

**ADDIS ABABA CITY GOVERNMENT YEKA SUB CITY EDUCATION
OFFICE SCHOLASTIC APTITUDE MODEL TEST (SAT) FOR GRADE
12th GINBOT 2013/MAY 2021**

TIME ALLOWED: 2 HOURS

GENERAL DIRECTIONS

THIS BOOKLET CONTAINS **SCHOLASTIC APTITUDE TEST**. THE TEST HAS TWO MAIN SECTIONS WITH A TOTAL OF **60 ITEMS**.

SECTION ONE CONTAINS **VERBAL REASONING** AND SECTION TWO CONTAINS **QUANTITATIVE REASONING**. VISUALLY IMPAIRED CANDIDATES ARE REQUIRED TO ATTEMPT **VERBAL REASONING SECTION ONLY**. ALL OTHER CANDIDATES ARE REQUIRED TO ATTEMPT **BOTH SECTIONS**.

EACH SECTION CONTAINS **MULTIPLE CHOICE ITEMS** CONTAINING OF FOUR POSSIBLE ANSWERS. IN EACH CASE, SELECT THE BEST ANSWER AND **BLACKEN** THE LETTER OF YOUR CHOICE ON THE SEPARATE ANSWER SHEET. VISUALLY IMPAIRED CANDIDATES ARE ALLOWED TO WORK FOR **ONE HOUR** ONLY. THE OTHER CANDIDATES ARE ALLOWED TO WORK FOR **TWO HOURS** ON THE TEST. WHEN TIME IS CALLED, YOU MUST IMMEDIATELY STOP WORKING, PUT YOUR PENCIL DOWN AND WAIT FOR FURTHER INSTRUCTIONS. ANY FORM OF CHEATING OR AN ATTEMPT TO CHEAT IN THE EXAMINATION HALL WILL RESULT IN AN AUTOMATIC DISMISSAL FROM THE EXAMINATION HALL AND CANCELLATION OF YOUR SCORE(S). PLEASE MAKE SURE THAT YOU HAVE WRITTEN ALL THE REQUIRED INFORMATION ON THE ANSWER SHEET BEFORE YOU START TO WORK ON THE EXAMINATION.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

Yeka Sub– City Education Office Secondary Schools 1st Semester Scholastic Aptitude Model Examination for Grade 12th for All Natural and Social Stream Ginbot 2013 E.C / May 2021 G.C

Time Allowed: 2 hours

SECTION ONE: Verbal Reasoning (Questions 1-35)

This section contains a total of **35** verbal reasoning questions with sub sections of analogy, synonyms, antonyms, language usage, sentence completion, reading comprehension, and logical and analytical reasoning. Each subsection has its own directions.

ANALOGY

DIRECTIONS: In question 1-5 related pair of words are followed by a word that has **similar** relationship when paired with another word. Answer these questions by selecting the choice that completes the given analogy correctly by **shading** the letter of the correct choice on the separate answer sheet.

1. JACKET is to LEATHER as CUPBOARD is to _____.
a. cloth b. leaves c. glass d. wood
2. BARREL is to BEER as VASE is to _____.
a. jewelry b. flowers c. money d. coffee
3. OBSTINATE: FLEXIBLE: GREGARIOUS: _____.
a. sociable b. friendly c. reserved d. companionable
4. EAGLE: BIRD: BAT: _____.
a. bird b. mammal c. reptile d. fish
5. DISCONTENTED: DISGRUNTLED: APPREHENSIVE: _____.
a. relaxed b. calm c. happy d. nervous

SYNONYMS

DIRECTIONS: Questions **6-7** consists of a word printed in capital letters, followed by four words. Choose the word that is the most nearly **similar** in meaning to the word in capital letter and **blacken** the letter of your choice on the separate answer sheet.

6. Innovative
a. Unoriginal b. Clichéd c. Creative d. Derivative
7. Discordant
a. Harmonious b. pleasant c. tuneful d. harsh

ANTONYMS

DIRECTIONS: Questions **(8-9)** consists of a word printed in capital letters, followed by four words. Choose the word that is the most nearly **opposite** in meaning to the word in capital letter and **blacken** the letter of your choice on the separate answer sheet.

8. Deafening
a. loud b. soft c. noisy d. vociferous

9. Contemporary
a. old b. modern c. current d. up to date

Vocabulary

SUBSTITUTION

DIRECTIONS: each of the questions below (10-14) consists of underlined word or phrase. From the given alternatives, choose the one that most nearly has the same meaning as the underlined word or phrase and **blacken** the letter of your choice on the separate answer sheet.

10. He has always been too obstinate to admit that he had been wrong.
a. stubborn b. frightened c. selfish d. cautious
11. Will their vows be made publicly or privately?
a. opening remarks b. thoughts c. promises d. emotions
12. The superintendent was the principal speaker at the school board meeting.
a. sole b. main c. outstanding d. last
13. The quest for the cure for HIV/AIDS is still going on in many countries.
a. hypothesis b. margin c. absence d. search
14. The army was out in the open and therefore vulnerable to the enemy attack.
a. eager b. remote c. exposed d. comfortable

SENTENCE COMPLETION

DIRECTIONS: Each sentence (15-19) below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are four words or set of words. Choose the word or set of words for each blank that **best** fits the meaning of the sentence as a whole and **blacken** the letter of your choice on the separate answer sheet.

15. It is a very popular play and it would be wise to _____ seat well in advance.
a. engage b. book c. buy d. occupy
16. I wish to see the manager to _____ about the terrible food in this restaurant.
a. inquire b. disapprove c. criticize d. complain
17. He has told us many lies that we can no longer place any _____ on what he says.
a. conviction b. reliance c. credibility d. regard
18. The rapid rise in the cost of _____ is worrying many people.
a. existing b. surviving c. respiring d. living
19. He had a very bad cold. He couldn't stop _____.
a. snoring b. sneezing c. coughing d. spitting

DIRECTIONS: READ THE FOLLOWING PASSAGE AND ANSWER THE QUESTIONS THAT FOLLOWS.

Because the low latitudes of the Earth, the areas near the equator, receive more heat than the latitudes near the poles, and because the nature of heat is to expand and move, heat is transported from the tropics to the middle and high latitudes. Some of this heat is moved by winds and some by ocean currents, and some gets stored in the atmosphere in the form of latent heat. The term "latent heat" refers to the energy that has to be used to convert liquid water to water vapor. We know that if we warm a pan of water on a stove, it will evaporate,

or turn into vapor, faster than if it is allowed to sit at room temperature. We also know that if we hang wet clothes outside in the summertime they will dry faster than in winter, when temperatures are colder. The energy used in both cases to change liquid water to water vapor is supplied by heat – supplied by **the stove** in the first case and by the Sun in the latter case. This energy is not lost. It is stored in water vapor in the atmosphere as latent heat. Eventually, the water stored as vapor in the atmosphere will condense to liquid again, and the energy will be released to the atmosphere.

In the atmosphere, a large portion of the Sun's incoming energy is used to evaporate Water, primarily in the tropical oceans. Scientists have tried to quantify this proportion of the Sun's energy. By analyzing temperature, water vapor, and wind data around the globe, they have estimated the quantity to be about 90 watts per square meter, or nearly 30 percent of the Sun's energy. Once this latent heat is stored within the atmosphere, **it** can be transported, **primarily** to higher latitudes, by **prevailing**, large-scale winds. Or it can be transported vertically to higher levels in the atmosphere, where it forms clouds and subsequent storms, which then release the energy back to the atmosphere.

20. The passage mainly discusses how heat
 - a. is transformed and transported in the Earth's atmosphere
 - b. is transported by ocean currents
 - c. can be measured and analyzed by scientists
 - d. moves about the Earth's equator
21. The word “**convert**” para.1 line 5 is closest in meaning to
 - a. mix
 - b. change
 - c. adapt
 - d. reduce
22. Why does the author mention “**the stove**” para.1 in line 10?
 - a. To describe the heat of the Sun
 - b. To illustrate how water vapor is stored
 - c. To show how energy is stored
 - d. To give an example of a heat source
23. According to the passage, most ocean water evaporation occurs especially
 - a. around the higher latitudes
 - b. in the tropics
 - b. because of large-scale winds
 - d. because of strong ocean currents
24. According to the passage, 30 percent of the Sun's incoming energy
 - a. is stored in clouds in the lower latitudes
 - b. is transported by ocean currents
 - c. never leaves the upper atmosphere
 - d. gets stored as latent heat
25. The word “**it**” para.2 in line 17 refers to
 - a. square meter
 - b. the Sun's energy
 - c. latent heat
 - d. the atmosphere
26. The word “**primarily**” para.2 in line 17 is closest in meaning to
 - a. chiefly
 - b. originally
 - c. basically
 - d. clearly
27. The word “**prevailing**” in line 18 is closest in meaning to
 - a. essential
 - b. dominant
 - c. circular
 - d. closest

28. All of the following words are defined in the passage **EXCEPT**

- a. low latitudes (line1)
- b. latent heat (line 5)
- b. evaporate (line7)
- d. atmosphere (line13)

Logical and Analytical Reasoning (29-35)

DIRECTIONS: Read the following information carefully and then answer questions 29-33 based on them.

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In a family of six, there are three men L, M, and N and three women R, S, and T. The six persons are Architect, Lawyer, Accountant, Professor, Doctor, and Engineer by profession but not in the same order.

- There are two married couples and two unmarried persons.
- N is not R's husband.
- The doctor is married to a lawyer. R's grandfather is a Professor.
- M is neither L's son, nor is he an Architect or a Professor.
- The Lawyer is T's daughter-in-law.
- N is T's son and the Engineer's father.
- L is married to the Accountant.

29. Who is an Architect?

- a. R
- B. M
- C. N
- D. L

30. Which among the following is the correct pair of married couples?

- a. LS and NT
- B.LR and NM
- C. LT and NS
- D. SM and NR

31. How is T related to M?

- a. Mother
- B. Grandmother
- C. Wife
- D. Daughter-in-Law

32. Who among the following are two unmarried persons?

- a. L, S
- B. L, M
- C. L, T
- D. R, M

33. Who is a Doctor?

- a. L
- B. M
- C. N
- D. S

DIRECTIONS: In this section (Questions 34-35) each question is based on a passage. Read each question carefully and select the best answer and **blacken** the letter of your choice on the separate answer sheet provided.

34. If you are a fitness walker, there is no need for a commute to a health club. Your neighborhood can be your health club. You don't need a lot of fancy equipment to get a good workout either. All you need is a well-designed pair of athletic shoes.

This paragraph best supports the statement that

- a. fitness walking is a better form of exercise than weight lifting.
- b. a membership in a health club is a poor investment.
- c. poorly designed athletic shoes can cause major foot injuries.
- d. fitness walking is a convenient and valuable form of exercise.

35. Giving children computers in grade school is a waste of money and teachers time. These children are too young to learn how to use computers effectively and need to spend time on learning basics, like arithmetic and reading. After all, a baby has to crawl before she can walk.

Which of the following, if true, would most weaken the speaker's argument?

- a. a demonstration that computers can be used to teach reading and arithmetic
- b. analysis of the cost-effectiveness of new computers versus repairing old computers
- c. examples of adults who do not know how to use computers
- d. recent grade reports of students in the computer classes
- e.

SECTION TWO: Quantitative Reasoning (Questions 36 – 60)

DIRECTIONS: For each of the problems given in questions 36 -60, select the best answer from the given alternatives and blacken the letter of your choice on the separate answer sheet.

36. A bag contains 35 blue, 40 white and 25 red cards. All takes out of one card from the bag at random. What is the probability that it will not take red card?

A $\frac{1}{5}$ B $\frac{3}{4}$ C $\frac{1}{2}$ D $\frac{1}{4}$

37. How many even natural numbers are the between 1,000 and 1,000,000?

A 500,000 B 499,900 C 499,500 D 499,00

38. There is an ant in a deep dam in desert area with the depth of 100meters. An ant then going out 5m and return back 4m per a day. How many days has taken that the ant going out form the deep dam?

A 96 days B 95 days C 100 days D 99 day

39. What is the value of product $(\sqrt{5} - 3)(\sqrt{5} + 3) \times (\sqrt{2} - 8)(\sqrt{2} + 8)$?

A 268 B 238 C 258 D 248

40. What number should be replacing by N in the following series of numbers

3, 6, 11, 20, N, 70, ...,?

A 47 B 38 C 37 D 48

41. What is the product of **8, 923, 567** $\times$ **9, 654, 238**?

A 86,150,239,626,946 C 86,150,239,626,996

B 86,150,239,626,956 D 86,150,239,626,946

42. Let $X < Y$

Quantity A	Quantity B
40% of X	60% of Y

Then which one of the following is correct?

- A Quantity B is less than or equal quantity A.
- B Quantity B is greater than or equal quantity A.
- C. The relationship cannot be determined from the information given.
- D. The two quantities are equal.

43.

Quantity A	Quantity B
$(-23)^{23}$	$(-32)^{32}$

- A. Quantity B is less than quantity A
 B. Quantity B is greater than quantity A
 C. The two quantities are equal.
 D. The relationship cannot be determined from the information given.
44. Look at the pattern carefully: 27262724272227, then, which following pair of numbers comes next?
 A.24, 27 B.20 , 25 C.24, 25 D.20, 27
45. What number should come next in the series: 504, 469, 434, 399... ?
 A.405 B.364 C.374 D. 380
46. What number should come next in the series: 68, 62, 56, 50, 44,?
 A.38 B.40 C.44 D.42
47. Look at the pattern carefully: 20 3035 45 50 60 65, then which of the following pair or numbers comes next?
 A.70, 85 B.70 , 75 C.75, 80 D.70, 80
48. Look at the pattern carefully: 2 12 17 27 32 42 47, then which of the following pair or numbers comes next?
 A.52, 57 B.57, 67 C.52, 67 D.57, 62
49. The difference between a positive proper fraction and its reciprocal is $\frac{11}{30}$. What is the value of the fraction?
 A. $\frac{5}{6}$ B. $\frac{6}{5}$ C. $\frac{4}{5}$ D. $\frac{5}{4}$
50. If M is a number between 1 and 2. Then which one the following is **not** more than M ?
 A. M^2 B. $\sqrt{M}$ C. $2M$ D. $\frac{1}{M}$
51. What is the simplified form of $\left(\frac{1}{10^{-3}}\right) \times (-10)^3$
 A.1,000,000 B.-0.000001 C.0.000001 D.-1,000,000
52. If $n \neq 0$ and $\frac{m}{n} = \frac{n}{100}$, what is the value of $\frac{n^4}{4m^2}$?
 A. 25,000 B. 2,500 C. 250 D. 250,000
53. What is the simplified form of $0.005 \div 0.01 \div 0.001 \div 0.0001$ is equals to
 A. 0.00005 B.0.005 C.5,000,000 D.500
54. Four doctors contested an election for an organization's manager and received 12,000 15,000 13,000 votes, respectively. What percentage of the total votes did the winning the doctor get?
 A 40% B.37.5% C.30% D.32.5%
55. If one-third of one-fifth of a number is 4, then what is the seven- tenth of that number?
 A.42 B.24 C.52 D.25

56. What number decreased by 5 is equals to 15 less than twice that number?
A.10 B.9 C.8 D.5
57. The sum of ages of 5 children born at the intervals of 4 years each is 55 years. What is the age of the eldest child?
A.3 years B.15 years C.19 years D.23 years

DIRECTION: Questions 58-60 below are based on the hypothetical data given in the table below. Table: It is the secondary school Gross enrollment trends by selected regions in Ethiopia.

Region	2010 E.C			2011 E.C			2012 E.C		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Ti	113658	109632	223290	107650	101755	209405	109378	107819	217197
Am	325114	343505	668619	366737	377016	743753	440059	454296	894355
Or	501016	382379	883395	584333	435794	1020127	740081	548946	1289027
So	323983	250700	574683	292450	225087	517537	376527	302411	678938
A.A	70277	86205	156502	71902	86548	158450	83821	97247	181068
Total	1334048	1172421	2506469	1423072	1226200	2649272	1749866	1510719	3260585

Source: Education statistics annual abstract 2019/20

58. Which region is the highest enrolling female to school compared to males?
A/ Ti B/ Or C/ Am D/ A, A
59. What is the approximate total male population in millions in the five regions?
A 6.5 B 5.5 C 4.5 D 7.5
60. What is the proportion of females enrolled in school in region A.A to the total students?
A 113:135 B 135:113 C 13:11 D 11:13

ENDS