as the answers written did not answer the question that was asked. The scoring was comparatively lower in poetry section than prose section.

Q. 21: The context of the proverbs were misunderstood and in many cases there was no illustration in the answer.

Some general observations and suggestions for better scores in Alternative English paper, HSLC:

1. **Literature Section:** Many students are quite prepared with the literature section, especially in the Prose section, the students are able to score well. Some reasons why students do not score higher marks in this section could be because they do not take the time to read the question carefully or because they did not understand the question that is asked. It is specially so in the case of Poetry section questions where many students confuse the different poems and the points are scattered. For remedial measures, teachers can emphasise on the differences among the different poems in class. It may help the students to score better too, if the teachers discuss with the students on how to tackle literature questions rather than letting them memorise the answers. Here, the literature pieces become the focus and not the language structures. Thus, even where a student is unable to write perfect grammatically correct sentences if the points are covered than they are able to score full marks or vice-versa in literature section.
2. **Grammar Section:** Students either score 100% or 0% in Grammar section. However, many students lose marks in this paper because of the wrong answers in Grammar section. Even regularly used sentences are wrongly written. Another area where many students lose marks is spelling errors. Spelling mistakes sometimes changes the whole meaning of the sentence whereby, the answer becomes wrong. Eg. Heard is written as Heart/ Heared / Hurted etc., Spent is written as spented/ spended/ spend etc.
3. **Composition Section:** The scripts of students of some Centres/Districts have been seen that there is a confusion of Essay with Letter-Writing. Even though there is no Letter-Writing in the syllabus of class 10 Alternative English paper, the examinees have written the Essay in the form of a letter or as the topic of discussion in the letter. This shows that it

was not explained to the students or that they did not understand how an essay is to be written and in what way it is different from a letter.

Students also lose marks in composition section because of the lack of coherence in the ideas. Such mistakes can be avoided if better explanation of how to write an essay is taught in class. It is the composition section that gives scope to score very good marks in the subject.

TENYIDIE (MIL)

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
1740	1535	88.22%

Comparison of performance in Tenyidie to last year:

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	84 - 96	92 - 97	18	17	1.30	1.11	-0.19
A1	74 - 83	84 - 91	74	82	5.34	5.34	0
A2	66 - 73	76 - 83	198	203	14.28	13.22	-1.06
B1	60 - 65	69 - 75	223	259	16.08	16.87	+0.79
B2	53 - 59	61 - 68	354	384	25.52	25.02	-0.52
C1	48 - 52	53 - 60	385	372	27.76	24.23	-3.53
C2	40 - 47	40 - 52	135	218	9.73	14.20	+4.47

Questions:

- Q4. John puo nou kedilie di kinu kevor ki Safi-e puo keneipfü kedipuo puta ga? **2**
- Q5. Dunant sedekeshü mhatho-u la thie suomia kemevi kimhiecü puo ngulie ga? **2**
- Q9. Safipfüe teisei teiki kimhie di mi chüpie puo nuonuoko hou pelelieya ga? Mu puo kimhie di kinu vorya ga? **(2+1=3)**
- Q15. Ketsokebako dieca 40-60 mese nunu kelashülie:
 "A Kesuoü" geizo-u pie thedze kethu rhi nunu thushülie. **5**

Analysis:

The identified questions were analysed taking 100 sample answers from 5 (five) Government schools and 5 (five) private schools from rural and urban areas. The performance in Tenyidie saw a marked improvement from last year.

Q. No.	Type of Q	Marks	Diffi- culty level	No. of students not attempting	No. of students getting marks										
					0	½	1	1½	2	2½	3	3½	4	4½	5
4.	SA	2	Easy	6	13	13	23	20	25						
5.	SA	2	Easy	15	20	11	25	19	10						
9.	SA	3	Average	8	8	2	11	16	31	15	9				
15.	LA	5	Average	17	7	2	6	4	11	6	23	11	12	1	0

Errors committed:

- Most of the low scoring papers had no connection between the question being asked and the answer given. Examinees' failure to understand the question resulted in taking the answer to a completely different direction.
- Some answers were very lengthy for a 2 or 3 marks question, thereby wasting time.
- Incomplete answers, poor language structures were other reasons for low scoring marks.
- The inability of the examinees to deliver the whole answer gave the assumption that they were not thorough with the textbooks.

Remedial measures:

- Careful reading and understanding of questions.
- Thorough reading of textbooks.
- To answer questions as per the marks allotment.

MUSIC

1. The music question paper of 2014, was easy and satisfactory.

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
255	243	95.29%

2. The performance of the students in 2014 was better than the year 2013.

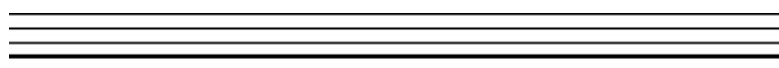
Comparison of performance in Music to last year

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	97 - 98	99 - 100	6	3	2.28	1.23	-1.05
A1	91 - 96	94 - 98	14	15	5.32	6.17	+0.85
A2	82 - 90	85 - 93	34	30	12.93	12.35	-0.58
B1	75 - 81	79 - 84	46	42	17.49	17.28	-0.21
B2	66 - 74	70 - 78	62	58	23.57	23.87	+0.30
C1	56 - 65	61 - 69	61	59	23.19	24.28	+1.09
C2	40 - 55	40 - 60	40	36	15.21	14.81	-0.40

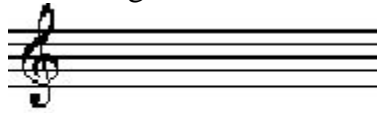
3. 50 scripts were taken out from different schools for analysis.

Questions:

- Q4. Name four Naga musical instruments. 2
- Q17. Write the major scale of A with key signature on the treble clef. 2



Q19. Build augmented triads on the given notes. 2



G Aug.



A Aug.

Q20. Identify each of the number marked melodic intervals. 2



Q22. Define posture. What is the importance of good posture? 1+1=2

Performance level:

Q.No.	Difficulty level	N.A.	0	½	1	1½	2	Mean score
4.	E	0	0	0	1	1	48	1.97
17.	A	1	14	2	12	1	20	1.11
19.	D	1	7	10	20	6	6	0.94
20.	E	14	17	-	5	1	13	0.90
22.	A	0	3	4	12	15	16	1.37

- i) Q.4.
50 students attempted, 48 students scored full marks, 2 students did not write the full answer.
- ii) Q. 17
49 students attempted. 29 students did not write the full answer.
- iii) Q. 19
49 students attempted, 43 students could not write the full answer
- iv) Q. 20
38 students attempted out of which 17 students got zero and 6 students did not write the full answer.
- v) Q. 22
50 students attempted, 34 students did not write the full answer.

Errors committed:

- i) Many students failed to understand the question asked.
- ii) Students could not write the key signature on the right place and also were confused with the scales.
- iii) Majority of the students are not clear with the concept of melodic intervals.

Remedial measures:

- i) Students should understand the questions asked and write the answers accordingly.
- ii) Teachers may encourage the students to read more textbook.
- iii) Students to answer question as per the marks allotment.
- iv) More exercises on scales, key signatures, augmented triads, diminished triads and melodic intervals will be helpful to the students.

BOOK-KEEPING & ACCOUNTANCY

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
2026	1405	69.35%

For the purpose of question paper analysis, 4 government schools and 4 private schools were selected. In both cases 2 schools were taken from rural and 2 schools from urban areas. In total 112 scripts were taken out of which 55 and 57 scripts were taken out from government and private schools respectively for the study.

- With regard to the question papers and type of questions, the examiners were satisfied and felt that the question paper was of moderate level.
- On comparison with the performance of the last year examination, in Book-Keeping & Accountancy, the pass percentage has increased by 3%. Moreover, the no. of candidates in 10th rank for the subject has increased by 74.07% and the number of candidates above 80% has shoot up over last year by 71.24%.

Comparison of performance in Book Keeping & Accountancy to last year

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	96 - 100	98 - 100	22	21	1.62	1.49	-0.13
A1	88 - 95	93 - 97	75	75	5.53	5.34	-0.19
A2	77 - 87	83 - 92	166	173	12.24	12.31	+0.07
B1	67 - 76	72 - 82	239	237	17.63	16.87	-0.76
B2	58 - 66	61 - 71	318	338	23.45	24.06	+0.61
C1	49 - 57	50 - 60	336	362	24.78	25.77	+0.99
C2	40 - 48	40 - 49	200	199	14.75	14.16	-0.59

- Performance in different types of questions in Book-Keeping & Accountancy:

(i)

Q. No	Type of Questions	Marks	Difficulty level
11.	SA – I	2	Easy
14.	SA – I	2	Average
15.	SA – I	2	Difficult
16.	SA – II	3	Average
18.	SA – II	3	Average
20.	SA – II	3	Difficult
21.	LA	5	Average
23.	LA	5	Easy
25.	LA	5	Average

Questions:

- Q11. Name two direct expenses and two indirect expenses. 2
 Q14. Give the meaning of promissory note. 2
 Q15. What is discounting of the bill? 2
 Q16. Explain any three purposes of preparing trading account. 3
 Q18. List any three transactions which will form contra entries. 3
 Q20. Explain any three advantages of written down value method. 3
 Q21. a. Mention and explain any five points to be considered while preparing final accounts.

Or **5**

- b. Prepare trading, profit & loss account and balance sheet as on 31st December, 2012 from the trial balance of M/s David & Bros.

- Q23. a. Explain the need and importance of bank reconciliation statement.

Or **5**

- b. The cash book shows a balance of ₹ 12,500. On comparing the cash book with the pass book the following discrepancies were noted:

Cheque issued but not yet presented for payment	600
ii) Cheques paid into bank but not yet collected	900
iii) Bank charges	30
iv) Interest on investment collected by bank	200

Prepare Bank Reconciliation Statement as on 31st December 2012.

- Q25. a. Explain any five causes for depreciation.

Or **5**

- b. A machinery was purchased from abroad for ₹ 10,000. Shipping and forwarding charges amounted to ₹ 2,000, import duty ₹ 7,000 and expenses on installation amounted to ₹ 1,000. Show Machinery account for the first three years @ 10% on Diminishing Balance Method.

(ii)

Q.No	No. of stds Not attempting	No. of students getting marks											Mean score	
		0	½	1	1 ½	2	2 ½	3	3 ½	4	4 ½	5		Total
11.	11	13	5	28	11	44							112	1.34
14.	14	28	9	21	16	24							112	0.99
15.	32	48	5	11	3	13							112	0.55
16.	16	17	9	11	12	11	10	26					112	1.65
18.	39	26	2	8	1	3	3	30					112	1.56
20.	36	28	7	12	5	4	6	14					112	1.16
21.	14	20	4	6	4	8	8	4	4	5	6	29	112	2.73
23.	14	16	0	3	0	11	9	16	5	4	4	30	112	3.03
25.	19	14	3	4	5	7	14	6	2	7	4	27	112	2.88

(iii)

Q.No	Total No. of Stds	No. of stds attempted	% of stds attempted	No. of stds with incomplete ans.	% of incomplete ans.
11.	112	101	90.18	57	56.44
14.	112	98	87.50	74	75.51

15.	112	80	71.43	67	83.75
16.	112	96	85.71	70	72.92
18.	112	73	65.18	43	58.90
20.	112	76	67.86	62	81.58
21.	112	98	87.50	69	70.41
23.	112	98	87.50	68	69.39
25.	112	93	83.03	66	70.97
Total	1008	813	80.65	576	70.85

From the above table 80.65% of the students attempted the questions and out of which 70.85% of them did not write the full answers.

4. Some of the common mistakes committed are:

Q.No.	Common mistakes committed
11.	They gave some receipts and assets instead of expenses
14.	Mix up the meaning of bills of exchange with promissory note
15.	Majority did not know the meaning so they gave the answer as giving/getting a discount on the price when buying a commodity
16.	Gave the purpose of preparing profit and loss account instead of trading account
18.	Repetition of same points in a different sentence structure
20.	Mix up the advantages of written down value method with straight line method
21.	Wrong entry of transactions
23.	Only points without explanation, wrong entry of transactions and wrong totalling.
25.	Only points without explanation, wrong calculation after the 1 st year.

5. Remedial measures:

1. Read the question properly before answering
2. More careful when doing calculations
3. Give explanation when asked to

HOME SCIENCE

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
935	699	74.76%

General observations on performance in reference to the Question Paper:

The general performance in Home Science subject has improved compared to last year. Most of the students did better in the Multiple Choice Questions (MCQ) and Very Short Answer (VSA) type of questions. However, in the Short Answer (SA-I & SA-II) type of questions, most of the students attempted but could not score marks due to incorrect answers given. Most students attempted questions where internal choices were provided.

An exercise on analyzing student's performance in reference to the question paper was done where 100 samples of scripts were taken for observation and study. Out of which 5(five) Government schools/institutions and 5(five) private schools/institutions were selected, both from rural and urban areas.

Some few questions were identified and analysis was done where the students gave wrong answers or where variation occurred.

Out of the 100 samples of scripts, 50 scripts from Government and 50 scripts from private schools/institutions were selected and analysis was done basing on the performance of the students on the questions identified.

Comparison of performance in Home Science to last year:

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	91 - 98	90 - 94	7	8	1.13	1.14	+0.01
A1	81 - 89	82 - 89	34	38	5.47	5.44	-0.03
A2	72 - 80	73 - 81	90	88	14.47	12.59	-1.88
B1	65 - 71	65 - 72	106	132	17.04	18.88	+1.84
B2	59 - 64	58 - 64	150	163	24.12	23.32	-0.80
C1	52 - 58	51 - 57	144	164	23.15	23.46	+0.31
C2	40 - 51	40 - 50	91	106	14.63	15.16	+0.53

Questions:

- Q10. How many calories does a gram of carbohydrate contain? **1**
- Q19. Write two symptoms of Kwashiorkor. **2**
- Q24. Give two properties of a good soap. **2**
- Q27. Explain any three ways of supplementing family income. **3**
- Q32. Explain the use of different food groups in planning a balanced diet for your family. **5**

Q.No	Type of Q	Mark allotted	Difficulty level	No. of stds attempt	No. of stds not attempted	No. of students scoring											Mean score	
						0	½	1	1½	2	2½	3	3½	4	4½	5		
10.	VSA	1	Easy	95	5	19	10	66										0.74
19.	SA-I	2	Average	82	18	33	17	16	9	7								0.63
24.	SA-I	2	Easy	94	6	35	12	22	5	20								0.80
27.	SA-II	3	Average	92	8	32	9	16	13	6	7	9						1.04
32.	LA	5	Average	84	16	26	6	10	3	12	4	7	5	5	4	2		1.64

Common errors committed in:

- Q.No.10: Instead of writing a gram of carbohydrate gives 4 calories of energy, students committed mistake by writing 4 grams of calories.
- Q.No.19: Students committed mistake by writing the wrong symptoms of Kwashiorkor disease.
- Q.No.24: Some students wrote the type of soaps, use of soap instead of the properties of soap. While some wrote on the cleansing action of soap.

Q.No.27: One common error is writing the food against the wrong group, e.g. Group 1: Fats and sugar instead of cereals, grains and products, others committed error in writing factors affecting meal planning.

Q.No.32: Instead of writing ways of supplementing family income, students committed error by writing the need and importance of supplementing family income

Suggestions/Remedial measures:

- It is observed that most of the students do not understand the question. So, it is important that while delivering the concepts to the students, the teacher should help them understand the concept.
- Students should be thorough with the textbook and selective study should be avoided.

I.I.TECHNOLOGY

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
4805	3010	62.64%

General observations in reference to the Question Paper

The general performance in IITechnology is fair.

Comparison of performance in I.I.T. to last year

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	97 - 100	95 - 100	65	40	1.60	1.33	-0.27
A1	90 - 96	89 - 94	234	173	5.76	5.75	-0.01
A2	82 - 89	81 - 88	545	418	13.42	13.89	+0.47
B1	75 - 81	75 - 80	685	547	16.87	18.17	+1.3
B2	68 - 74	68 - 74	959	789	23.61	26.21	+2.6
C1	59 - 67	58 - 67	961	729	23.66	24.22	+0.56
C2	40 - 58	40 - 57	612	314	15.07	10.43	-4.64

Questions:

- Q12. Name the bar that states the progress of downloading of a webpage. **1**
- Q13. What is the purpose of setting a primary key in a table? **1**
- Q18. What are Blogs? **2**
- Q20. What happens to the text placed between <STRIKE> and </STRIKE> tags? Give an example. **2**
- Q23. What is a table? Why do we use them? **2**

Observations on selected questions where students gave varied/wrong answers

Q.No	Difficulty level	No. of students who attempted	No. of students who omitted	No. of students who scored the following mark					Mean Score
				0	½	1	1 ½	2	
12.	E	47	3	18	-	29			0.62

13.	E	45	5	20	9	16			0.45
18.	A	40	10	4	7	10	2	17	1.26
20.	A	34	16	16	1	6	4	7	0.78
23.	A	47	3	12	4	19	4	8	0.91

Note:

- a) The data is taken from 50 answer-scripts; with 25 answer- scripts each from both Govt. & Private institutions(rural and urban).
- b) Q.No. 12 & 13 are of 1 mark, Q.No. 18,20 & 23 are of 2 marks.
- c) Difficulty level: A- Average, E – Easy
- d) The mean score is calculated from the number of students who attempted the question.

Common mistakes

Q.No.	Common mistakes
12.	Writing 2 to 3 bar names
13.	Mentioning internet instead of using the actual term – database table
18.	Most common mistake in writing the definition of Blog
20.	Not thorough with the purpose of the <strike> tag. Incomplete example.
23.	Mistake in writing the definition

Suggestions/Remedial measures:

- a) From table 1, it is observed that the number of students scoring C2 have reduced significantly as compared to last year. Therefore, it is suggested that special attention be given to the average students. Also, the high scorers, i.e. students scoring A+ and A1 have reduced.
- b) It is observed that the most common mistakes committed by the students are in writing the definition. Therefore, subject teachers are advised to be cautious while delivering these concepts to the students.

ENVIRONMENTAL EDUCATION

Pass Percentage at HSLC 2014:

Appeared	Passed	Pass Percentage
8708	6149	70.61%

Comparison of performance in Environmental Education to last year:

Grade	Mark spectrum		Number of students		Percentage		% Increased or decreased
	2013	2014	2013	2014	2013	2014	
A+	87 - 96	89 - 99	66	80	1.17	1.30	+0.13
A1	76 - 86	80 - 88	304	337	5.40	5.48	+0.08
A2	66 - 75	70 - 79	682	839	12.11	13.64	+1.53
B1	58 - 65	62 - 69	938	1024	16.66	16.65	-0.01
B2	50 - 57	52 - 61	1528	1599	27.14	26.00	-1.14
C1	46 - 49	47 - 51	1453	1574	25.80	25.60	-0.20
C2	40 - 45	40 - 46	660	696	11.72	11.32	-0.40

Performance has increased as compared to 2013 result.

Analysis:

Analysis was carried out with 50 scripts from government schools and 50 from Private Institutions

Questions where candidates gave varied or wrong answers:

In MCQ sections many students could not give correct answer for Q no 8 and 11, Definition of eutrophication and Chipko Movement- Protection of trees.

In VSA section, answers of many below average and average students showed varying degrees with many giving wrong answers or partially correct answer for Q no. 14, 15 definition of agro forestry, E- waste and naming the first cloned adult sheep, Dolly. One question in particular Q no. 19 hybrid system, a straight definition- many students wrote answer from Science text book, although marks has been awarded accordingly.

In SA 1, Q no. 24 on pollution, generalised definition, saw varied answers, some students wrote answers on noise pollution and air pollution.

Q no 25, Methods of treating waste water, many wrote incomplete answers ending in answers like 1. Primary treatment 2. Secondary treatment for 2 marks without naming the processes involved like sedimentation, decantation, filtration etc.

Q no 30 Importance of genetic engineering also drew varied response as many below average students wrote definition of biotechnology and without stating any importance.

LA I answers also varied answers especially Q no. 36, management and mitigation of floods, with many below average and average students scoring 2 or 3 marks out of the total 5 marks.

LA II Q no. 38 (a) some students wrote various Wildlife Protection Acts, where as they were asked to write the provisions under it.

Type of Question	Marks	Difficulty level
SA Q 22- 28	2	Easy

Questions:

- Q22. State any two principal measures to conserve forest.
 Q23. What is a public awareness programme?
 Q24. What is pollution?
 Q25. Mention any two methods adopted for treating waste water.
 Q26. State any two efforts to recover loss of marine productivity.
 Q27. Who is a buyer?
 Q28. Mention any two advantages of using CNG (compressed natural gas).

Performance level:

Q.No.	Not attempted	0	$\frac{1}{2}$	1	1 $\frac{1}{2}$	2	Mean Score
22.	6+3	6+5	8+4	8+10	18+3	4+25	1.24
23.	8+7	6+8	8+4	9+5	14+10	5+13	1.08
24.	6+5	5+7	12+3	10+4	10+6	4+25	1.14
25.	10+6	30+20	2+1	2+4	1+9	5+10	0.62
26.	16+5	10+5	5	8+2	6+10	5+28	1.29
27.	8+6	10+4	7+4	10+6	5+10	9+20	1.19
28.	10+6	15+4	8+6	10+14	3+2	4+18	0.98

The above figures indicate the marks secured by 100 students (50 from *Private Institutions* and 50 from government schools). The 50 scripts were picked on an average of 25 scripts from both urban and rural areas

Suggestions and Remedial measures:

1. Encourage the students to read the text book or go through it, more than classroom notes.
2. Teachers can also give class test based on similar question pattern set by the Board, which will help students to have an idea when they sit for their final exams.
3. Teachers can encourage students to read articles about current global environmental issues and problems apart from classroom teachings.
4. Teachers can also emphasize on current topics like environmental pollution, global warming and its effects, water scarcity, deforestation and its consequences etc and ways to prevent it.
5. One suggestion from examination point of view for students is to read the question thoroughly before answering it, which will help them get better marks. As many students fail to answer according to what is being asked.

HSSLC

Section



ENGLISH

Number of Institutions = 10 (Government & Private)

Number of Questions = 4

Number of scripts = 100

- i. VSA (2marks) question no.1
- ii. LA I (6 marks) question no. 5
- iii. LA III (5+3=8 marks) question no.7
- iv. SA III (5marks) question no.8

General remarks:

The overall performance in reference to the question paper, pass percentage, and percentage of students scoring 80% and above (844) respectively was very satisfactory. This is the first batch of students who have been studying the new book 'Orchids' a multi-skill course where all the four language skills have been integrated and was introduced in the academic year 2010 in class 9 and has been carried forward to class 12 in a phase manner.

Comparison of Performance in English to last year

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	11355	12833	+7.44
Pass percentage:	87.13%	94.57%	
Highest mark secured:	87	95	

a. Question no- 1 (VSA) - 2 marks

Q1. Answer the following questions:

6x2=12

- a) What is the 'perfect union' that Barack Obama is talking about?
- b) How did Jean –Victor repay Hardimont's gesture of goodwill?
- c) Write two things you can do when travelling in an empty carriage according to A.G Gardiner.
- d) List two achievements of Tawakul Karman who shared the Nobel Peace Prize with Ellen Johnson Sirleaf in 2011.
- e) What was Susan's gift for the family and how was it special?
- f) How can one demonstrate good leadership skill?

97% of the students attempted the question, 28% of them got full marks, 60% of them scored between 1 to 1½ marks. Errors committed in answering this question was not giving the right points.

The students can score good marks if they know their text well.

No. of students not attempting	No. of students getting the marks					Mean score
	0	½	1	1 ½	2	
3	3	6	46	14	28	1.27

b. Question no. 5i or 5ii (LA I) – 6 marks

Q5. Read the following extracts and answer the questions that follow:

- i. *Friends, Romans, countrymen, lend me your ears,
I come to bury Caesar, not to praise him,*

*The evil that men do lives after them;
The good is oft interred with their bones;
So let it be with Caesar. The noble Brutus
Hath told you Caesar was ambitious;
If it were so, it was a grievous fault,
And grievously hath Caesar answer'd it.*

- a) What was Brutus' main grievance against Caesar? (2)
- b) Which lines show that Caesar suffered for being faultless? (2)
- c) Why did Antony begin his speech appearing to agree with Brutus on Caesar's death? (2)

Or

ii. *Here is the will, and under Caesar's seal.
To every Roman citizen he gives,
To every several man, seventy – five drachmas.
Moreover, he hath left you all his walks,
His private arbours and new- planted orchards,
On this side Tiber; he hath left them you,
And to your heirs for ever, common pleasures,
To walk abroad, and recreate yourselves.
Here was a Caesar! When comes such another?*

Antony uses Caesar's will to turn his audience completely in his favour and against the injustice of the assassination. Write a short note on this incident. (6)

98% of the students attempted the question. Many students lost marks in this question because they did not write the correct answers asked. The answers were either wrong, not relevant to the question asked and incomplete. 46% of the students scored between 2½ to 3 marks out of the 6 marks only.

Remedial measures: It is presumed that the teacher is teaching the students well but it will benefit and help the students score good marks if they are encouraged to read and know their text thoroughly. Also understanding the question well will help them to write and score good marks.

No. of students not attempting	No. of students getting the marks												Mean score
	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	
2	1	2	10	18	22	24	10	5	6				2.63

c. Question 7. (LA III) – 8 marks

Q7. Read the following passage and prepare notes on the contents of the passage and summarize in about 80 words using the notes that you have made. **5+3=8**

The fact that everybody enjoys a good mystery explains why magicians are such popular entertainers. We all know that a magician does not really depend on 'magic' to perform his tricks, but on his ability to act at great speed. However this does not prevent us from enjoying watching a magician produce rabbits from a hat or swallow countless eggs.

Probably the greatest magician of all time was Harry Houdini who died in 1926. His real name was Ehrich Weiss, but he adopted the name Houdini after reading a book which greatly influenced him. This had been written by a famous magician called Robert -Houdin. Houdini mastered the art of escaping. He could free himself from the

tightest knots or the most complicated locks in seconds. Although no one really knows how he did this, there is no doubt that he had made a close study of every type of lock ever invented. He would carry a small needle like tool strapped to his leg and he used this in place of a key.

Houdini once asked the Chicago police to lock him in prison. They bound him in chains and locked him up but he freed himself in an instant. The police accused him of having used a tool and locked him up again. This time, there were chains around his neck, waist, wrists and legs- but again he escaped in a few minutes. Houdini had probably hidden his 'needle' in a wax-like substance and dropped it on the floor in the passage. As he passed he stepped on it so that it stuck to the sole of his foot. His most famous escape, however, was altogether astonishing. He was heavily chained up and enclosed in a wooden chest, the lid of which was nailed down. The chest was dropped into the sea in the New York harbour. In one minute, Houdini had swum to the surface. When the chest was brought up and opened, the chains were found inside.

98% of students attempted the question but scored very low marks. 60% of the students scored between 2½ to 3½ marks out of 8 marks. The errors committed in writing this question was, no proper format was given. For example, title of the passage, sub-title, and sub-heading was not given etc. Many students just reproduced the same passage as was given in the question.

No. of students not attempting	No. of students getting the marks										Mean Score
	½	1	1½	2	2½	3	3½	4	4½	5	
2		2	5	12	23	12	25	10	5	4	1.74

Remedial measures: Remedial measures that can be taken to write this question will be to understand the format of note-making, selecting a title, heading, and writing a summary. Giving a proper format like a suitable title, understanding the passage well and provide sub title, and sub-heading. Where ever necessary, abbreviations can be used. **(More classroom practice will enable the students write better)**

d. Question 8i & ii (SAIII) – 5 marks

Q8. An inter-school Athletic event is going to be held in your school. You are Jack, Sports Convenor of Evergreen Higher Secondary School, Shillong. Send a notice to the interested students informing them to submit their names at the earliest.

Or

5

Cindy called up Martin to invite him and his sister Becky to dinner that evening. She is celebrating her birthday with a small group of friends at 8:00 pm. She wants Martin to bring Becky with him. Their good friends Lucy and Linda are coming too. Martin was at college, so his mother took the call. Martin's mother is going to see a friend in a hospital so she leaves him a message. Write the message in about 50 words.

No. of students not attempting	No. of students getting the marks										Mean Score
	½	1	1½	2	2½	3	3½	4	4½	5	
0			4	6	15	11	50	10	4		2.26

100% of the students attempted the question. 50% of the students scored 3½ out of 5 marks. 10% of them got 4 marks and a good number of them got 2½ marks. The errors committed in this question too was to do with proper format. **Remedial measures** that can be taken to write

this question will be giving the proper format as given below.(Example of the questions are from 2014 question paper)

Message

- Format(date,greeting and signature)
- Content- birthday celebration, time, invitees
- Expression- grammar accuracy,appropriate words and spelling
- Coherence and relevance of ideas and style

Notice

- Format (title, date, and writers name with designation)
- Content
- Expression
- Suggested value points
- inter-school-athletic event
- for whom
- when
- where

ALTERNATIVE ENGLISH

- No. of Institutions = 10 (Private and Govt.)
- No. of scripts = 100
- No. of questions = 5

General observation on performance in reference to the question paper was satisfactory. More students could score 80% and above as compared to last year’s performance.

Comparison of Performance in Alternative English to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	10142	10458	+0.04
Pass percentage:	88.70%	88.74%	
Highest mark secured:	85	90	

Type of Questions:

- (1) SA I – 2 marks Q.3
- (2) SA III – 4 marks Q.5
- (3) LA I – 5 marks Q.18
- (4) LA I – 5 marks Q.24
- (5) LA II – 10 marks Q.26

General Remarks: Question no. 3. SAI – 2 marks:

What does the author compare National Prejudice to?

The common errors committed in this question were, many of the students do not know the context of the passage from which the question was asked. The students were not clear of the concept given in the text.

Remedial measures to write this answer better will be to read and understand the text well and grasp the idea of the author given in the text.

	No. of students getting the marks	Mean
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Not attempted	0	½	1	1½	2	Score
4	4	10	22	42	18	1.31

Question no. 5 SA III – 4 marks:-

“To begin with ,of course, there is no such thing as success.....There is nothing that is not successful. That a thing is successful merely means that it is....” Respond to the statement.

The common errors committed in this question were giving wrong interpretations about the quoted lines asked in the question. Many of them wrote the answers basing on their own ideas and not of the author’s.

The remedial measures to tackle and write this answer better will be to read and understand the text deeper and not just on a surface level.

Not attempted	No. of students getting the marks									Mean Score
	0	½	1	1½	2	2½	3	3½	4	
6	3	7	16	9	23	17	13	6	3	1.93

Q. 18 LA - I 5 marks:

a. What do you know about Abel Whittle? What part does he play in the Novel?

Or

b. Compare the characters of Elizabeth Jane and Lucetta.

The common errors committed in this question too were to do with surface knowledge / understanding of the text. Many students could not get good marks because they did not read through the text / novel. The answers given were a mixture of half informations gathered here and there and not systematic. Specially in Q. 18 (a).

In Q. 18 (b) the question was asked to give a comparison of two characters in the novel and many students could only give some very basic informations only.

The remedial measures for the students to score good marks for this type of question will be by reading and understanding the text on their own, events by events, role of the different characters given and the change of events and sequence from which the story develops.

The students need to inculcate the habit of reading and understand the text on their own because it may not be possible for the teachers to go thoroughly through the whole text / novel in the class because of time factor.

Not attempted	No. of students getting the marks											Mean Score
	0	½	1	1½	2	2½	3	3½	4	4½	5	
5	3		9	15	18	18	17	8	2	5		2.26

Q. 24 LA I – 5 marks:

Design an advertisement for a new brand of school bags for both boys and girls. Highlight its attractive features and offer special discount. You may use visuals.

The common errors committed in this question were, box was missing, heading was not given, and contact address not written, etc.

It would help the students score and get better marks if they had more practice with the proper format in the classroom.

Not attempted	No. of students getting the marks									Mean Score
	1	1½	2	2½	3	3½	4	4½	5	

0	6	9	12	14	23	25	7	4		2.7
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Q. 26 LA – II – 10 marks: (Comprehension/Unseen passage)

The errors committed in this question were, hasty answers, they did not read the passage / text properly. Many of them lost marks where they had to give answers basing on their understanding of the passage given.

Students can score better marks if they read the passage and given questions carefully and practice with similar exercises.

Not attempted	No. of students getting the marks													Mean Score
	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	
0	-	4	7	11	10	12	8	9	12	8	8	4	7	3.70

TENYIDIE (MIL)

The identified questions were analysed taking 100 sample answers from 5 (five) Government schools and 5 (five) private schools from rural and urban areas. The performance in Tenyidie saw a marked improvement from last year. The graduated scale in table 1 shows better performance with regard to the analysed questions.

Comparison of Performance in Tenyidie to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	595	687	+1.85
Pass percentage:	93.70%	95.55%	
Highest mark secured:	86	89	

Questions:

- Q5. Josef Faro mho ca kelashü di kedipuo se kedi tarhoshü ga? **2**
- Q7. Memukan-e kedipuo pie kedi Ahasurus tarhoshü ga? **3**
- Q8. Kiüdi Jihova-e thedzie puo bu sozha gei mha thuta ga? Khuthu-u kicüpuo ga? **2+1=3**
- Q9. Israelko kemerie dzü kezhaue cie kephi ki Jihova uko kelakeshü dze thushülie. **4**
- Q14. “Keriemia we riekeli mese”. Keriemia hau suomia pu ba ga? Kiüdi ükezomiae diecha hau pu ga? **1+2=3**

Performance level:

Table 1

Q.No.	Type of Q	Marks	Difficulty level	No. of students not attempting	No. of students getting the marks									
					0	½	1	1½	2	2½	3	3½	4	
5.	SA	2	Easy	2	15	3	8	14	58					
7.	SA	3	Average	22	10	1	2	8	19	10	28			
8.	SA	3	Easy	13	2	2	11	13	16	21	22			
9.	LA	4	Average	0	3	0	2	3	11	8	29	16	28	
14.	SA	3	Easy	13	13	3	7	3	20	13	28			

Errors committed:

- Most of the low scoring papers had no connection between the question being asked and the answer given. Examinees' failure to understand the question resulted in taking the answer to a completely different direction.
- Some answers were very lengthy for a 2 or 3 marks question, thereby wasting time.
- Incomplete answers, poor language structures were other reasons for low scoring marks.
- The inability of the examinees to deliver the whole answer gave the assumption that they were not thorough with the textbooks.

Remedial measures:

- Careful reading and understanding of questions.
- Thorough reading of textbooks.
- To answer questions as per the marks allotment.

ARTS STREAM

HISTORY

The overall performance of students in History subject in 2014 has an increased of about 7.36% from 60.38% in 2013 to 67.74% in 2014.

There was a drastic improvement in marks where more than 60 students secured star mark as compared to less than 10 in 2013.

There was also a difference of 8 in the highest mark 97 in 2014 as compared to 89 in 2013.

Comparison of Performance in History to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	5524	6612	+7.36
Pass percentage:	60.38%	67.74%	
Highest mark secured:	89	97	

Questions:

- Q4. Why did the sepoys refuse to use the greased cartridges? 1
- Q10. Mention any two important characteristics of inscription. 2
- Q15. Why were Jotedars a powerful figure in many areas of Bengal? 2
- Q17. Describe any four features of early urban centres of the Harappan Civilization. 4
- Q22. Write a detailed note on the Jalian Wala Bagh Massacre. 4
- Q25. a. Explain the main features of the Maurya administration. 5
- Or**
- b. Describe the main features of Gupta administration.
- Q27. a. Some writers hold the view that the Revolt of 1857 was a sepoy mutiny. Explain any five points to support it. 5
- Or**
- b. Describe the main events of the Uprising of 1857.
- Q30. a. Why did the British leave India? Explain. 8
- Or**

b. Give an account of the Quit India Movement.

Performance level:

Q. No.	Difficulty level	Marks per Q	Marks scored in %				Number of stds who scored	Wrong answer	Not attempted	Mean score	Total no. candidates
			25 %	50 %	75 %	100 %					
4.	Easy	1	nil	2	nil	61	63	27	10	0.68	100
10.	Average	2	2	15	8	25	50	24	26	1.05	100
15.	Average	2	7	22	4	23	56	11	33	1.15	100
17.	Hard	4	24	13	12	6	55	16	29	1.54	100
22.	Easy	4	11	14	17	16	58	13	29	2.16	100
25.	Average	5	11	10	21	10	52	12	36	2.60	100
27.	Average	5	20	18	15	4	57	23	20	1.82	100
30.	Average	8	13	18	20	17	68	12	20	4.42	100

The above chart shows that more than 74% of the students attempted the questions.

More than 57% of the students secured marks in the questions attempted and out of which more than 46% of them secured more than 50% of the marks allotted in each question.

About 25% of the students did not attempt the question. Thus, we can conclude that the question paper was easy or average.

Findings (general):

- i. Systematic answering (point wise) of question is lacking
- ii. Deviating from the main value points because of answering without reading the question properly
- iii. Answering what they have studied even though not asked
- iv. Not aware of the expected length of answer
- v. In long answer type questions, only points given and no explanation

Remedial measures:

- Even though grammatical mistakes were ignored while evaluating (history), it is very important to write a sentence correctly otherwise it implies a different meaning or no sense at all.
- Encouraged textual reading (and framing own questions) and discourage textual and old question papers readings alone (evidence seen in findings no. iii.)
- Proper understanding of the question is vital before answering a question.
- Making them aware of the expected length of answer will enable them to complete the whole questions without unnecessary tension.
- Writing the answer in a systematic way and giving explanation (wherever necessary) will enable them to secure the expected marks.

POLITICAL SCIENCE

1. General observation on performance in reference to the Question Paper of 2014
 - Most of the Questions were common and textual. But relatively the performance was not as good as expected.
 - Comparatively the students did better in Long Answer Questions.
2. Comparison of performance to last year
Individual performance as well as the pass percentage is better in 2014. The number of students who got 80% and above is double the number of last year.

Year:	2013	2014	Pass Percentage increased or decreased	
No. of students passed:	5483	6363		
Pass percentage:	59.57%	65.44%		+5.87
Highest mark secured:	95	94		

3. Analysis of questions from 100 scripts covering Private and Govt. institution as well as from rural and urban background is given below. The questions are from SA-1 forms of question having average difficulty level.

Questions:

- Q7. Mention any two objectives of the Nehru-Mahalanobis model of development. 2
- Q8. Write any two recommendations made by the Mandal Commission in its report. 2
- Q9. Mention two features of coalition politics. 2
- Q10. What is Hide strategy? Name a country following this type of strategy. 1+1=2
- Q12. Write any two economic consequences of globalization. 2

Performance level:

Q.No.	Not attempted	Marks scored					Mean Score
		0	½	1	1½	2	
7	20 = 20%	27 = 27%	2 = 2%	30 = 30%	1 = 1%	20 = 20%	0.73
8	20 = 20%	18 = 18%	2 = 2%	23 = 23%	8 = 8%	29 = 29%	0.94
9	24 = 24%	31 = 31%	3 = 3%	23 = 23%	10 = 10%	9 = 9%	0.58
10	35 = 35%	27 = 27%	5 = 5%	20 = 20%	3 = 3%	10 = 10%	0.47
12	13 = 13%	30 = 30%	5 = 5%	28 = 28%	7 = 7%	17 = 17%	0.75

- Since the answers are to be given in two points, the score is mostly 0, 1 & 2.
- Very less percentage of mark scored in halves (½) indicates that full allotted mark awarded for correct answers (grammatical & spelling mistakes ignored).

4. Comments on low scoring

- No familiarity with the basic concept of the subject matter.
- Depending too much on notes and rote memory without understanding. Easily get confused with a slight change or twisting of question.

- Carelessness and not spending time to understand what the question demands.
- Answers totally out of context. Writing just for the sake of attempting the questions.
- Above all, the main reason is not being studious.

5. Suggestions for improvement

- Emphasis should be to understand the basic concepts of the subject matter. With this understanding any type of question can be answered.
- Be familiar with the syllabus and design of Board's Question Paper.
- While answering the questions the directional words are to be followed.
- Textbook should be read instead of piece-meal study of notes.

PHILOSOPHY

The overall pass percentage has gone up from 63.98% in 2013 to 67.27% in 2014. However, the highest mark has come down from 74 in 2013 to 65 in 2014.

Comparison of Performance in Philosophy to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	135	187	+3.29
Pass percentage:	63.98%	67.27%	
Highest mark secured:	74	65	

Questions:

- Q1. What is the meaning of the term 'Darsana' in Indian philosophy? 1
- Q10. State any two jewels of Jainism. 2
- Q13. Mention the eight fold paths of Buddhism. 4
- Q19. Discuss the Christian concept of God with reference to the concept of God as Infinite. 4+4=8
- Q30. Distinguish between social philosophy and sociology. 3+3=6

Performance level:

Q.No.	Marks per Q.	Marks secured in %				No. of marks scored	Wrong answer	Not attempted	Mean score	Total no. of students
		25%	50%	75%	100%					
1.	1	nil	nil	nil	31	31	18	1	0.63	50
10.	2	nil	2	nil	39	41	8	1	1.63	50
13.	4	nil	1	12	36	49	1	nil	3.64	50
19.	8	32	8	nil	1	41	8	1	2.12	50
30.	6	7	3	nil	nil	10	28	12	0.51	50
Total %		15.6	5.6	4.8	42.8	68.8	25.2	6	8.53/21	-

The above chart shows that 94% of students had attempted answering the questions asked and 68.8% scored marks.

However, in the long answer type questions (i.e. 6 & 8 marks) less than 1% of students scored above 50% of marks.

Only 6% of students did not attempt the questions which suggest that most of them are familiar with the questions asked.

EDUCATION

Comparison of Performance in Education to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	4409	6011	+16.74
Pass percentage:	57.93%	74.67%	
Highest mark secured:	93	94	

Performance table.

Total 100 scripts.

No of questions. 6 x 100 = 60

Type of question	Marks	Difficulty level
SA	2	Easy

Questions:

- Q12. State any two characteristics of development. 2
- Q 13. Describe the term 'biological heredity'. 2
- Q 14. What are sensory nerves? 2
- Q 15. Why is childhood period described as a schooling age? 2
- Q 16. Describe the term 'pre-natal period'. 2
- Q 18. Briefly describe the origin of the word 'Interest' with the help of an example. 2

Q.No.	No of students who attempted	No of students who did not attempt	No. of students getting the marks					Mean Score
			0	½	1	1½	2	
12.	94	6	22	4	22	6	40	1.20
13.	78	22	9	8	34	18	9	1.06
14.	96	4	8	4	36	20	28	1.29
15.	93	7	2	12	11	24	44	1.52
16.	93	7	2	1	10	28	52	1.68
18.	50	50	14	2	8	8	18	1.14

Attempted - 84%

Not attempted – 16%

SOCIOLOGY

Comparison of Performance in Sociology to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	2247	2758	+4.7
Pass percentage:	71.74%	76.44%	
Highest mark secured:	89	86	

Performance table.

Total 100 scripts.

No of questions. 6 x 100 = 600

Type of question	Marks	Difficulty level
SA	2	Easy

Questions:

- Q7. Distinguish between Svetambara and Digambara. 2
- Q 8. Bring out the difference between benevolent and malevolent spirits. 2
- Q 9. Mention two factors that promoted secularization in India. 2
- Q 10. Distinguish between Civil law and Criminal law. 2
- Q 11. State the two objectives of land reforms. 2
- Q 12. Differentiate between personal and structural violence. 2

Q.No.	No. of students who attempted	No of students who did not attempt	No of students getting the marks					Mean score
			0	½	1	1 ½	2	
7.	83	17	9	5	13	29	27	1.36
8.	99	1	14	4	21	19	41	1.35
9.	77	23	7	6	18	20	26	1.34
10.	98	2	12	6	14	33	33	1.35
11.	96	4	15	2	20	20	39	1.35
12.	63	37	3	3	9	19	29	1.54

Attempted – 86%

Not attempted – 14%

The passed percentage and the scoring of marks for both the subjects have significantly improved.

Errors committed:

- In answers with points, limited points are mentioned or the same point is repeated.
- failing to use the exact terminology in definitions.
- In answers with sub headings, the headings are rightly mentioned but the explanations given are irrelevant.
- One common mistake the students keep committing is failing to identify and differentiate, the Features from its problems and consequences which is why they end up giving the wrong answers.
- In SA type questions, the answers are too long with unnecessary elaboration which does not fetch any extra marks but only waste time.
- In LA 1/ LA 2 type questions, the explanations are too brief and not elaborated enough.
- Sentence formation/ multiple spelling errors in one single answer/ weak grammar. These are some common reasons for failing to secure full marks.

Remedial measures:

- Teachers should teach and instruct his/her students to carefully study the questions and the marks allotted to it and answer accordingly.
Eg:- Questions allotted for **1/2 marks** are elaborated in detail and questions allotted for **6/8 marks** are not answered in detail and some key points are missed out.

- Teachers should stress the importance of using the exact terminologies in definitions and when ever required.

MUSIC

- Overall performance of the students this year is better than last year.
- Only 30 scripts were taken out from different schools for analysis.

Comparison of Performance in Music to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	51	58	+5.56
Pass percentage:	75%	80.56%	
Highest mark secured:	90	93	

Questions:

- Q11. What are the four characteristics of a musical tone? 1/2 x 4=2
- Q12. How is monophony different from heterophony? 2
- Q14. Why is beauty important in Christian worship? 2
- Q16. Name four keyboard instruments. 2
- Q17. What is meant by the term 'diatonic'? 2

Performance level:

Q. No.	Difficulty level	Not attempted	0	1/2	1	1 1/2	2	Mean score
11.	E	0	8	-	4	3	15	1.28
12.	A	5	1	-	2	2	20	1.80
14.	D	3	5	9	2	1	10	1.04
16.	E	-	1	2	1	7	19	1.68
17.	A	12	7	5	3	-	3	0.64

- Q11** – 30 students attempted, 15 students did not write the full answer.
- Q12** – 25 students attempted, 4 students did not write the full answer.
- Q14** – 27 students attempted, 17 students did not write the full answer.
- Q16** – 30 students attempted, 11 students did not write the full answer
- Q17** – 18 students attempted, 15 students did not write the full answer.

Error committed:

- Many answers are not to the question asked.

Remedial measures:-

- Students should be encouraged to read the textbook more.
- The students should be oriented with the Board question pattern.
- Teacher to guide the students to read question paper carefully and write the answers accordingly.

GEOGRAPHY

There has been an improvement when compared to last year's performance.

Analysis was carried out selecting 25 government institutions and 25 from private institutions.

Comparison of Performance in Geography to last year

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	342	523	+15.89
Pass percentage:	53.11%	69%	
Highest mark secured:	92	91	

Questions where students gave varied and wrong answers.

- Q no. 2 pastoral nomadism, showed answers with variations, as some students wrote answers out of textual context.
- Q no. 7 only few students could write/give correct answer with variations, some wrote about import/export of goods.
- Q no. 9 shifting cultivation too showed varied answers, even though this type of cultivation is common in Nagaland, especially in hilly terrain areas.
- Q no. 13 pertaining to problems of rural settlement was attempted by majority of the students and many scored between 3 and 4 marks (below and average students) out of the total 5 marks allotted against it.
- Q no. 14 (world map question) though attempted by many students, only few gave correct answer/location, but fared well in India Map question (Q no 27).
- Q no. 15 Name a tourist town of India, too showed variations with many scoring ½ out of 1 mark and few students citing Delhi, Bangalore, Mumbai as tourist town.
- Q no. 19 E- commerce definitions proved to be highly difficult for many below average and average students.
- Q no. 20 any two objectives of import too showed variation as many could not write as expected.
- Many students gave good answers for Q no 26.

As per the analysis (performance level), considering 8 short answer questions:

Govt Institutions from Urban areas: Short Answers 2 marks

Type of question	Marks	Difficulty level
SA (Q no 4-7, 17-20)	2	Easy

Questions:

- Q4. State any two main features of possibilism. 2
- Q5. Mention any two ill-effects of population growth. 2
- Q6. What are secondary activities? 2

- Q7. What is outsourcing? 2
 Q17. Name any two health indicators of human development. 2
 Q18. Mention any two objectives of rainwater harvesting. 2
 Q19. What is e-commerce? 2
 Q20. State any two objectives of import. 2

Performance level:

Not attempted	0	½	1	1 ½	2	Mean Score
Q4 = 2+3	2	2+1	3+5	2+2	18+12	1.6
Q5 = 1+4	2	2	3+3	2+7	19+7	1.03
Q6 = 5+5	7+2	7	5+1	4+2	4+8	1,08
Q7 = 10+9	3+4	6+6	3+4	1+1	2+1	0.70
Q 17 = 2+4	5+9	7+0	2+9	1	11+2	0.90
Q 18 =8	8+7	2+2	4+8	2+5	2+3	0.75
Q 19= 10+16	5+2	4	3+4	1+1	2+2	0.76
Q 20=11+5	10+10	3+2	5	1	1+2	0.42

The above figures indicates the marks secured by 50 students (25 from Private Institutions And 25 from government schools) urban and rural areas.

Suggestions and Remedial measures:

1. Encourage the students to read the text book or go through it, more than classroom notes.
2. Teachers can also suggest activities related to map work, as the number of students getting full marks on Map questions, stands more or less the same as last year.
3. Teachers can also give class test based on similar question pattern set by the Board, which will help students to have an idea when they sit for their final exams.
4. Teachers can also give emphasis on important places, towns, cities for instance in VSA question, some students failed to even name one tourist town in India.
5. One suggestion from examination point of view for students is to read the question thoroughly before answering it, which will help them get better marks. As many students fail to answer according to what is being asked.

ECONOMICS

1. The overall performance of the students is better as compared to last year.
2. 100 scripts were taken out from government and private schools for analysis.

Comparison of Performance in Economics to last year

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	4226	4651	+6.75
Pass percentage:	59.35%	66.10%	
Highest mark secured:	94	97	

Questions:

- Q5. Define an indirect tax. Give two examples. 1+1= 2

- Q6. Distinguish between nominal GDP and real GDP. 2
 Q8. Define fiscal policy. Name the two types of fiscal policy. 1+1=2
 Q20. State any four major problems of Indian agriculture. 2
 Q21. What is foreign trade? State two problems of India's foreign trade. 1+1=2

Performance level:

Q. No.	Difficulty level	Not attempted	0	½	1	1½	2	Mean score
5.	A	3	17	8	27	18	27	1.15
6.	D	36	39	2	12	1	10	0.54
8.	A	21	10	-	19	8	42	1.46
20.	E	4	9	8	24	17	38	1.36
21.	E	14	10	5	29	19	23	1.23

- Q5** – Total students attempted – 97, students not writing full answer - 70.
Q6 – Total students attempted – 64, students not writing full answer - 54
Q8 – Total students attempted – 79, students not writing full answer - 37.
Q20 – Total students attempted – 96, students not writing full answer – 58.
Q21 – Total students attempted – 86, students not writing full answer - 63.

Errors committed:

- i. Many students did not answer the full question asked.
- ii. Students failed to understand the question asked.

Remedial measures:

- i. Teachers to guide the students to answer the question asked.
- ii. To guide the students to read the textbook.
- iii. Definition along with examples, types and problems to be given equal weightage.
- iv. To write the question number correctly while answering.

COMMERCE STREAM

ACCOUNTANCY

1. The performance of students in reference to the question paper was satisfactory.
2. Comparing with the performance of last year the pass percentage was almost the same i.e. last year 87.56% and this year 88.61%. The highest mark scored last year was 70 marks, out of 70 and this year also it is 70 marks out of 70 in theory.
3. Methods used.
 - a) Two (2) Govt. Hr. Sec. Schools and five (5) private Hr. Sec. Schools and colleges (rural & urban)
 - b) Identified 5 questions where candidates gave varied/wrong answers
 - c) Selected 50 scripts from Govt. Hr. Sec. Schools and 50 scripts from Private Hr. Sec. Schools and colleges.

Comparison of Performance in Accountancy to last year

		Pass Percentage
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Year:	2013	2014	increased or decreased
No. of students passed:	1190	1019	+1.04
Pass percentage:	87.56%	88.61%	
Highest mark secured:	100	100	

Question No.4

Why is profit and loss appropriation account prepared?

Type of question	Mark	Difficulty level
VSA	1	Easy

Performance Level:

No. of students not attempting	No. of students getting marks			Mean Score
	0	½	1	
25	22	32	21	0.69

75% of the student attempted the question

32% of the student did not write the full answer and partly correct answer.

Error: The students did not answer as per the question.

Remedial measure: To read and understand the question.

Question No.12

Show the following items in the format of balance sheet of a company:-

- | | |
|------------------------|--------------------------------|
| i) building | ii) unclaimed dividends |
| iii) provision for tax | iv) securities premium account |
| v) loose tools | vi) work in progress |

Type of question	Marks	Difficulty level
SA ₁	3	Average

Performance Level:

No. of students not attempting	No. of students getting marks							Mean Score
	0	½	1	1½	2	2½	3	
8	10	15	7	11	15	13	21	1.91

92% of the students attempted the question

61% of the students did not write the full answer and partly correct answer.

Error: Students do not know where a particular item should appear in the balance sheet.

Question No.10

When is a partnership firm reconstituted?

Type of question	Marks	Difficulty level
SA ₁	3	Average

Performance Level:

No. of students not attempting	No. of students getting marks							Mean Score
	0	½	1	1½	2	2½	3	
6	9	7	16	12	14	12	24	1.97

94% of the students attempted the question

61% of the students did not write the full answer and partly correct answer

Error: Students did not answer as per the question

Remedial measure: To read and understand the question.

Question No.15.c

Calculate gross profit and sales from the following information:

Stock at the beginning of the year	₹ 60,000
Stock at the end of the year	₹ 1,00,000
Stock turn over ratio	8 times
Selling price	20% above cost

Type of question	Marks	Difficulty level
LA ₁	5	Easy

Performance Level:

No. of students not attempting	No. of students getting marks											Mean Score
	0	½	1	1½	2	2½	3	3½	4	4½	5	
0	-	4	7	8	14	3	16	1	12	9	26	3.27

100% of the students attempted the question

74% of the students did not write the full answer but gave partly correct answer.

Error: Students don't know the formula to calculate gross profit and sales.

Question No.17 (b)

From the following particulars prepare the cash flow statement:

BALANCE SHEETS as on 31st December

Liabilities	2010	2011	Assets	2010	2011
Share capital	5,00,000	5,00,000	Land & building	1,20,000	80,000
Reserve	80,000	1,50,000	Plant & machinery	6,00,000	5,00,000
Loans	3,00,000	1,00,000	Stock	75,000	1,00,000
Public deposits	30,000	50,000	Debtors	1,60,000	1,50,000
Creditors	1,50,000	1,40,000	Cash	1,15,000	1,20,000
Outstanding expenses	6,000	7,000			
Provision for bad debts	4,000	3,000			
	10,70,000	9,50,000		10,70,000	9,50,000

During the year 2010, ₹ 50,000 depreciation has been provided on plant & machinery and a machine costing ₹ 15,000 (depreciation provided there on ₹ 10,000) was sold at 60% profit at book value.

Type of question	Marks	Difficulty level
LA ₂	10	Difficult

Performance Level:

No. of students not attempting	No. of students getting the marks																				Mean Score	
	0	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½		10
0					3	2	2	3	1	2	6	3	9	4	11	7	3	5	8	6	24	7.32

100% of the students attempted the question

76% of the students did not write the full answer and but gave partly correct answer.

ENTREPRENEURSHIP

1. The performance of students in reference to the question paper was satisfactory.
2. Comparing with the performance of last year the pass percentage has increased by 0.35% i.e. the pass percentage was 75.93% but the previous year, it was 75.58%. The highest marks scored last year was 68 marks out of 70 but this year it has gone up to 70 marks out of 70.
3. Methods followed.
 - i. Scripts are selected from 2 (two) Govt. Hr. Sec. Schools and 5 Private Hr. Sec. Schools and Colleges.
 - ii. Identified 4 questions where the candidates gave varied/wrong answers.
 - iii. Selected 50 scripts from Govt. Hr. Sec. Schools and 50 scripts from Private Hr. Sec. Schools and colleges.

Comparison of Performance in Entrepreneurship to last year

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	427	429	+0.35
Pass percentage:	75.58%	75.93%	
Highest mark secured:	98	100	

Question No.6

What is the primary objective of scheduling?

Type of question	Mark	Difficulty level
VSA	1	Easy

Performance Level:

No. of students not attempting	No. of students getting the marks			Mean Score
	0	½	1	
7	18	12	63	.92

93% of the students attempted the question

30% did not write the full answer and wrong answer.

Error: Students did not answer as per the question.

Remedial measure: To read the question, understand what is been asked and answer as per the question.

Question No. 9

Justify the need for market assessment for small scale enterprises.

Type of question	Marks	Difficulty level
SA ₁	3	Difficult

Performance Level:

No. of students not attempting	No. of students getting the marks							Mean Score
	0	½	1	1½	2	2½	3	
11	20	3	16	7	9	10	24	2.07

89% of the students attempted the question

45% of the students did not write the full answer.

Error : 20% of the students gave the wrong answer i.e. they did not answer as per the question.

Remedial measure: To understand the question and answer accordingly.

Question No. 16

Discuss any four analytical and statistical methods of demand estimation for a product.

Type of question	Marks	Difficulty level
SA ₂	4	Difficult

Performance Level:

No. of students not attempting	No. of students getting the marks									Mean Score
	0	½	1	1½	2	2½	3	3½	4	
4	18	4	8	5	8	10	11	15	17	2.72

96% of the students attempted the question

61% of the students did not write the full answer.

Error: 18% of the students gave the wrong answer i.e. they did not write the answer as per the question.

Remedial measure : To read the question properly.

Question No. 20 (b)

Discuss any four steps involved in the selection of an enterprise.

Type of question	Marks	Difficulty level
LA	8	Average

Performance Level:

No. of students not attempting	No. of students getting the marks																Mean Score	
	0	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½		8
12	4			6		2	6	8	4		7	3	12	7	8	9	12	5.53

88% of the students attempted the question

72% of the students did not write the full answer.

Error : 4% of the students gave the wrong answer.

FUNDAMENTALS OF BUSINESS MATHEMATICS

- The performance of students with reference to the question paper was satisfactory.
- Comparing with the performance of last year the pass percentage has increased by 11.69% i.e. last year the pass percentage was 58.97% only but this year it has gone upto 70.66%. The highest mark scored last year was 99 marks out of 100 but this year it was only 98 marks out of 100.
- Methods used.
 - Two (2) Govt. Hr. Sec. Schools and five (5) Private Hr. Sec. Schools and Colleges (rural & urban)
 - Identified 5 questions where the candidates gave varied/wrong answers
 - Selected 50 scripts from Govt. Hr. Sec. Schools and 50 scripts from Private Hr. Sec. Schools and colleges.

Comparison of Performance in Fundamentals of Business Mathematics to last year

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	447	407	+11.69
Pass percentage:	58.97%	70.66%	
Highest mark secured:	99	98	

Question No. 5

What is meant by bill of exchange after sight?

Type of question	Mark	Difficulty level
VSA	1	Easy

Performance Level:

No. of students not attempting	No. of students getting the marks			Mean Score
	0	½	1	
15	34	35	41	0.77

85% of the students attempted the question

35% of the students did not write the full answer and partly correct answer.

Error: The students did not answer as per the question.

Remedial measure : to answer as per the question.

Question No. 10

What is meant by objective function?

Type of question	Marks	Difficulty level
VSA	1	Average

Performance Level:

No. of students not attempting	No. of students getting the marks			Mean Score
	0	½	1	
18	24	32	26	0.72

82% of the students attempted the question

56% of the students did not write the full answers, partly correct answer and wrong answers.

Error: the student did not answer as per the question.

Remedial measure: to give answer as per the question.

Question No. 14

Prove that the matrix A given by $A = \begin{pmatrix} a & b \\ c & d \end{pmatrix}$ satisfies the relation

$A^2 - A(a + d) + (ad - bc)I = 0$, where, I is the unit matrix of order 2.

Type of question	Marks	Difficulty level
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SA ₁	4	Difficult
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Performance Level:

No. of students not attempting	No. of students getting the marks									Mean Score
	0	½	1	1½	2	2½	3	3½	4	
12	15	-	14	8	9	-	15	11	16	2.62

88% of the students attempted the question

57% of the students did not write the full answer but gave partly correct answer

Error: Most of the students do not know the meaning of I, therefore they did not get the correct answer.

Remedial measure : Proper knowledge about the basic terms and formula.

Question No. 21

Use a venn diagram to solve the problem .In a statistical investigation of 1003 families of Kolkata , it was found that 63 families had neither a radio nor a television ,794 families had a radio and 187 a television .How many families in that group had both a radio and a television?

Type of question	Marks	Difficulty level
SA ₂	5	Average

Performance Level:

No. of students not attempting	No. of students getting the marks											Mean Score
	0	½	1	1½	2	2½	3	3½	4	4½	5	
14	8		6	7	12		13	6	8	10	16	3.30

86 % of the student attempted the question

62 % of the student did not write the full answer but gave partly correct answer.

Error : Most of the students did not read the question properly.

Remedial measure: To read the question properly and understand it.

Question No. 25 (b)

Let R be the set of real numbers and $A = R - \{3\}$ and $B = R - \{1\}$. Let the function $f: A \rightarrow B$ be defined by $f(x) = \frac{x-1}{x-3}$. Show that the function f is bijective.

Type of question	Marks	Difficulty level
LA ₁	6	Difficult

Performance Level:

No. of students not attempting	No. of students getting the marks													Mean Score
	0	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	
18	13		7		14		4	10	3	5	12	6	8	3.73

82% of the students attempted the question

61% of the students did not write the full answer but gave partly correct answer.

Error: Most of the student did not write the correct answer because it was difficult.

Remedial measure: Students must be prepared to answer some difficulty level questions.

BUSINESS STUDIES

For the purpose of question paper analysis, 2 government schools and 4 private schools were selected. Both government schools were from urban areas since they were the only government institutions whereas for private schools 2 were from semi urban and 2 from urban area. In total 105 scripts were taken out of which 50 and 55 scripts were taken out from government and private schools respectively for the study.

1. With regard to the question papers and type of questions, it is felt that the question paper was of moderate level.
2. On comparison with the performance of the last year examination, in Business studies, the pass percentage has increased by 0.27%. Moreover, the no. of candidates in 10th rank for the subject has increased by 37.50% and the number of candidates above 80% last year was 13 but this year, it has shoot up to 29.

Comparison of Performance in Business Studies to last year

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	1106	939	+0.27
Pass percentage:	81.38%	81.65%	
Highest mark secured:	92	98	

3. Performance in different types of questions in Business Studies:

(i)

Q. No	Type of Questions	Marks	Difficulty level
9.	SA – I	2	Average
12.	SA – I	2	Difficult
14.	SA – II	4	Average
19.	SA – II	4	Easy
22.	LA	8	Easy
25.	LA	8	Average

Questions:

- Q9. What is division of work? 2
- Q12. Name the elements of promotion mix. 2
- Q14. Explain any four significance of management principles. 4
- Q19. Explain any four characteristics of controlling. 4
- Q22. a. Discuss any eight characteristics of management. 4
- Or**
- b. Discuss the elements and importance of coordination. 8

Q25. a. Discuss the essentials of a sound financial plan.

Or

b. Discuss the factors affecting fixed capital requirement.

8

(ii)

Q. No	No. of stds Not attempting	No. of students getting the marks										Mean score
		0	½	1	1 ½	2	2 ½	3	3 ½	4	Total	
9.	4	11	9	63	3	15					105	1.01
12.	36	25	7	7	4	26					105	0.99
14.	11	24	5	7	3	10	7	14	6	18	105	2.07
19.	10	9	3	5	3	9	8	24	11	23	105	2.65
		0	1	2	3	4	5	6	7	8		
22.	3	3	4	3	11	11	15	14	25	16	105	2.69
25.	15	11	10	10	4	7	7	9	26	6	105	2.16

(iii)

Q.No	Total No. of Stds	No. of stds attempted	% of stds attempted	No. of stds with incomplete ans.	% of incomplete ans.
9.	105	101	96.19	86	85.14
12.	105	69	65.71	43	62.31
14.	105	94	89.52	76	80.85
19.	105	95	90.48	73	76.84
22.	105	102	97.14	86	84.31
25.	105	90	85.71	84	93.33
Total	630	551	87.46	448	81.31

From the above table 87.46% of the students attempted the questions and out of which 81.31% of them did not write the full answers.

4. Some of the common mistakes committed are:

Q.No.	Common mistakes committed
9.	Majority of the students gave only half of the answer
12.	Majority of who answered gave the components of product mix instead of the elements of promotion mix
14.	Majority gave the principles of scientific management whereas the question is about the significance of management principles
19.	Some gave the importance of controlling instead of the characteristics and many wrote the points without explanation
22.	Wrote the points without explanation while many repeated the same points in a different sentence structure
25.	Wrote the points without explanation while many repeated the same points in a different sentence structure

5. Feedbacks to teachers to guide the students:

- i) Encourage students to refer textbooks more frequently so as to discourage note learning.

- ii) To discourage selective study.
- iii) Encourage students to pay equal weightage in every subject.
- iv) Instruct the students to read the question paper properly before writing the answer to the questions.

SCIENCE STREAM

PHYSICS

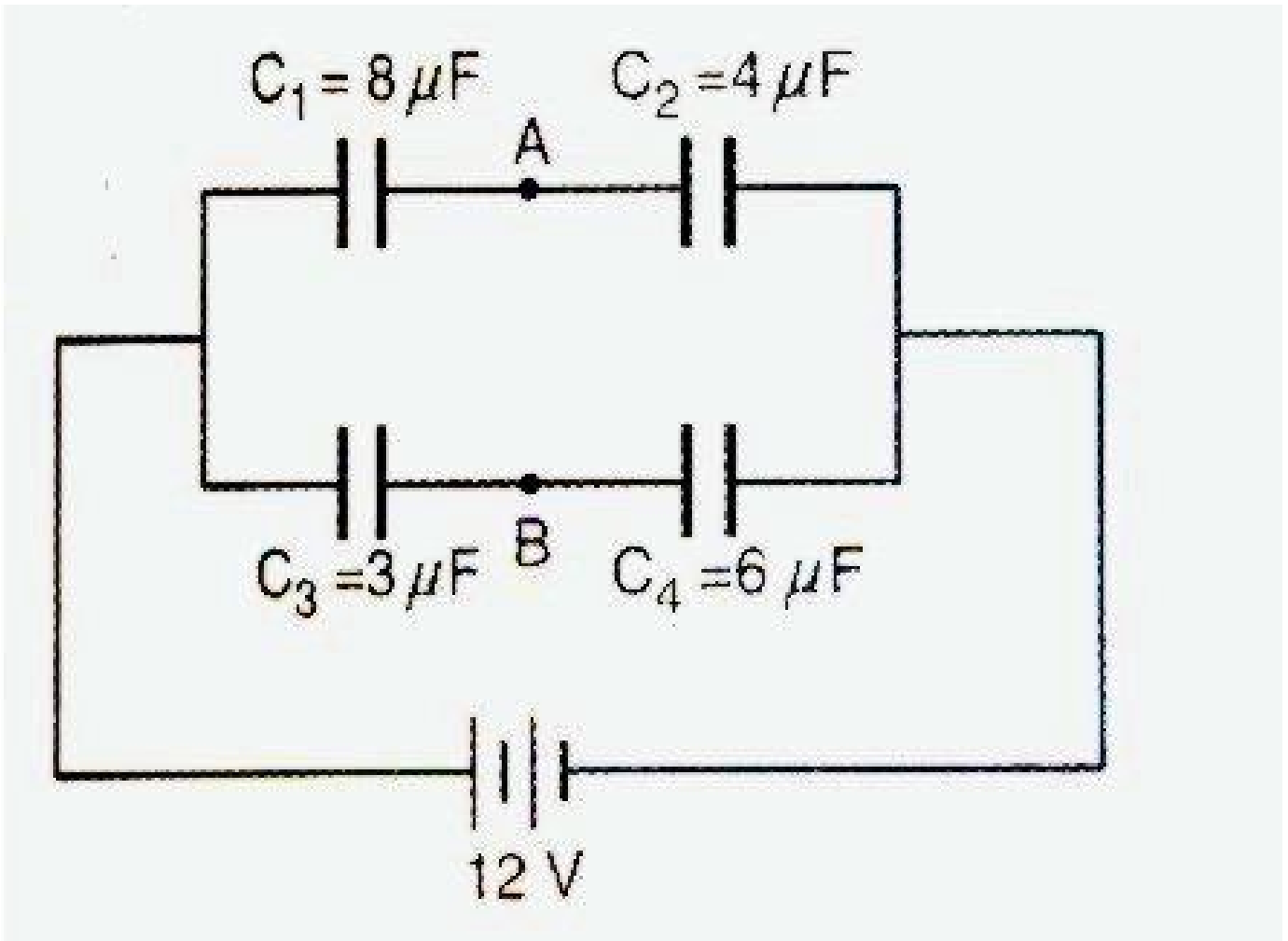
1. **General observation on performance in reference to the Q. paper:**
The general performance with reference to the question paper was satisfactory.
2. **Comparison of performance in Physics to last year:**

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	1645	2110	+13.78
Pass percentage:	68.97%	82.75%	
Highest mark secured:	98	97	

3. **Methodology followed:**
Selected some questions where students gave varied/wrong answers. The observations are as follows:

Questions:

- Q1. State Coulomb’s law in electrostatics. **1**
 - Q14. Draw the course of rays in an astronomical telescope, when the final image is formed at least distance of distinct vision. **2**
 - Q19. **a.** Find the electric potential at a point on the perpendicular bisector which is 10 cm from the midpoint of the line joining two point charges 1.5×10^{-6} C and 2.5×10^{-6} C separated by a distance of 30 cm. **3**
- Or** **3**
- b.** Four capacitors C_1 , C_2 , C_3 and C_4 are connected to a battery of 12 volts as shown in the figure. Find the potential difference between points A and B.



Q21. With the help of circuit diagram, explain the principle and working of a meter bridge. 3

Q29. a. Derive an expression for fringe width using Young's double slit method for interference of light. What will happen to the interference pattern if the phase difference between the two sources continuously varies.

Or

5

b. Derive an expression for Lens Maker's formula, $\frac{1}{f} = (\mu - 1)\left(\frac{1}{R_1} - \frac{1}{R_2}\right)$.

Performance level:

Q. No.	Difficulty level	No. of stds attempted	No. of stds who didn't attempt	No. of students getting the marks											Mean Score	
				0	½	1	1½	2	2½	3	3½	4	4½	5		
1.	E	74	26	-	16	58										0.891
14.	A	52	48	18	12	16	6									0.596
19.	A	36	64	8	8	4	6	2	6	2						1.166
21.	A	56	44	-	10	12	20	4	6	4						1.464
29.	A	46	54	-	-	4	8	4	4	2	2	8	4	4		2.543

Note: a) Difficulty Level: E- easy, A- Average.

b) The mean score is calculated from the marks scored divided by the number of students attempted.

c) Data observed from 100 scripts.

4. **General remarks/Common Errors:**

Q1. Majority of students answered this question without understanding it. Few students could not answer to the question asked.

Q14. Many students did not understand what was asked. Students should practice drawing the rays diagram at different points.

Q19. Most of the students could not give correct formula to solve the problems. About 70% of examinees did not attempt numerical questions.

Q21. Many students could not draw the correct diagram and they also mixed up with principle and working of meter bridge. Due to rote memory, students are confused with it.

Q29. Here, many examinees preferred Q.29(b) instead of Q.29(a) though it is a commonly asked question. Because Q.29(b) is direct derivation and also simple type question. It is observed that majority of students are writing their exam with rote memory, so they always prefer direct and simple questions.

5. **Remedial Measures:**

Q1. Students should be made to understand the concept clearly.

Q14. Students should be encouraged to develop skills of drawing. Teachers should give clear concepts of variable rays at different points.

Q19. Students should be encouraged to practice numerical problems through writings. Teachers should emphasise on numerical problem solving by giving home works etc.

Q29. Students should be encouraged to solve application type questions to build their confidence. Teachers need to encourage students to solve these type of questions through class tests, home works etc.

General observations: Instead of giving readymade notes to students which encourages rote memorization, teachers are advised to clearly define the concepts of lesson/topics and the students should be encouraged to do more reading to clear their doubts. Practice through writings, skills of drawing and understanding how to solve numerical problems have to be encouraged.

CHEMISTRY

1. **General observation on performance in reference to the Q. paper:**

The general performance in Chemistry is satisfactory.

2. **Comparison of performance in Chemistry to last year:**

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	1676	2112	+12.55
Pass percentage:	70.27%	82.82%	
Highest mark secured:	98	96	

3. Methodology :

Selected some questions where students gave varied/wrong answers. The observations are as follows:

Questions:

Q1. What is Schottky defect? 1

Q4. Write the IUPAC name of $[\text{Co}(\text{NH}_3)_5\text{NO}_2]\text{Cl}$. 1

Q12. Why do transition metals form coloured compound? 2

Q26. a. What is glycoside linkage? Draw the open chain and ring structure of glucose. 3

Or 3

b. What is meant by denaturation of proteins? Distinguish between primary and secondary structure of proteins.

Q29. a. 1) Give the principle involved in the manufacture of HNO_3 by Ostwald's process.

2) Give reason for the following:

i) Noble gases have low melting and boiling point.

ii) Nitrogen does not form penta halide like phosphorous.

Or 5

b. What are group-16 elements? Compare the properties of group-16 elements on the basis of the following:

i) Oxidation ii) Acidic character iii) Catenation.

Performance level:

Q. No.	Difficulty level	No. of students attempted	No. of stds who didn't attempt	No. of students getting the marks											Mean score
				0	½	1	1½	2	2½	3	3½	4	4½	5	
1.	E	64	36	8	20	36									1.123
4.	A	56	44	9	31	16									0.562
12.	A	56	44	-	10	16	12	10							1.125
26.	A	46	54	-	-	12	8	8	12	6					1.125
29.	A	66	34	-	-	6	16	10	16	6	4	2	2	4	2.409

Note: a) Difficulty Level: E- easy, A- Average.

d) The mean score is calculated from the marks scored divided by the number of students attempted.

e) Data observed from 100 scripts.

4. General remarks/Common Errors:

Q1. Many students wrote the answer from rote memory and were confused with Frenkel defects.

Q4. Most of the students are not clear with the arrangement of ligands while writing formula.

Q12. 70% of students could not answer properly. They didn't understand the concept of splitting of electrons into different energy level.

Q26. Most of the students did not answer the first part of question properly. The students are confused which is ring or open chain.

Q29. Majority of students could not write answer properly and also they are not able to give proper reasons to justify the comparison. Many students did not know the Gr. 16 elements and its properties.

5. Remedial Measures:

- Q1. Teachers should encourage the students to compare the two defects and make the different distinctions of the two defects.
- Q4. Students should be encouraged to do more practice of different compounds and also make them understand the procedure of writing the formula of coordination compounds.
- Q12. Teachers should clearly explain the different energy levels, the ground and excited state of electrons. How electrons get excited to the energy level and its concepts should be made clear to the students.
- Q26. Teachers should encourage the students to practice with more writing or drawing.
- Q29. Teachers need to encourage the students to study the periodic table and guide them on how the elements are classified into groups and periods and its relationship with the other elements.

General observations: Students need more practice of writing. The lack of practice has been observed from students while they were writing reactions, diagram etc. In Chemistry subject, the more we practice the more we learn because simply going through the textbook/topics will confuse students. Therefore, teachers should encourage students to practice more through writing, this may enable them to learn and score better marks in the subjects.

MATHEMATICS

General observations in reference to the Question Paper:

The general performance in Mathematics is fair.

- The questions not correctly answered by the examinees include Q.No. 1, 12 & 17.
- Questions least attempted were Q.No. 23 (b), 24 (b), 28 (a) & 31 (a), implying that the alternatives were preferred.
- There were many instances of students not tying the graph paper to the answer book.

Comparison of performance in Mathematics to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	1052	1183	+3.97
Pass percentage:	45.36%	49.33%	
Highest mark secured:	100	98	

Observations on selected questions where students gave varied/wrong answers - Questions:

- Q12. Let * be a binary operation defined on the set of rational numbers Q as $a * b = a + ab$. Is it associative? Is it commutative?

Q17. Integrate $\int \frac{\sin 2x}{(a+b \cos x)^2} dx$ by substitution method. 2

Q21. Solve the equation $\sin^{-1}(1-x) - 2 \sin^{-1} x = \frac{\pi}{2}$ for x 4

Q30. A pair of dice is thrown 7 times. If "getting a total of 7" is considered a success, find the probability of getting:

(i) exactly 6 successes, (ii) at least 6 successes and (iii) at most 6 successes. 4

Q31. a. Using elementary row transformations, find the inverse of $\begin{bmatrix} 1 & 2 & 5 \\ 2 & 3 & 1 \\ -1 & 1 & 1 \end{bmatrix}$

Or 6

b. Solve the following system of equations using matrix method:

$$2x - 3y + 5z = 11$$

$$3x + 2y - 4z = -5$$

$$x + y - 2z = -3$$

Performance level:

Table 1

Q.No	Diffi- culty level	No. of students who attempted	No. of students who omitted	No. of students who scored the following marks													Mean score
				0	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	
12.	E	51	49	11	3	11	2	24									1.25
17.	A	31	69	11	7	4	1	8									0.81
21.	A	29	71	12	3	1	1	1	2	1	2	6					1.55
30.	A	56	44	4	4	9	1	6	3	7	3	19					2.49
31.	A	100	-	-	-	-	1	11	2	9	-	12	1	15	7	42	4.74

Note:

- d) The data is taken from 100 answer-scripts; with 50 answer-scripts each from both Govt. & private institutions (rural and urban).
- e) Difficulty level: A - Average, E - Easy
- f) The mean score is calculated from the number of students who attempted the question.

Common mistakes

Table 2

Q.No.	Common mistakes
12.	Mistake in handling with the binary operation as defined.
17.	a) Incorrect formula. b) Incorrect/incomplete integration.
21.	Mistake in handling with the sine inverse.
30.	Most common mistake in calculation/careless mistakes.
31.	e) Mistake in handling with the minus sign. f) Not showing that A^{-1} exists.

Suggestions/Remedial measures:

Some common mistakes committed by the examinees are shown in Table 1 & 2. Subject teachers are advised to be cautious while transferring these concepts to the students.

BIOLOGY

General Observations:

It has been observed that the general performance in Biology has improved when compared to last year. Most of the students did quite well in the Very Short Answer (VSA) type of questions and the Long Answer (LA) type of questions. Students attempted questions where internal choices were provided in the various forms of questions.

So, for analyzing the question paper, 100 samples of scripts were taken for observation and studies, out of which 5(five) Government schools/institutions and 5(five) private schools/institutions were selected, both from rural and urban areas.

Some few questions were identified from part-A (Botany) and part-B (Zoology) and analysis was done where the students gave wrong answers or where variation occurred.

Out of the 100 samples of scripts, 50 scripts from Government and 50 scripts from private schools/institutions were selected and analysis was done basing on the performance of the students on the questions identified.

Comparison of Performance in Biology to last year:

Year:	2013	2014	Pass Percentage increased or decreased
No. of students passed:	1647	2074	+11.98
Pass percentage:	77.03%	89.01%	
Highest mark secured:	98	96	

Questions:

Part - A (Botany)

- Q1. State Chargaff's rule. 1
- Q5. a. Give two significance of seeds in angiosperm. 2
- Or**
- b. Why do many plants develop strategies to discourage self-pollination? 2
- Q8. What are the effects of radio active pollution? 2
- Q9. Give the structural components of an ecosystem. 3
- Q14. Describe the various steps involved in recombinant DNA (rDNA) technique. 5

Part - B (Zoology)

- Q5. What is a clone? Name the different types of cloning. 2
- Q8. a. What are test cross and back cross? 2
- Or**
- b. What are the abnormalities that occur due to XXY chromosome? 2
- Q10. a. Show the incomplete dominance of Snapdragon flower using ray diagram. 3
- Or**

b. What is sex chromosome? Briefly explain the sex chromosomes in human with XX and XY chromosome.

Q14. Name Mendel's three laws of inheritance. Explain the law of independent assortment. 5

Errors committed in:

Part - A (Botany)

- Q.No.1: Instead of writing A=T & G=C, hence A+G=T+C, some students gave the wrong pairing as A=G & C=T or A+T=C+G
- Q. No.5: Majority of the students did not attempt Q.No.5 (b), and students who attempted gave the wrong reasoning as why plants develop strategies to discourage self-pollination.
- Q.No.8: Instead of writing the effects of radioactive pollution, some students wrote on the effects of noise pollution, acid rain etc
- Q.No.9: Some students wrote on the types of ecosystem, others on the functional components of ecosystem instead of the structural components of ecosystem
- Q.No.14: Common error committed by the students is writing the DNA replication instead of r-DNA technique.

Part - B (Zoology)

- Q.No.5: Wrong definition written by most students.
- Q.No.8(b): Some students wrote on the XYY abnormality instead of the abnormalities that occur due to XXY (Klinefelter's syndrome).
- Q.No.10: Majority of the students did not attempt Q.No.10 (a) i.e. showing the incomplete dominance of Snapdragon flower using ray diagram. However, the students who attempted Q.No.10 (b) gave the wrong pairing/crossing between XX and XY chromosome.
- Q.No.14: Most students were able to name the three Mendel's laws of inheritance, but could not explain the later part of the question, i.e. explaining the law of independent assortment.

Common error committed in both **Part-A (Botany)** and **Part-B (Zoology)** are given below:

- Writing part-A in the answer booklet of part-B and vice versa.
- Giving the incorrect question number.
- Wrong labelling of the diagram.

Suggestions for improvement:

- Before the examination starts, students should be reminded to write part-A and part-B separately in different booklet.
- It is important for students to write the correct question number for each answer written.

Performance level: Botany

Q. No.	Types of question	Marks allotted for each question	Difficulty level	No. of students attempted	No. of students not attempting	Number of students scoring										Mean score		
						0	½	1	1½	2	2½	3	3½	4	4½		5	
1.	VSA	1	Easy	75	25	11	2	62										0.84

5.	SA-I	2	Average	81	19	45	4	22	6	4								0.51
8.	SA-I	2	Easy	93	7	23	4	40	5	20								0.99
9.	SA-II	3	Average	83	17	17	9	18	15	16	3	5						1.20
14.	LA	5	Average	86	14	18	4	5	3	5	7	3	7	15	10	9		2.59

Performance level: Zoology

Q. No.	Types of question	Marks allotted for each question	Difficulty level	No. of students attempted	No. of students not attempting	Number of students scoring										Mean score		
						0	½	1	1½	2	2½	3	3½	4	4½		5	
5.	SA-I	2	Easy	84	16	21	31	20	5	7								0.67
8.	SA-I	2	Average	86	14	25	14	21	12	13								0.87
10.	SA-II	3	Average	96	4	6	2	2	12	28	16	30						2.15
14.	LA	5	Average	98	2	2	2	3	28	19	13	7	7	5	3	9		2.45
