



# Examiners Report

2019 / 2020 Trinidad and Tobago Chemistry Olympiad  
Round 1- Levels A and B

## SUMMARY

The Trinidad and Tobago Chemistry Olympiad (TTCO) Committee expresses thanks to the participating secondary schools and teachers for encouraging student participation, and the students for their interest in being part of this tournament. It is neither the student's grade nor the performance of the school that is ultimately important; but rather the act of participation that conveys an achievement and aids in making the Trinidad and Tobago Chemistry Olympiad a success.

The 1<sup>st</sup> edition of the TTCO was held on Wednesday 6<sup>th</sup> November, 2019 and involved an impressive number of students participating. In Level A, there were 489 students participating from among 25 schools; and 323 students in Level B from 23 schools as seen below according to Form.

*Table 1: Summary of students sitting the Round 1 Examination*

LEVEL	FORM	NO. OF STUDENTS WRITING LEVEL 1 EXAMINATION	NO. OF STUDENTS QUALIFYING FOR LEVEL 2 EXAMINATION
Level A	3	114	4
	4	192	36
	5	183	111
	<b>TOTAL (Level A)</b>	<b>489</b>	<b>151</b>
Level B	Lower 6	197	69
	Upper 6	126	88
	<b>TOTAL (Level B)</b>	<b>323</b>	<b>157</b>
<b>Overall Total</b>		<b>812</b>	<b>308</b>

## LEVEL A

Level “A” examination was designed for forms 3, 4 and 5 and closely aligned with the CXC – CSEC Syllabus. The questions were set at a level partially higher than what would be expected at the CSEC examinations and were in some cases meant to examine the level of critical thinking among these younger students. The overall performance closely resembled a normal distribution, with the highest mark being 90 %. 151 students were selected to advance to the Round 2 Level A, representing a wide selection of schools. While the majority of these are from Form 5 (111), we are quite pleased to report that thirty-six (36) Form 4s, and four (4) Form 3s were also among those advancing.

*Table 2: Summary of qualifiers for Round 2 Examinations – Level A*

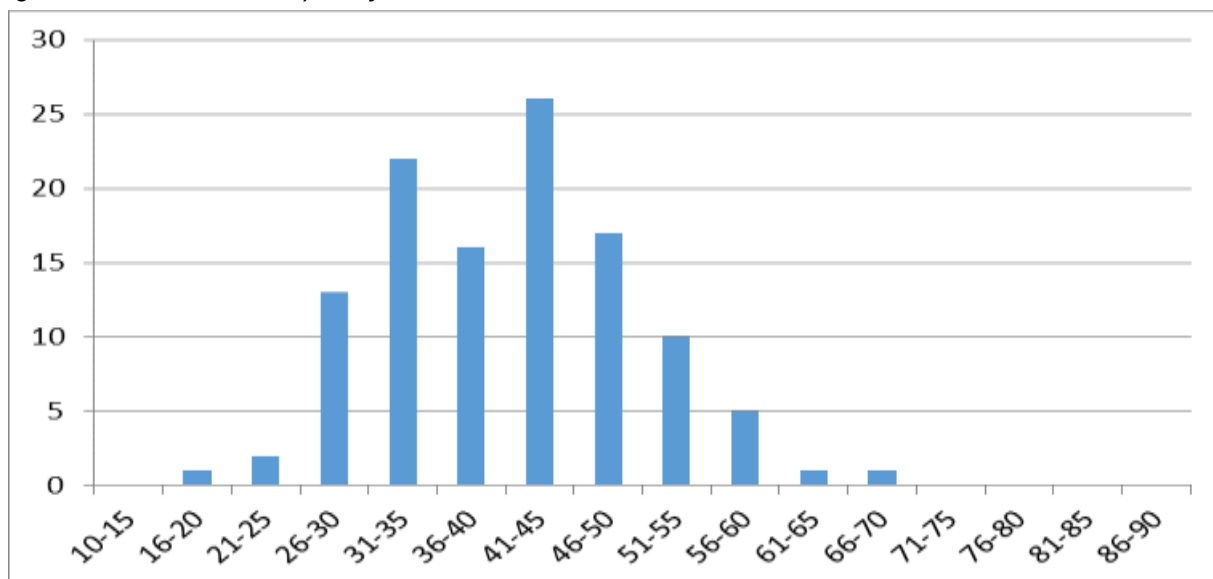
SCHOOL	Total Qualified	Form 3	Form 4	Form 5
Couva East Secondary School	7	0	0	7
Fatima College	11	0	0	11
Hillview College	3	0	3	0
Holy Faith Convent Penal	3	0	0	3
Iere High School	11	2	0	9
Lakshmi Girls' Hindu College	11	0	0	11
Naparima College	11	0	3	8
Naparima Girls' High School	9	0	0	9
Presentation College San Fernando	4	1	3	0
Presentation College, Chaguanas	20	1	9	10
Queen's Royal College	2	0	0	2
San Fernando Central Secondary School	4	0	0	4
St. Augustine Girls' High School	23	0	4	19
St. Joseph's Convent Port of Spain	15	0	4	11
St. Joseph's Convent San Fernando	5	0	1	4
SWAHA Hindu College	1	0	0	1
Vessigny Secondary School	1	0	0	1
Vishnu Boys' Hindu College	1	0	0	1
Waterloo Secondary School	9	0	9	0
<b>TOTAL</b>	<b>151</b>	<b>4</b>	<b>36</b>	<b>111</b>

Table 3: Top Performing Students for Level A Examinations

FORM	SCHOOL	SCORE (%)	PLACE
3	Iere High School	70	1 <sup>st</sup>
	Presentation College, San Fernando	65	2 <sup>nd</sup>
	Iere High School	62	3 <sup>rd</sup>
4	Hillview College	83	1 <sup>st</sup>
	Naparima College	82	2 <sup>nd</sup>
	Waterloo Secondary School	82	2 <sup>nd</sup>
5	Queen's Royal College	90	1 <sup>st</sup>
	Couva East Secondary School	88	2 <sup>nd</sup>
	Couva East Secondary School	88	2 <sup>nd</sup>
Overall Level A Performance	Queen's Royal College	90	1 <sup>st</sup>
	Couva East Secondary School	88	2 <sup>nd</sup>
	Couva East Secondary School	88	2 <sup>nd</sup>

## Level A - Analysis

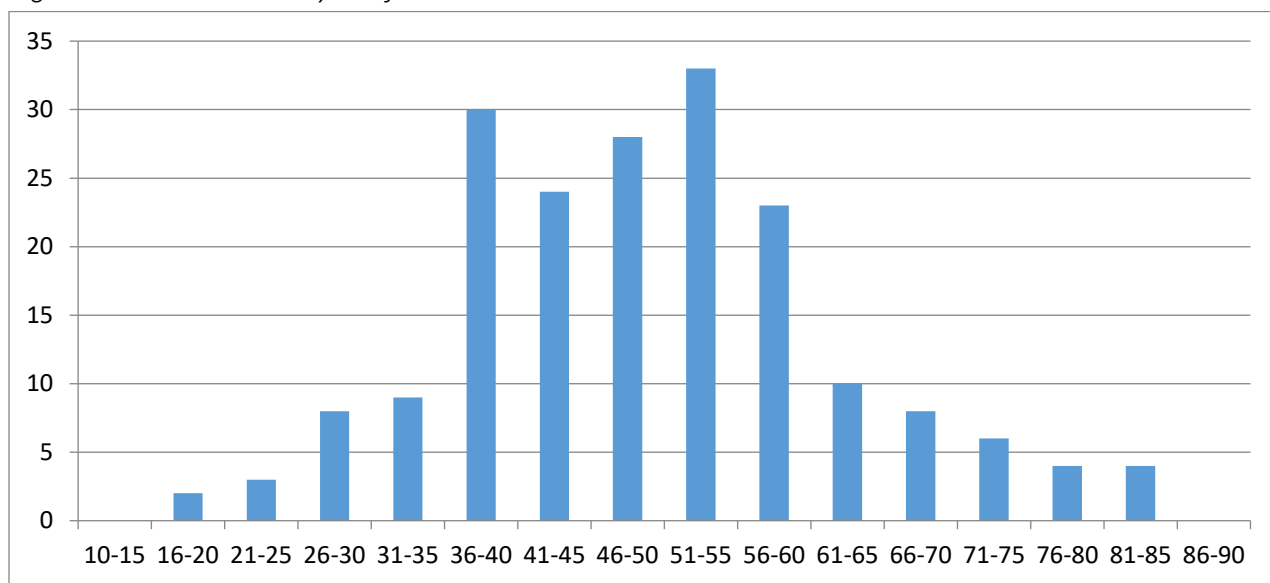
Figure 1: Statistical Analysis of Level A Examination – Form 3



Mean = 41.07

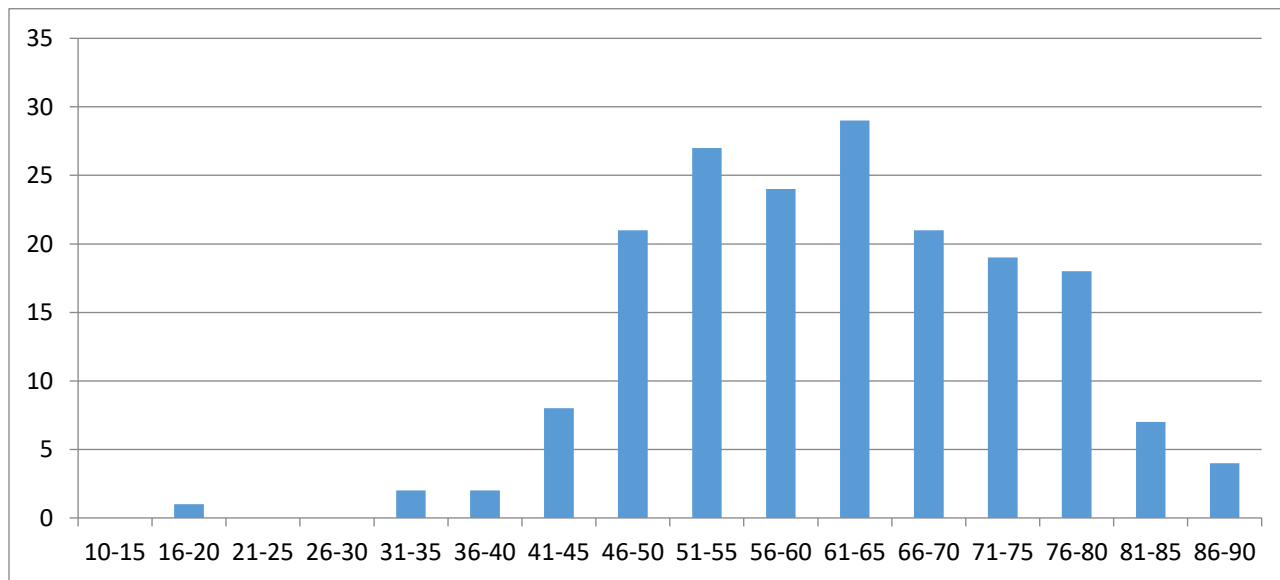
Standard Deviation = 9.33

Figure 2: Statistical Analysis of Level A Examination – Form 4



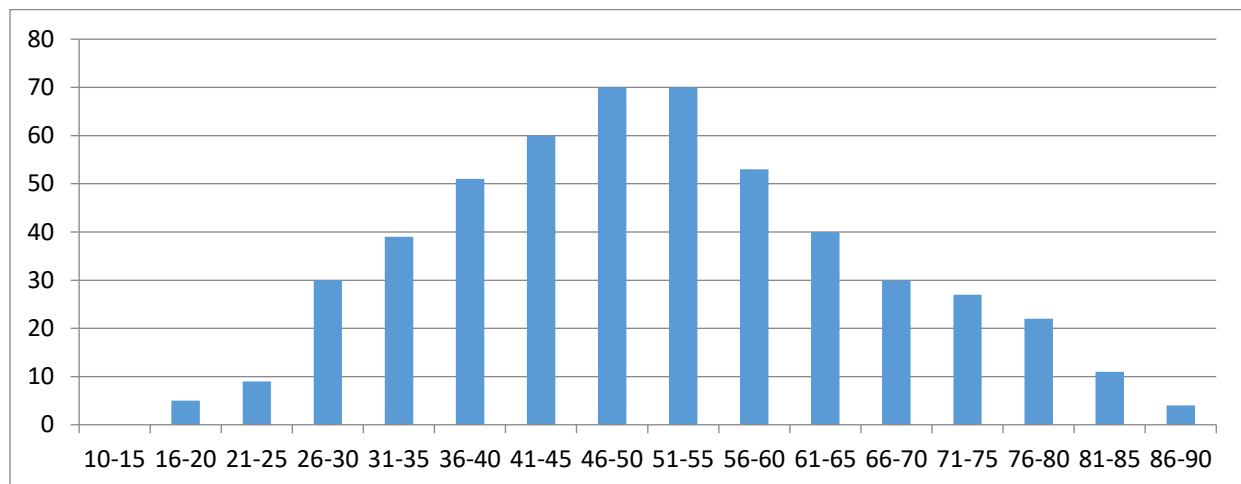
Mean = 49.58  
 Standard Deviation = 12.94

Figure 3: Statistical Analysis of Level A Examination – Form 5



Mean = 62.30  
 Standard Deviation = 12.27

Figure 4: Statistical Analysis of Level A Examination – All Forms



Mean = 51.39

Standard Deviation = 14.97

## LEVEL B

Similarly to Level A, the overall performance of the Level B examination also resembled a normal distribution, albeit over a much narrower range of scores; with the highest mark being 65 %. This is to be expected. These are the ones who will eventually qualify to represent Trinidad and Tobago at the International Chemistry Olympiad, where the examinations are at a much higher level than that encountered during the course of a typical secondary school curriculum. While our exam is roughly based on the CAPE Syllabus, it is assessed at a higher level, requiring the students to demonstrate applicative and extrapolative skills.

157 students were selected to advance to Round 2 Level B. It was intended to select only the top 150 students for the second round, however, with the occurrences of several tied scores, this number was adjusted. We were quite impressed that almost half of those advancing were from lower 6 (69 students).

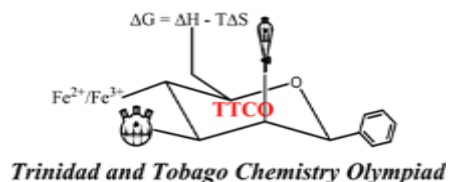


Table 4: Summary of qualifiers for Round 2 Examinations – Level B

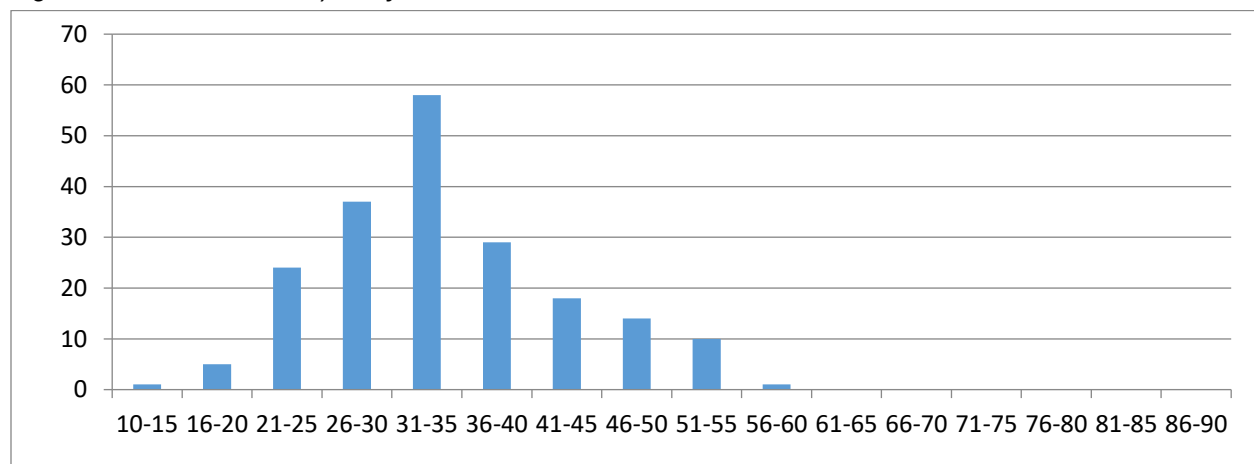
SCHOOL	Total Qualified	Lower 6	Upper 6
Bishop's Anstey/Trinity College East	5	1	4
Debe High School	4	4	0
Fatima College	8	5	3
Holy Faith Convent Couva	4	2	2
Iere High School	9	0	9
Lakshmi Girls' High School	7	3	4
Naparima College	14	5	9
Naparima Girls' High School	12	4	8
Pre-Science	4	4	0
Presentation College San Fernando	3	0	3
Presentation College, Chaguanas	22	14	8
Queen's Royal College	2	1	1
San Fernando Central Secondary School	2	0	2
St Augustine Girls' High School	24	8	16
St Benedict's College	3	0	3
St Francois Girls' College	4	3	1
St George's College	3	3	0
St Joseph's Convent Port of Spain	16	8	8
St Joseph's Convent San Fernando	4	2	2
SWAHA Hindu College	2	1	1
Vishnu Boys' High School	5	1	4
<b>TOTAL</b>	<b>157</b>	<b>69</b>	<b>88</b>

Table 5: Top Performing Students for Level B Examinations

FORM	SCHOOL	SCORE (%)	PLACE
Lower 6	Lakshmi Girls' Hindu College	58	1 <sup>st</sup>
	Naparima College	55	2 <sup>nd</sup>
	Naparima College	53	3 <sup>rd</sup>
	Naparima College	53	3 <sup>rd</sup>
	Queen's Royal College	53	3 <sup>rd</sup>
Upper 6	Naparima College	65	1 <sup>st</sup>
	Presentation College, Chaguanas	62	2 <sup>nd</sup>
	St Augustine Girls' High School	60	3 <sup>rd</sup>
	Fatima College	60	3 <sup>rd</sup>
	Queen's Royal College	60	3 <sup>rd</sup>
Overall Level B Performance	Naparima College	65	1 <sup>st</sup>
	Presentation College, Chaguanas	62	2 <sup>nd</sup>
	St Augustine Girls' High School	60	3 <sup>rd</sup>
	Fatima College	60	3 <sup>rd</sup>
	Queen's Royal College	60	3 <sup>rd</sup>

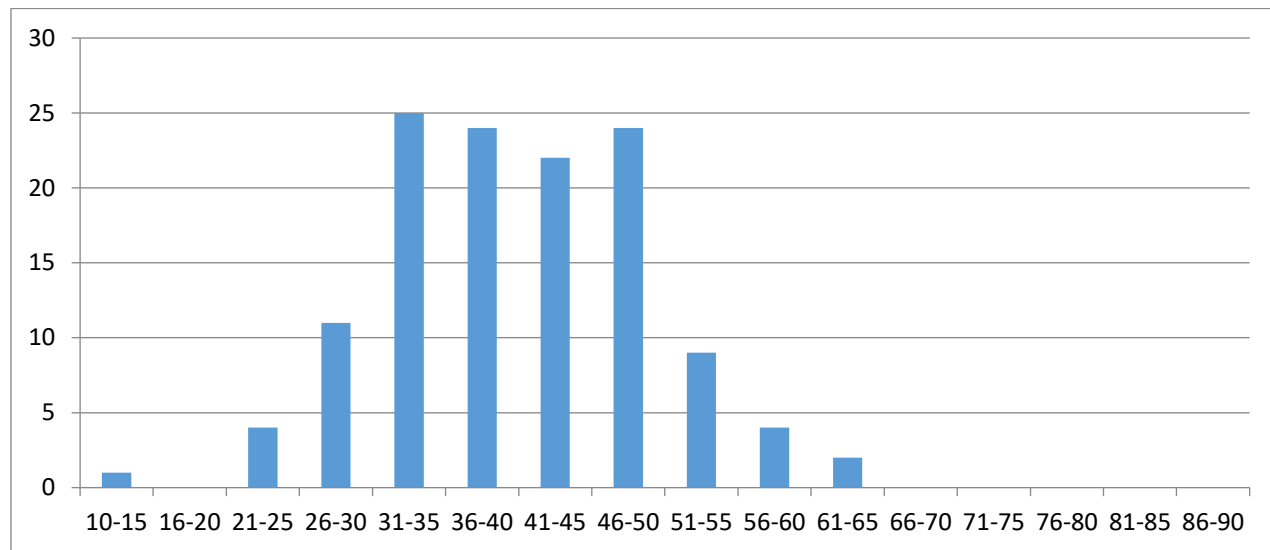
## Level B – Analysis

Figure 5: Statistical Analysis of Level B Examination – Form 6 Lower



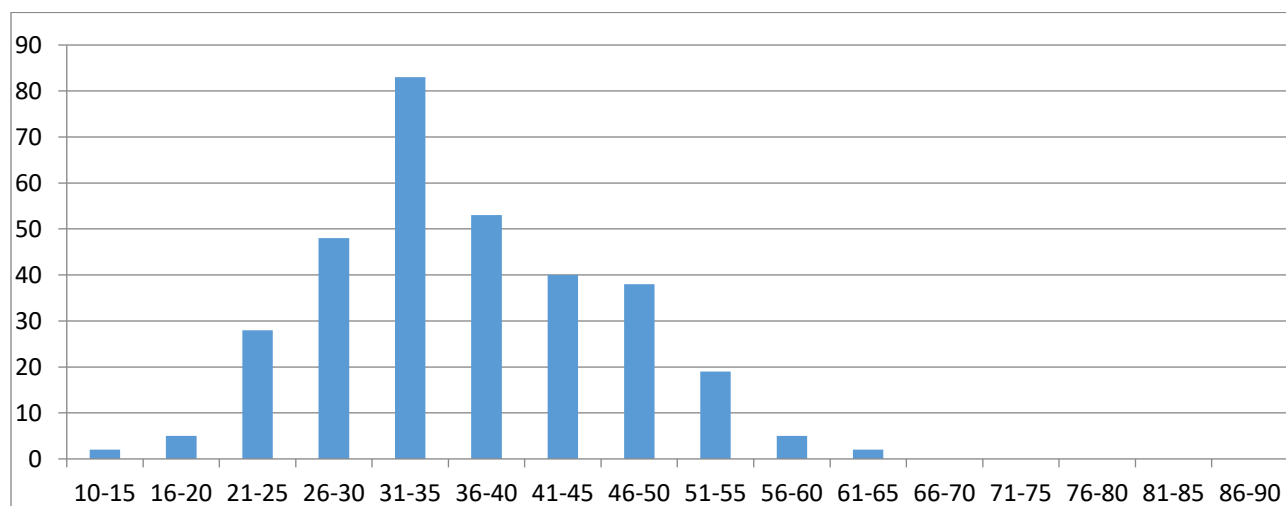
Mean = 34.62  
 Standard Deviation = 8.49

Figure 6: Statistical Analysis of Level B Examination – Form 6 Upper



Mean = 40.65  
 Standard Deviation = 9.09

Figure 7: Statistical Analysis of Level B Examination – All Forms



Mean = 36.98  
 Standard Deviation = 9.20





## ROUND 2 EXAMINATIONS

Students who have progressed to level 2 are invited to write this examination on February 12<sup>th</sup>, 2020. Examinations will be conducted at two (2) centers; Naparima College in the south and UWI in the north. All examinations will be three (3) hours long and will start at 9am and end at 12 noon. The level 2 examinations will consist of Structured Questions and Essays. Details of the Level 2 examinations will be sent in a subsequent e-mail.

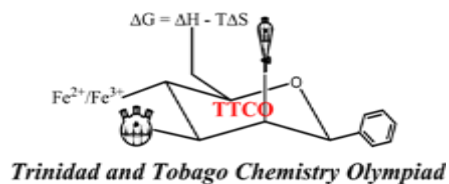
## CONCLUSION

The progression of the lower forms (3, 4, and lower 6) at their respective levels to the next round, augers well for the state of Chemistry in Trinidad and Tobago and the performance in future Olympiads.

For the 2020/2021 Olympiad and beyond, the TTCO is considering having three (3) levels instead of two (2), allowing the younger students an opportunity to participate.

- Level A - Forms 2 and 3
- Level B - Forms 4 and 5
- Level C - Lower 6 and Upper 6

Official individual school assessments, prize details and information on Round 2 of the 2019/2020 TTCO will be forthcoming.



The TTCO wishes to once more thank all Students, Teachers and Schools for their participation and extends a hearty CONGRATULATIONS to ALL Participants!

**CONGRATULATIONS!!!**

Dr. Nigel Jalsa

Dr. Terry Mohammed

Mrs. Laura Rambaran-Seepersad

*TTCO Committee Signatures*

13<sup>th</sup> December, 2019.

**END OF REPORT**