21st ANMC GUIDEBOOK

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The organizers reserve the right to change or add to the rules and regulations if such addition or changes are required at any time.

NATIONAL MATHEMATICS COMPETITION

We are pleased to inform you about the upcoming traditional feast of mathematics for pupils, teachers, and parents. It is the 21st edition of the Annual National Mathematics Competition for Primary 5&6 pupils and JSS1-3 students organized by two of the leading institutions of Nigeria in the area of education: Nigerian Tulip International Colleges (NTIC) and the National Mathematical Center (NMC).

NTIC and NMC are putting a great effort into seeding the love of mathematics in pupils' hearts. However, they are not the only ones who have branded this excellent product; we owe thousands of pupils, teachers, and parents all around Nigeria who are contributing to this festival with their efforts and enthusiasm. We kindly applaud every individual who adopts and supports this competition. Thank you, Nigeria!

In this booklet, you will find some detailed information about the competition. There will be two sections in this booklet. Section one contains rules and regulations for the primary version and section two the for jss3 version. We kindly request you read through this booklet and find answers to your questions about the event.

SECTION I

21st Annual National Mathematics Competition for Primary 5&6

Organized by

Nigerian Tulip International Colleges & National Mathematical Center

Format of the competition for Primary 5&6:

It is worth reminding you that this level of competition is only for primary 5&6 pupils from public or private primary schools all around Nigeria.

Pupils can register via www.ntic.edu.ng or buy examination cards through contact numbers placed on handbills and other outlets close to them.

The age limit is between 10 and 12 years old (including 10 and 12 years).

All students are to sit for the exam in zones where their schools are registered.
Type and number of questions: Both stages of this competition are objective-type examinations involving 75 questions distributed as follows: 35 algebra, 15 geometry, and 25 aptitudes. The questions are prepared according to the Nigerian primary school syllabus but at a more complex level.

Duration of the examination: A total of 120 minutes is allotted to answer all the questions.

Dates and venues for the stages and award-giving ceremony:

21st ANMC   1st Round: 10 February 2024,   in various states of Nigeria

21st ANMC   2nd Round: 4-5-6th April 2024   NTIC Abuja and Kano

21st ANMC   Award Giving Ceremony: 6th April 2024   NTIC Abuja and Kano

Stages of the competition for Primary 5&6 Pupils:

1st Stage:

The first stage of the annual competition holds simultaneously in various states of the federation, including FCT. All primary 5&6 pupils from public or private primary schools may participate in this competition. Each participant must come with an online registration slip or a copy of the Examination Card filled out completely to the exam hall (a detached copy from the registration form is sold by NTIC and NMC officers or other responsible people from schools or ministries at N3500.

First-round exam centers are indicated table below properly for each zone. A student cannot change his/her zone at the first and final stages.

Zones	States	1st Round Exam Centers
South ZONE	Abuja, Anambra, Akwa-Ibom, Cross River, Abia, Rivers, Imo, Enugu, Bayelsa, Ebonyi, Lagos, Ogun, Osun, Ondo, Oyo, Ekiti, Delta, Edo, Kwara	ABIA, ANAMBRA, BAYELSA, CROSS RIVER, DELTA, EBONYI, EDO, ENUGU, FCT, IMO, KWARA, LAGOS, OGUN, ONDO, OSUN, OYO, RIVERS
North ZONE	Kaduna, Niger, Plateau, Bauchi, Nasarawa, Kogi, Benue, Adamawa, Taraba, Kano, Zamfara, Sokoto, Kebbi, Katsina, Yobe, Borno, Gombe, Jigawa	ADAMAWA, BAUCHI , BENUE, GOMBE, KADUNA, KANO, KATSINA, KOGI, NASARAWA, PLATEAU, SOKOTO, YOBE

RULES for 21th ANMC for Primary 5&6 Pupils:

1-There will be various exam centers for two different zones.

2-The registration shall be on a first-come, first-served basis.

3-There will be two zones (North Zone: Kano State and South Zone: Abuja State) for the 2nd Round.

4- The top 15 pupils from the 1st Round of the 21st ANMC will qualify for the second round. Additionally, any other best student of the state who is not ranked in top 15 will also be invited for the second round.

5-Qualified pupils of the 1st Round of 21th ANMC will be awarded based on their 2nd Round results. There will not be separate awards or prizes for the 1st Round qualifiers.

6-Exam Cards may be purchased from state coordinators or NTIC Schools (at N3500) or visit www.ntic.edu.ng for online registration

Pupils are expected to come for the exam in their school uniforms.

You may get details of the venues for the exam from any of NTIC branches, or you may contact an officer from NMC and Ministries of Education across the states.

Pupils will be asked to shade the necessary information and their answers into answer sheets provided for them at the exam center, using pencils only. Since the answer sheets are in optic format, the pupils may not be used to shading the answers and the necessary information properly. **That is why we request the assistance of the teachers and the parents in teaching them how to shade into the optic forms properly.** Please, check page 13 of this booklet for sample shading. The reason for using the uncommon optic forms is to be able to mark the sheets and deliver the results within the shortest time, despite the fact that over 10,000 pupils are participating in this competition.

We expect to finalize the marking of the scripts within **five weeks** after the first stage. Please, note that the results will ONLY be announced on **the official website of the school (**www.ntic.edu.ng**)**

The results of the 1st Round will be announced on the website 35 days after the state level exam.

2nd Stage (Final Level) for Primary 5&6 Pupils:

Although the winners will be given calls (on the number provided in the examination form) to be informed about the final stage, it is the winners' responsibility to check and learn about the results on time from our website. In the case where a winner does not come for the final stage for whatsoever reason, he/she cannot claim to proceed to the final stage.

All qualified pupils for the second stage are to bring their birth certificate, letter of identification and 2023-2024 academic session 1st Term report card from their schools.

In a situation whereby a candidate did not come with any of the certificates mentioned above, such candidate will automatically be disqualified from participating in the second round.

The final stage of ANMC will be conducted in 2 different locations: Abuja and Kano. The states and the centers have been arranged as follows:

Zones	States	Centers for Final Stage
South ZONE	Abuja, Anambra, Akwa-Ibom, Cross River, Abia, Rivers, Imo, Enugu, Bayelsa, Ebonyi, Lagos, Ogun, Osun, Ondo, Oyo, Ekiti, Delta, Edo, Kwara	NTIC, Abuja
North ZONE	Kaduna, Niger, Plateau, Bauchi, Nasarawa, Kogi, Benue, Adamawa, Taraba, Kano, Zamfara, Sokoto, Kebbi, Katsina, Yobe, Borno, Gombe, Jigawa	NTIC, Kano

Each pupil is expected to be accompanied by one teacher. If two or more pupils come from the same school, only one teacher must accompany them. If parents or more teachers want to come to the event, they have to provide their accommodation and transportation fare.

Pupils, their trainers, and schools will be awarded according to pages 6 & 7. The accommodation and public transport (by road) fee (to and from) for each winner and only one teacher from the winning school will be paid.

1st Round qualifiers must arrive at the zones mentioned above on 4th April 2024.

Only the winners of the zone level will sit for the final stage of the examination the following morning (5th April 2024). They will have 120 minutes for 75 objective questions.

They will be able to return to their destinations after the Award Giving Ceremony on 6th April or 7th April 2024.

Awards and Prizes for Primary 5&6 Pupils:

ANMC 2nd ROUND PRIZES FOR PUPILS

1. 6 gold, 6 silver and 8 bronze medals will be given in each zone.
2. The best six pupils (gold medalists) from each zone will get a 100% scholarship (including tuition, feeding and hostel except other fees like books and uniforms).
3. The pupils from 7th to 12th position (silver medalists) from each zone will get a 100% tuition scholarship.
4. The pupils from 13th to 20th position (bronze medalists) from each zone will get a 50% tuition scholarship.
5. The pupil securing 21st and onward positions of the second round qualifiers from each zone will get a 25% tuition scholarship.
6. The teachers of the pupils from each zone will receive a cash prize according to the 2nd Round results as indicated on the next page.
7. The best three schools from each zone will be given special prizes. (One school can get only the highest deserved price)
8. All first-round qualifiers from each zone will be given certificates of merit.
9. The schools and teachers of the first-round qualifiers from each zone will be awarded certificates of merit.
10. The schools' of first-round qualifiers from each zone will be awarded plaques.

Scholarships are available only at Nigerian Tulip International Colleges

Final Level Awards

POSITION	PUPIL'S CASH PRIZE	TEACHER'S CASH PRIZE	PUPIL'S MEDAL
1st	₦ 150,000	₦ 150,000	GOLD
2nd	₦ 125,000	₦ 125,000	GOLD
3rd	₦ 100,000	₦ 100,000	GOLD
4th	₦ 75,000	₦ 75,000	GOLD
5th	₦ 50,000	₦ 50,000	GOLD
6th	₦ 25,000	₦ 25,000	GOLD
7th-12th			SILVER
13th-20th			BRONZE

AWARDS FOR THE BEST THREE SCHOOLS:

Awards for the best three schools (for each zone) are Desktop Computer, Tablet and Printer, respectively, based on the 2nd Round results.

The organizers reserve the right to change or add to the rules and regulations if such additions or changes are required at any time.

SECTION II

National Mathematics Competition for Junior Secondary School Students (JSS)

Organized by

Nigerian Tulip International Colleges & National Mathematical Center

The Aims and Objectives of the Scholarship Scheme

The scholarship scheme is for Senior Secondary students, and it has been put together to:

- Contribute to the educational development of our society and country,
- Help strengthen the accomplishment of gifted students' dreams,
- Represent the school and country in national and international competitions,
- Produce champions in various external exams like WAEC, JAMB, SAT, etc.

Competition Format for JSS students:

It is worth reminding you that this competition is only for JSS pupils from public or private schools all around Nigeria. All junior secondary students will participate in the same exam; there will not be separate exams for each junior grade level.

Pupils can register via www.ntic.edu.ng or buy examination cards through contact numbers placed on handbills and other outlets close to them.

The age limit is between 13 – 15 years old (including 13 and 15 years).

Only JSS-1, JSS-2, and JSS-3 students are allowed to sit for this exam.

All students are to sit for the exam in zones where their schools are registered.

Type and number of questions: The first round of this competition is an objective-type examination involving 75 questions distributed as follows: 35 algebra, 15 geometry, and 25 aptitudes. The questions are prepared according to the Nigerian junior secondary school syllabus but at a harder level.

Duration of the examination: A total of 120 minutes is allotted to answer all the questions.

Dates and venues for the stages and award-giving ceremony:

21th ANMC   1st Round: 10th February 2024,   in various state of Nigeria

21th ANMC   2nd Round: 3-4-5-6th April 2024   NTIC Abuja

21th ANMC   Award Giving Ceremony: 6th April 2024   NTIC Abuja

The organizers reserve the right to change or add to the rules and regulations if such additions or changes are required at any time.

Stages of the competition for JSS:

1st Stage :

The first stage of the annual competition is held simultaneously in various states of the federation, including FCT. All JSS-1 to JSS-3 students from public or private schools may participate in this competition. Each participant must come with an online registration slip or a copy of the Examination Card filled out completely to the exam hall (a detached copy from the registration form is sold by NTIC and NMC officers or other responsible people from schools or ministries at N3500.

First-round exam centers are indicated table below properly for each zone. A student can not change his/her zone in the first stage and the final stage.

Zones	States	1st Round Exam Centers
South ZONE	Abuja, Anambra, Akwa-Ibom, Cross River, Abia, Rivers, Imo, Enugu, Bayelsa, Ebonyi, Lagos, Ogun, Osun, Ondo, Oyo, Ekiti, Delta, Edo, Kwara	ABIA, ANAMBRA, BAYELSA, CROSS RIVER, DELTA, EBONYI, EDO, ENUGU, FCT, IMO, KWARA, LAGOS, OGUN, ONDO, OSUN, OYO, RIVERS
North ZONE	Kaduna, Niger, Plateau, Bauchi, Nasarawa, Kogi, Benue, Adamawa, Taraba, Kano, Zamfara, Sokoto, Kebbi, Katsina, Yobe, Borno, Gombe, Jigawa	ADAMAWA, BAUCHI Primary, BENUE, GOMBE, KADUNA, KANO, KATSINA, KOGI, NASARAWA, PLATEAU, SOKOTO, YOBE

The Rules of Junior ANMC for JSS1-2-3:

1- There will be various exam centers for two different zones.

2-The registration shall be on a first-come, first-served basis.

3-There will be one zone for the 2nd round, and this zone will be in Abuja NTIC.

4-The minimum required correct answer is 65 (out of 75 questions) to be a qualified student in the 1st round, however, the committee is authorized to decide on the number of qualified students based on the results.

5-The qualified students of the 1st Round of Junior ANMC students will be called for the 2nd Round. In the 2nd Round, the qualified students will be tested for their Mathematics, English, and Physics knowledge. The students' learning skills level on the new content and their overall aptitude will be assessed in this round.

6-Exam Cards may be purchased from state coordinators or NTIC Schools. (at N3500) or visit www.ntic.edu.ng for online registration

Students are expected to come for the exam in their school uniforms.

You can get details of the venues for the exam from any of our school branches, or you may contact an officer from NMC and Ministries of Education across the states.

Students will be asked to shade the necessary information and their answers into answer sheets provided for them at the exam center, using pencils only. Since the answer sheets are in optic format, the pupils may not be used to shading the answers and the necessary information properly. **That is why we request the assistance of the teachers and the parents in teaching them how to shade into the optic forms properly.** Please, check page 13 of this booklet for sample shading. The reason for using the uncommon optic forms is to be able to mark the sheets and deliver the results within the shortest time, despite the fact that over 10,000 pupils/students are participating in this competition.

We expect to finalize the marking of the scripts within two months after the first stage. Please, note that the results will ONLY be announced on **the official website of the school (www.ntic.edu.ng)**
The results of 1st Round will be announced on the website 60 days after the state level.

2nd Stage (Final Level):

Although the winners will be given calls (on the number provided in the examination form) to be informed about the final stage, it is the winners' responsibility to check and learn about the results on time from our website. In the case where a winner does not come for the final stage for whatsoever reason, he/she cannot claim to proceed to the final stage.

All qualified students for the second stage are to bring their birth certificates, letters of identification, and 2023-2024 academic session 1st Term report cards from their schools.

In a situation whereby a candidate did not come with any of the certificates mentioned above, such a candidate will automatically be disqualified from participating in the second round.

The final stage of Junior ANMC will be conducted only in Abuja.
Each student is expected to be accompanied by one teacher. If two or more students come from the same school, only one teacher must accompany them.
Students and their trainers will be awarded according to page 11. The accommodation and public transport (by road) fee (to and from) for each winner and only one teacher from the winning school will be paid.
1st round winners must arrive at NTIC Abuja on 2th April 2024.
In the 2nd Round, the qualified students will be tested for their Mathematics, English, and Physics knowledge. The students' learning skills level on the new content and their overall aptitude will be assessed on the 3th, 4th, and 5th of April.

They will be able to return to their destinations after the Award Giving Ceremony on 6th April or 7th April 2024.

Awards and Prizes of Junior ANMC:

2nd STAGE PRIZES FOR JSS STUDENTS

1. The Maximum of 6 Junior ANMC winners and their trainers will receive the following cash prizes.
2. The maximum of 20 students and their teachers will receive certificates of achievement.
3. Maximum best 6 students of the 2nd Round will be offered a full scholarship (including tuition, feeding, and hostel except for other fees like books and uniforms) and the maximum next immediate 14 students will be offered various tuition fee scholarships. All these scholarships will be distributed at various NTIC branches. The organizing committee will do the placement of the winners.
4. Scholarship awards for upper years will begin in the following academic year. For example, a student in JSS2 who receives a scholarship will start receiving its benefits in JSS3.
5. The decision-making of the scholarships to participating students and their placements solely belongs to the organizing committee of Junior ANMC.
6. The organizers reserve the right to change or add to the rules and regulations if such addition or changes are required.
7. The scholarships are available only at Nigerian Tulip International Colleges.

Final Level Awards

POSITION	PUPIL'S CASH PRIZE	TEACHER'S CASH PRIZE	PUPIL'S MEDAL
1st	₦ 150,000	₦ 150,000	GOLD
2nd	₦ 125,000	₦ 125,000	GOLD
3rd	₦ 100,000	₦ 100,000	GOLD
4th	₦ 75,000	₦ 75,000	GOLD
5th	₦ 50,000	₦ 50,000	GOLD
6th	₦ 25,000	₦ 25,000	GOLD
7th-12th			SILVER
13th-20th			BRONZE

The organizers reserve the right to change or add to the rules and regulations if such additions or changes are required at any time.

HOW TO CALCULATE THE SCORE OF A PARTICIPANT

The score is calculated differently in every zone.

It is calculated according to the section average of the zone.

The score of a participant is calculated with the following formula:

$$Score = \frac{(200 - Max\ Rough\ Score + Rough\ Score)}{2}$$

Rough Score = A x Coef of Algebra + G x Coef of Geometry + Apt x Coef of Apt

A, G, and Apt represent the number of correct answers of the participant in Algebra, Geometry and Aptitude, respectively.

That means the number of correct answers in Algebra, Geometry and Aptitude is multiplied by the coefficients of the section and then added together to obtain the Rough Score.

The coefficients in each section (Algebra, Geometry and Aptitude) are calculated as follows:

$$Coefficient\ of\ the\ \sec tion = \frac{Number\ of\ questions}{General\ Average}$$

For example, in the 15th edition of the competition, the General Averages in each section were as follows:

Algebra Average = 17.28 over 35

Geometry Average = 5.95 over 15

Aptitude Average = 9.47 over 25

According to this, coefficients are calculated as follows:

$$Coefficient\ of\ the\ section = \frac{Number\ of\ questions}{General\ Average}$$

$$Coefficient\ of\ Geometry = \frac{15}{5.95} = 2.521$$

$$Coefficient\ of\ Aptitude = \frac{25}{9.47} = 2.64$$

An example: Assuming that a participant got 26 correct answers in Algebra, 13 correct answers in Geometry and 14 correct answers in Aptitude, then his/her rough score will be calculated as:
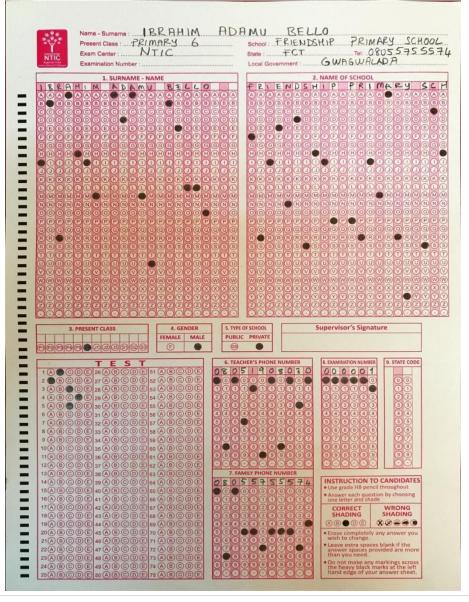
26 × 2.0255 + 13 × 2.521 + 14 × 2.64 = 122.396 (Approximately)

Finally, his/her Score is calculated as $\frac{(200 - 174.7075 + 122.396)}{2} \cong 73.844$

PROPER SHADING OF THE ANSWER SHEET (OPTIC FORM):

For fast and correct results, the pupils are expected to shade properly. From experience, we have observed that most pupils are not be used to shading optic forms. Even after being instructed by their invigilators on proper shading, many of them still shade wrongly. This challenge has been responsible for delays in releasing the result. For this reason, in this edition, we will use an improved version of the optic forms that will enable us to mark and release the results as soon as possible. However, we still request the help of teachers and parents to teach pupils how to shade properly before coming for the exam. You will see a SAMPLE of proper shading on the optic form. Teachers and parents are requested to train the pupils about how to shade properly. In case of wrong shading, we do not assume any responsibility. The pupils will get the results according to how they shaded.

Below is a sample of how to shade an optic form. The sample is hypothetically illustrated by a boy named IBRAHIM ADAMU BELLO, a Primary 6 pupil of the school FRIENDSHIP PRIMARY SCHOOL, GWAGWALADA, FCT.

Now, let us see in detail.

At the top of the optic form, there is a part where the pupil will write, in block letters, his/her full name, his/her present class, name of his/her school, state and local government where he/she lives and a number that we can contact him with.

He/she will insert the letters of his/her full name in the boxes such that every box may have only a single letter. 'I' into the first box, 'B' into the second box, 'R' into the third and so on. (As the sample name is I-B-R-A-H-I-M)

Then, he/she should find the corresponding letters under every letter. He/she should find 'I' under 'I' and shade it, 'B' under 'B' and shade it and so on. While filling out, he/she should fill inside the circle completely without overflowing.

In this part, the pupil is to shade his/her school (but not the school he/she is taking the Maths Competition). In the same way, he/she shades his/her school.

Pupils from the same school should code their school in the same way. For example, the pupils from Friendship Primary School may all code it as Friendship Primary Sch.

It is not proper to have the name of the same school written in different versions like this: Friendship Pry Sch, Friendship Pry School, Friendship N/P School, FNPS and so on. Thus, we need the assistance of the teachers to decide on a single version of the school's name and teach the pupils to code that version before coming for the exam.

The pupil should also shade his/her present class, gender and the type of the school (i.e., Public or Private)

At this part, the examination number of the pupil has been shaded already. **PUPILS must not touch this part!**

The pupils should be asked to record their examination number when their optic form is given to them. It will assist them in receiving their results in a very short time.

At the PHONE NUMBER part, he/she will insert the phone numbers of his/her parents as well as the teacher's phone number. Pupils can always make reference to their examination card for their teacher's phone number in case they do not know it offhand.

Also, remember that every box may have only a single number. Then, he/she should find the corresponding number under every number. He/she should find '0' under '0' and shade it, '8' under '8' and shade it and so on. While filling out, he/she should fill in inside the circle completely without overflowing

At the TEST part, the pupil is expected to shade the answers. There are numbers from 1 to 75, as shown above. For every question, there are letters from A to E. The students should shade their answers to the corresponding numbers. For example, if the answer to question 1 is B, the choice B is to be shaded for question 1. Since there are 75 questions in the examination, only the questions from 1 to 75 will be shaded.

Note that, if a pupil shades more than one answer in a line, his answer will be regarded as a wrong answer. In case he changes his mind about one of his answers, he should erase the previous one completely by using a soft eraser before marking the new choice.

Note that machines are evaluating the optic forms. Thus, the pupils should be aware that the machine cannot read their results if:

- they use biros instead of pencils,
- they shade more than one answer for any question,
- they do not make proper shading.

Optionally, all the students are advised to do shading practice on www.ntic.edu.ng

Video "How to Shade Answer Sheet in ANMC" is available at www.ntic.edu.ng