

# NATIONAL OLYMPIAD STUDENT OF THE YEAR AWARD

Celebrating Excellence in Educational Leadership

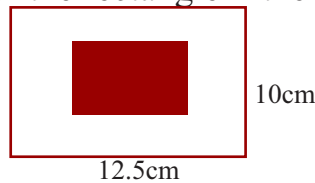
## 2023 Screening Examination Guide

**Duration:** 90 Minutes

**ATTEMPT ALL QUESTIONS**

**PRIMARY  
CATEGORY**

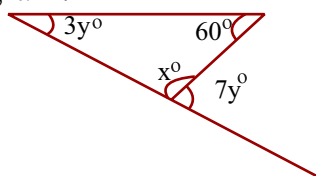
- An airplane arrived Kano international airport at exactly 6.45pm after flying for 21 hours 50 minutes from an Asian country. What was the departure time of the aircraft?  
(A) 9.55pm (B) 4.35pm (C) 3.50pm (D) 8.55pm.
- The average speed of a school bus traveling in the last five hours is 20km/h. Calculate the distance it had covered in the last quarter of an hour.  
(A) 5km (B) 100km (C) 25km (D) 4km
- Calculate the area of the shaded region of the rectangle if the area of the unshaded region is  $75\text{cm}^2$   
(A)  $200\text{cm}^2$   
(B)  $50\text{cm}^2$   
(C)  $25\text{cm}^2$   
(D)  $125\text{cm}^2$



- A pupil who scored 36 points won the previous Royal Math Olympiad and got 90% of the total marks awarded. Calculate the point scored by Emeka if he got 50% in the Olympiad exam.  
(A) 18 points (B) 40 points (C) 20 points (D) 12 points
- A notebook costs ₦k and a pen costs ₦25 less, how much is the cost of 2 notebooks and 3 pens?  
(A) ₦5k + 75 (B) ₦5k - 25 (C) ₦k - 75 (D) ₦5k - 75
- The selling price of a pencil is ₦6. If a dozen of pencil costs ₦60, how much will Mrs. Okoro profit after selling 10 dozens?  
(A) ₦120 (B) ₦12 (C) ₦100 (D) ₦72
- What fraction of the circle is shaded if all the sectors are equal?  
(A)  $1/6$   
(B)  $1/3$   
(C)  $2/3$   
(D)  $1/2$



- Calculate the sum of the perfect squares between 1 and 30  
(A) 55 (B) 14 (C) 54 (D) 5
- Mr. Adekunle took a loan from a commercial bank to fund his son's education at an agreed interest rate of 15% per annum for 5 years. How much will he pay back at the end of the period if the value of the loan was ₦60,000?  
(A) ₦45,000 (B) ₦9,000 (C) ₦69,000 (D) ₦105,000
- The three angles in a triangle are in the ratio of 1:2:3. Identify the nature of the largest angle.  
(A) Right angle (B) Reflex angle (C) Obtuse angle (D) Acute angle
- The stop watch of a referee officiating a football match shows 0.007608 seconds. How many significant figure can be observed?  
(A) 7 S.f (B) 4 S.f (C) 3 S.f (D) 6 S.f.
- Calculate the value of  $x^\circ$  in the diagram.



13. Simplify  $2 \times (4 \times 3^2) - 6 + 8 - 9$

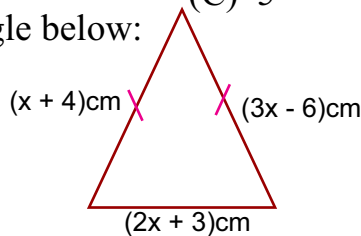
- (A) 7 (B) 14 (C) 5 (D) 11

14. If the Highest common factor (H.C.F) of 5 and 15 is 5, by how much is the least common multiple greater?

- (A) 10 (B) 15 (C) 5 (D) 20

15. Calculate the perimeter of the triangle below:

- (A) 15cm  
(B) 31cm  
(C) 27cm  
(D) 39cm.



16. A bottle 75% full contains 15cl of beverage. How many bottles will be required to fill a jar which has a volume of 5 liters?

- (A) 50 bottles (B) 30 bottles (C) 25 bottles (D) 75 bottles

17. Express in Figure: Sixteen million sixteen thousand and sixteen.

- (A) 16,001,616 (B) 16,160,016 (C) 160,016,016 (D) 16,016,016

18. Rearrange in ascending order: -0.6, 0.199, 0.9, -0.13 and 0.89

- (A) -0.6, -0.13, 0.199, 0.89, and 0.9. (B) -0.13, -0.6, 0.9, 0.89 and 0.199  
(C) 0.199, 0.89, 0.9, -0.13 and -0.6 (D) 0.9, 0.89, 0.199, -0.13 and -0.6

19. What is the value of k in the sequence: 12, 18, 30, 54, k, 198...

- (A) 78 (B) 102 (C) 121 (D) 98

20. Find the sum of 0.91 and the product of 1.7 and 3

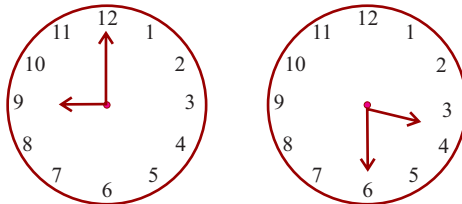
- (A) 5.1 (B) 5.04 (C) 6.01 (D) 14.2

21. The sum of 9 and a certain number is one and a half times the original number. Find the number.

- (A) 16 (B) 24 (C) 32 (D) 18

22. How many degrees will the hour hand of a wall clock move from 9 pm to 3.30 am?

- (A)  $195^\circ$   
(B)  $270^\circ$   
(C)  $125^\circ$   
(D)  $85^\circ$



23. The length of nine electric poles in a warehouse are 64m, 59m, 83m, 49m, 72m, 67m, 51m, 86m and 77m. Find the median height of the poles.

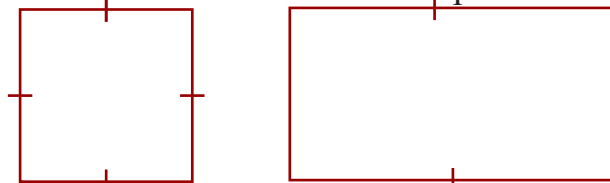
- (A) 59m (B) 67m (C) 49m. (D) 72m

24. Evaluate  $\text{DCXIX} + \text{MCXXI} - \text{CLX}$

- (A) MDLXX (B) MDCLXXX (C) MDLXXX (D) MCDLXXX

25. A square and a rectangle have the same area. Calculate the perimeter of the square if the rectangle measure 18cm x 8cm

- (A) 12 cm  
(B) 144cm  
(C) 36cm  
(D) 48cm



26. In a puzzle game, Bola gets 10 points for every correct response, while she loses 15 points for every wrong response. If she earned a total of 100 points after 20 attempts, how many times did she provide a correct response?

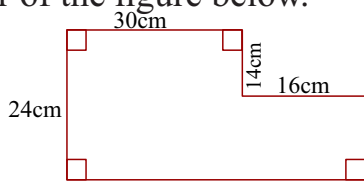
- (A) 16 (B) 10 (C) 14 (D) 12

27. Which of the following is incorrect according to 3D shapes?

- (A) Cylinder has 2 circular bases (B) Cone has 5 edges  
(C) Pentagonal pyramid has six vertices (D) Cube has 8 vertices

28. Calculate the perimeter of the figure below.

- (A) 94cm
- (B) 84cm
- (C) 140cm
- (D) 130cm



29. A set of quadruplets participating in the maiden edition of African Mathematics Olympiad has a combined age of 38 years and 8 months. Find the age of each pupil.  
 (A) 8 years 7months (B) 8 years 9 months (C) 10yrs and 2 months (D) 9 years 8months
30. If the lengths of a square field are increased by 12cm, by how many cm will the perimeter increase?  
 (A) 48cm (B) 12cm (C) 144cm (D) 24cm.

### CIVIC EDUCATION

31. Who was the first military head of State in Nigeria?  
 A. General Yakubu Gowon B. General Sani Abacha  
 C. General Muritala Mohammed D. Major Gen. Aguy Ironsi
32. The head of Local Government Council in Nigeria is .....  
 A. Administrator B. Councilor C. Chairman D. Commissioner
33. What is the major export commodity in Nigeria?  
 A. Cocoa B. Ruber C. Groundnut D. Petroleum
34. The title of the traditional ruler of Kano is .....  
 A. Oba B. Obi C. Emir D. Ooni
35. Which agency of government is responsible for printing and minting the Nigerian currency?  
 A. Central Bank B. Ministry of Finance C. Ministry of Trade D. National Assembly
36. The sum total of a people's way of life is .....  
 A. Ethnicity B. Religion C. Socialisation D. Culture
37. Who was the first president of Nigeria ?  
 A. Sir Ahmadu Bello B. Alhaji Shehu Shagari C. Chief M.K.O Abiola D. Dr. Nnamdi Azikiwe
38. Nigeria became an independent Nation in .....  
 A. 1914 B. 1926 C. 1960 D. 1966
39. We have traffic regulations in order to .....  
 A. Arrest road users B. Keep off drunkards from our roads  
 C. Maintain the roads in good shape D. Prevent carelessness and accidents on our roads
40. Which of the following is NOT a way of reducing unemployment?  
 A. Building of new industries B. Encouraging private investment  
 C. Investment more in agriculture D. Relying on foreign products
41. Which of the following is NOT a tier of government in Nigeria?  
 A. Federal government B. Regional government C. State government D. Local government
42. Which of the following is NOT a food crop?  
 A. Cotton B. Maize C. Millet D. Rice
43. The Alafin is the paramount ruler of ..... Kingdom  
 A. Benin B. Egba's C. Igbo D. Oyo
44. Iron ore can be found in ..... state .  
 A. Kaduna B. Kogi C. Lagos D. Sokoto
45. Which of the following ethnic group is NOT found in Nigeria ?  
 A. Gwari B. Hermite C. itsekiri D. Nupe

46. The Age grade system of association is commonly practiced by the ..... culture  
A. Ijaw                      B. Hausa                      C. Igbo                      D. Yoruba
47. The horse in the Nigerian Coat of Arm represents .....  
A. beauty                      B. dignity                      C. good soil                      D. strength
48. The primary responsibility of government is to .....  
A. protect lives and property B. provide free education C. punish criminals D. build roads
49. A student that is always absent from school is a .....  
A. Vandal                      B. Radical                      C. Thug                      D. Truant
50. Nigeria before independence was ruled by the ....  
A. British                      B. French                      C. German                      D. Italian
51. The main reason for the establishment of federal government collages (FGC) is to promote .....  
A. free education                      B. culture                      C. disintegration                      D. unity
52. Which organ of government has the power to impeach the President in Nigeria?  
A. Executive                      B. Judiciary                      C. Legislator                      D. Military
53. The current system of education in Nigeria is .....  
A. 5,4,4                      B. 6,3,4                      C. 7,3,4                      D. 9,3,4
54. The knowledge acquired within the family is .....education  
A. Elementary                      B. Formal                      C. Informal                      D. Inherited
55. Which of the following is NOT a negative behavior  
A. discrimination                      B. nepotism                      C. favouritism                      D. integrity
56. The white color in the Nigeria flag signifies .....  
A. commerce                      B. good soil                      C. agriculture                      D. peace
57. Which of the following is the main function of the Independent National Electoral Commission?  
A. conducting elections                      B. managing the country's population  
C. arresting financial offenders                      D. providing emergency materials
58. What is the full meaning of W.H.O?  
A. Whole Health Organization                      B. World Health Organization  
C. Women Health Organization                      D. Western Health Organization
59. Law enforcement Agencies in Nigeria includes the followings EXCEPT  
A. Army                      B. ICPC                      C. Militant                      D. NDLEA
60. At what age is one qualified to vote in an election in Nigeria?  
A. 16                      B. 18                      C. 20                      D. 30

### ENGLISH LANGUAGE

**INSTRUCTION:** SELECT THE OPTION THAT BEST FILLS THE GAP IN EACH SENTENCE.

61. Kindly share these fruits ..... the three pupils.  
A. on                      B. between                      C. over                      D. among
- 62.. The superlative of the word **BAD** is .....  
A. baddest                      B. worse                      C. badoo                      D. worst
63. The president smiled ..... me before presenting the award.  
A. with                      B. on                      C. at                      D. for
- 64.. Mr Efe returned from Lagos a fortnight ago. This means he returned .....  
A. four weeks ago B. two days ago                      C. two weeks ago                      D. four days ago
65. Adaku is too full of herself. This means that she is .....  
A. growing fat                      B. a bully                      C. timid                      D. proud

**INSTRUCTION: IDENTIFY THE CORRECTLY SPELT WORD IN EACH SENTENCE.**

66. A regular physical \_\_\_\_\_ is important for a healthy living.  
A. excercise      B. excersice      C. exersice      D. exercise
67. Food is a basic \_\_\_\_\_ for a growing child.  
A. necessity      B. neccessity      C. necessity      D. neccessity
68. Mosquito is a dangerous \_\_\_\_\_ causing malaria.  
A. parasite      B. parrasite      C. parracite      D. paracyte
69. Failure is the direct consequence of \_\_\_\_\_ and a poor study habit.  
A. indescipline      B. indiscipline      C. indicipline      D. indisipline
70. The \_\_\_\_\_ murdered his victim in cold blood.  
A. assasin      B. asasin      C. asassin      D. assassin
71. The \_\_\_\_\_ recommended a painkiller for her flu.  
A. Phamarcist      B. Phermacist      C. pharmacist      D. Phamercist
72. Tunde's performance at the Olympiad exam \_\_\_\_\_ his teacher.  
A. infurriated      B. infuririated      C. inferiorated      D. infuriated
73. The \_\_\_\_\_ testified that the driver was reckless.  
A. passanger      B. passenger      C. pasanger      D. pasenger
74. \_\_\_\_\_ is an important sewing equipment used for cutting materials.  
A. scisors      B. scissose      C. scissorce      D. scissors
75. Cassava is a good source of \_\_\_\_\_.  
A. carbohydrate      B. carbonhydrate      C. cabohydrate      D. carbohidrate

**INSTRUCTION: IDENTIFY THE OPTION NEAREST IN MEANING**

76. The inter-house sports competition is an ANNUAL event in my school.  
A. termly      B. seasonal      C. monthly      D. yearly
77. My dad helps with my homework OCCASIONALLY.  
A. regularly      B. rarely      C. often      D. sometimes
78. Pupils are always INQUISITIVE when learning a new experience.  
A. noisy      B. curious      C. calm      D. excited
79. Biola was COMPELLED to complete her task in the garden.  
A. helped      B. begged      C. encouraged      D. forced
80. The teacher OFTEN ends her class with an interesting story.  
A. always      B. seldomly      C. Sometimes      D. frequently
81. Mr Ojukwu is CRAFTY in his business dealings.  
A. creative      B. kind      C. cunning      D. smart
82. The movie at the cinema was BORING.  
A. educative      B. uninteresting      C. amusing      D. exciting
83. Usman was FORTUNATE he wasn't punished for the crime.  
A. woeful      B. happy      C. surprised      D. lucky
84. The driver DEPARTED Kano last week.  
A. left      B. returned to      C. visited      D. revisited
85. The young engineer presented the ACCURATE result of the field measurement.  
A. misleading      B. false      C. correct      D. approved

**INSTRUCTION: IDENTIFY THE OPTION OPPOSITE IN MEANING**

86. Tunde worked in the farm with a BLUNT cutlass.  
A. blurred      B. long      C. worn out      D. sharp
87. The gold wristwatch Fatima bought in the trade fair is EXPENSIVE.  
A. beautiful      B. exorbitant      C. costly      D. cheap
88. She expressed SHYNESS while making the valedictory speech.  
A. timidity      B. compassion      C. bashfulness      D. confidence



89. The furniture is made of **DELICATE** materials.  
A. fragile      B. wooden      C. durable      D. colourful
90. Mr Chukwu earns a living from **IMPORTING** goods and services.  
A. Producing      B. selling      C. trading      D. exporting
91. Mr Ade drives his new car **RECKLESSLY**.  
A. carefully      B. carelessly      C. slowly      D. speedily
92. The witness claimed he was **IGNORANT** of the cause of the argument.  
A. unaware      B. doubtful      C. knowledgeable      D. uncertain
93. The new pupil is **RELUCTANT** to participate in classroom activities.  
A. shy      B. hesitant      C. willing      D. uninterested
94. Preye scored **ABOVE** the class average in his Maths test.  
A. within      B. below      C. almost      D. more than
95. The trial judge was **IMPARTIAL** in his final judgement.  
A. fair      B. praised      C. diligent      D. biased

### **COMPREHENSION: BEAUTY AND THE BEAST**

Beauty and Beast is one of the most popular Disney films of all times. It was first shown in 1991 and it was soon praised by both film critics and viewers. A new version has recently been produced in 3D for 2010 Christmas.

The film tells the story of Beast, an ugly and furious monster who lives in an old medieval castle accompanied by a group of animated house objects like candles, teapots, clocks, brooms and wardrobes. In truth, Beast is a prince whom a witch placed a curse because of his arrogance. If he wants to break the spell, he must learn to love before he is twenty one years old. The countdown is over when the last petal of a magic rose falls down.

His character begins to change when he meets and falls in love with Belle, an imaginative young woman from a provincial French town who lives with her insane father and loves reading. From now on, the ugly and furious monster becomes gentler and kinder but he has to fight against Gaston, a handsome man who wants to marry Belle.

Finally, love triumphs, Beast defeats Gaston and he gets to conquer Belle's heart. The curse disappears. Beast becomes prince Adam again and they lived happily ever after.

96. The original personality of the Beast according to the passage was .....?  
A. An ugly and furious monster      B. A handsome suitor  
C. An arrogant son of a king      D. A prince from a provincial french town
97. The behaviour of the Beast began to change when he .....  
A. was cursed by a witch      B. got attracted to Belle  
C. Fought Gaston      D. lived alone in the castle
98. How long did it take Disney to reproduce a new version of the film?  
A. twenty years      B. twelve years      C. ten years      D. nineteen years
99. Belle lives with her .....?  
A. loving father      B. insane mother      C. handsome suitor      D. mentally ill father
100. The curse was finally broken when.....  
A. the Beast won Belle's heart.      B. the last petal of a magic rose fell down  
C. Gaston won the heart of Belle      D. the prince became kind and gentle