



**LIDETA SUB CITY ADMINISTRATION EDUCATION OFFICE
GRADE 12 SCHOLASTIC APTITUDE TEST (SAT) MODEL
EXAMINATIONS**

2016E.C/ 2024G.C

NUMBER OF QUESTIONS: 60 TIME ALLOWED: - 2 HOURS

GENERAL DIRECTIONS

THIS MODEL EXAMINATION CONTAINS 60 MULTIPLE CHOICE SCHOLASTIC APTITUDE TEST (SAT) QUESTIONS.

THERE IS ONLY ONE BEST ANSWER FOR EACH QUESTION. CHOOSE THE CORRECT ANSWER FROM THE SUGGESTED OPTIONS AND BLACKEN THE LETTER OF YOUR CHOICE ON THE ANSWER SHEET. USE ONLY PENCIL TO MARK YOUR ANSWERS.YOUR ANSWER MARKS SHOULD BE HEAVY AND DARK, COVERING THE ANSWER SPACE COMPLETELY. PLEASE ERASE ALL UNNECESSARY MARKS COMPLETELY INCLUDING ANSWERS YOU HAVE CHANGED FROM YOUR ANSWER SHEET.

YOU ARE ALLOWED TO WORK ON THE EXAM FOR 2 HOURS. 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 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 OVER UNTIL YOU ARE TOLD TO DO SO.

SECTION ONE: Verbal Reasoning

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

Synonyms

DIRECTIONS: questions 1_2 consists of words printed in capital letters followed by four words. Choose the word that is most nearly **similar** in meaning to the words in capital letters. Then, find the question number and **blacken** the letter of your choice on the separate answer sheet provided.

1.VIBRANT

- A. Lively B. Boring C. Dull D. Difficult

2.RIVAL

- A. Partner B. Friend C. supporter D. opponent

Antonyms

DIRECTIONS : questions 3_4 consists of words printed in capital letters followed by four words. Choose the word that is most nearly **opposite** in meaning to the words in capital letters. Then, find the question number and **blacken** the letter of your choice on the separate answer sheet provided.

3. NEXUS

- A. Separation B. Respect C. Connection D. Distraction

4. DOTE

- A. Foolish B. Aversion C. Antidote D. Daring

DIRECTIONS: For questions 5_12 read each of the following words carefully and choose the word that correctly completes the **analogy**. Then, **blacken** the letter of your choice on the separate answer sheet provided.

5. Radio: Television::

- A. Electricity: Lightning B. Ear : Eye C. Up: down D. Nose: Face

6. _____ : Play :: Sing : Anthem

- A. Scene B. Theatre C. Act D. field

7.Fern : Plant :: _____ : Fish

- A. Catch B. Minnow C. Animal D. Sparrow

8. _____ : plane :: Garage : Automobile.

- A. Hangar B. Runway C. Steak D. Oil

9. Groom : Horse :: _____ : Child
A. Nanny B. Gallop C. Track D. Infantry
10. License is to Marriage as Receipt is to:
A. Money B. Purchase C. Store D. Husband
11. Mathematics is related to numbers in the same way History is related to _____
A. people B. Events C. dates D. wars
12. Framework is related to House in the same way Skeleton is related to:
A. Grace B. Ribs C. Skull D. Body

Language Usage

DIRECTIONS: Questions (13-15) consists of the underlined phrases or words. Choose the one that most nearly has the same meaning as the underlined phrases and **blacken** the letter of your choice on the separate answer sheet provided.

13. The party got out of hand and the guests started to throw bottles at each other.
A. become a mess B. out of control C. got disturbed D. was failure
14. I am sure they will fight tooth and nail for their rights.
A. engage in fight using all resources C. Without any other weapon
B. resorting violence D. very cowardly
- 15.” A picture is worth a thousand words.”
A. picture expresses words.
B. words can express something better than pictures
C. Pictures convey messages better than words
D. Thousand words convey messages better than pictures

DIRECTIONS: Answer questions (16-17) by selecting the choice that carries the closest meaning to the given sentences and **blacken** the letter of your choice on the separate answer sheet provided.

16. If he had studied hard, he would have completed his education successfully.
A. He has completed his education though he didn't study hard.
B. He studied very hard and completed his education successfully.
C. He has not yet completed his education.
D. He has not completed his education due to his laziness.

17. You are too late to take an exam.

A. You can take an exam now.

C. You will take an exam next.

B. You can't take an exam now.

D. You may take an exam.

Sentence Completion

DIRECTIONS: Questions (18_20) below has one or two blank spaces, each blank indicating that something has been omitted. Beneath the sentence are four words or sets of words. Choose the word 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.

18. The teacher accused me of _____ because my essay was so similar to that of another students.

A. procrastination

B. plagiarism

C. celerity

D. confusion

19. There is a general _____ in United States that out ethics are declining and that our moral standards are _____.

A. Feeling __ normalizing

C. idea __ futile

B. optimism__ improving

D. complaint__ deteriorating

20. Bacteria living in the soil play a/an _____ role in recycling the carbon and nitrogen needed by plants.

A. envious

B. mature

C. domestic

D. vital

Reading Comprehension

DIRECTIONS: Read the passages I and II below carefully and answer questions 21_27 based on the information stated or implied in the passages and blacken your letter of choice on the separate answer sheet.

Passage I

Dogs and Cats should never be permitted to eat chocolate, because chocolate works like a poison in their bodies. Chocolate contains a chemical called theobromine, which is similar to caffeine. Human bodies are able to process the theobromine without any ill side effects, but dogs and cats can not. Different types of chocolate contain different amounts of theobromine .It would take 20 ounces of milk chocolate to kill a 20- pound dog, but only two ounces 0f baker's chocolate or six ounces of semi-sweet chocolate. The amounts, of course, are much smaller for a cat, whose body weight is typically less than that of a dog.

Most cats are not naturally attracted to eating chocolate, but many dogs are. Dogs by nature will sample nearly anything that they see their masters eating, so pet owners must take care to keep all chocolate products well out of reach of their dogs and cats.

Source: 501 reading comprehension 4th edition.

21. According to the passage, why is chocolate poisonous for dogs and cats?
- A. It contains bromine. C. Their body cannot process it.
B. It is made from milk. D. it contains caffeine
22. The reason that the dog might eat chocolate, according to the passage is:
- A. Because it tastes good. C. Dogs won't eat chocolate.
B. They can smell milk. D. Dogs like to imitate their owners.
23. What is the purpose of the author in this passage?
- A. to inform the readers. C. to entertain the readers.
B. to tell about the behaviors of dogs. D. cannot be determined
24. The proverb that can best summarize the above passage can be:
- A. Look before you leap. C. Monkey see, monkey do.
B. Pet food for pets, people food for people. D. A penny saved is a penny earned.

Passage II.

Have you ever heard someone sing, "Happy birth day to you... ?" If so, you are hardly alone_ millions of people sing that song every year, and the tune is one of the most familiar of any song every year, and the tune is one of the most familiar of any song in North America. Ironically, It is not known who wrote it! The tune was written by two sisters, Patty and Mildred Hill, who were school teachers in the late 19th century. But their song had different words; instead of " Happy birth day to you," the song ran " Good morning to all." The two sisters would sing this **ditty** to their students each morning as school began.

In 1924, the tune was published in a song book, which added the " Happ birth day" lyrics as verse two. Today, the second verse of that song has become one of the best known tunes in the world and nobody knows who wrote the words!

Source : 501 reading comprehension 4th edition.

25. According to the passage, who wrote the "Happy birth day?"
- A. two sisters B. Patty and Mildred C. Irving Berlin D. It is not known
26. Why is it ironic that the author of the words to " Happy birth day" is not known?
- A. Because of modern copyright laws. C. Because it shows how unjust life can be.
B. Because everyone knows the song D. Because it was published in 1924.
27. What happened in 1924 to make "Happy birth day" famous?
- A. The tune was published in a song book with words. C. Hitler came to power in Germany.
B. Nothing significant happened D. The author of the tune passed away.

Logical and Analytical reasoning (28_35)

DIRECTIONS: Questions 28_35 deal with different types of logical and analytical reasoning. Read the given sets of conditions and assumptions for each question. Choose the answer that you think is most appropriate among the given alternatives and **blacken** your letter of choice on the separate answer sheet.

28.Chala is older than Biritu, but he is either younger than or as old as Yodit. Which one of the following statement is **TRUE** about the relationship between the ages of Yodit and Biritu ?

- A. Yodit is as old as Biritu.
- B. Yodit is younger than Biritu.
- C. Biritu is younger than Yodit.
- D. The relationship cannot be determined.

29. **Statement** : Should there be students union in College / University ?

- Arguments :**
- I. No. This will create a political atmosphere in the campus.
 - II. Yes, It is very necessary Students are future political leaders.

- A. Both I and II are strong
- B. only argument II is strong.
- C. Only argument I is strong.
- D. Neither I nor II is strong.

30. **Statements:** All mangoes are golden in color. No golden-colored things are cheap.

- Conclusions:**
- I. All mangoes are cheap.
 - II. Golden-colored mangoes are not cheap.

- A. only conclusion I follows.
- B. Only conclusion II follows.
- C. Neither I nor II follows.
- D. both I and II follow.

31.ELFA, GLHA, ILJA, _____, MLNA.

- A. OLPA
- B. LLMA
- C. KLMA
- D. KLLA

32.In a Certain language, BOOK is coded as 4300, MATE is written as 3900. Then 1600 will represent which word out of the given alternatives?

- A. CAGE
- B. WOOD
- C. GOOD
- D. CRAB

33. Pointing to a man of a photograph, a lady said, “ His mother is the only daughter of my mother. How is the lady related to the man?

- A. sister
- B. mother
- C. Daughter
- D. Aunt

DIRECTIONS: Answer questions (34-35) based on the data given below and blacken your letter of choice on the separate answer sheet.

In a School, there were five teachers. Ahmed and Birku were teaching Physics and English. Siyane and Birku were teaching English and Geography. Dawit and Ahmed were teaching Mathematics and Physics. Megersa and Birku were teaching History and Economics.

34. Who among the teachers was teaching maximum number of subjects.

- A. Siyane B. Dawit C. Birku D. Megersa

35. More than two teachers were teaching which subject?

- A. Physics B. Mathematics C. Geography D. English

SECTION TWO: QUANTITATIVE REASONING (QUESTION 36-60)

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

36. The next term in the series 2, 5, 9, 19, 37, _____ is?

- A. 73 B. 75 C. 78 D. 80

37. A group of 210 students appeared in some test. The mean of $\frac{1}{3}$ rd of students is found to be 60. The mean of the remaining students is found to be 78. The mean of the whole group will be;

- A. 80 B. 76 C. 74 D. 72

38. Anil after travelling 6 km towards his house realized that he has travelled wrong direction. He turned and travelled 12 km towards West, turned right until travelled 8 km to reach his office. The straight distance of the office from his house is :

- A. 20 km B. 11 km C. 12 km D. 10 km

39. Two numbers are in the ratio 3:5. If 9 is subtracted from the numbers, the ratio becomes 12:23. The numbers are

- A. 30, 50 B. 36, 60 C. 33, 55 D. 42, 70

40. If the radius of a circle is increased by 50%, the perimeter of the circle will increase by

- A. 20% B. 30% C. 40% D. 50%

41. In an examination, 35% of the total students failed in Mathematics, 45% failed in English and 20% in both. The percentage of those who passed in both subjects is

- A. 10 B. 20 C. 30 D. 40

42. If $x - y = 3$ and $x^2 + y^2 = 29$, find the value of xy .

- A. 10 B. 12 C. 15 D. 18

43. Let y be a real number.

Quantity $A = (y + 1) \times y \times (y - 1)$

Quantity $B = y \times y \times y$

- A. $B > A$ B. $A > B$ C. $A = B$ D. Cannot be determined

44. A ball is dropped from the height of 10m. If on each bounce it rebounds $\frac{1}{3}$ of the distance it fell, then how far does it travel before coming to rest?

- A. $\frac{40}{3}$ m B. 40 m C. $\frac{16}{3}$ m D. 20 m

45. If the product $3^x \cdot 3^{x^2} \cdot 3^{x^3} \dots = 27$, then the value of x is?

- A. 0.75 B. 1 C. 0.25 D. 0.5

46. Two unbiased coins are tossed. What is the probability of getting at most one head?

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

Questions (36-40) based on table below, classification of 100 students based on the marks obtained by them in Physics and Chemistry in an Examination.

Subject	Marks out of 50				
	40 and above	30 and above	20 and above	10 and above	0 and above
Physics	9	32	80	92	100
Chemistry	4	21	66	81	100
Average (Aggregate)	7	27	73	87	100

47. What is the difference between the number of students passed with 30 as cut-off marks in Chemistry and those passed with 30 as cut-off marks in aggregate?

- A. 3 B. 4 C. 5 D. 6

48. If at least 60% marks in Physics are required for pursuing higher studies in Physics, how many students will be eligible to pursue higher studies in Physics?

- A. 27 B. 32 C. 34 D. 41

49. The percentage of number of students getting at least 60% marks in Chemistry over those getting at least 40% marks in aggregate, is approximately?

- A. 1% B. 27% C. 29% D. 31%

50. The number of students scoring less than 40% marks in aggregate is?

- A. 13 B. 19 C. 20 D. 27

51. If it is known that at least 23 students were eligible for a Symposium on Chemistry, then the minimum qualifying marks in Chemistry for eligibility to Symposium would lie in the range?

- A. 40 - 45 B. 30 - 40 C. 20 - 30 D. Below 20

52. A basket contains 6 blue, 2 red, 4 green and 3 yellow balls. If four balls are picked up at random, what is the probability that 2 are red and 2 are green?

- A. $\frac{1}{3}$ B. $\frac{2}{455}$ C. $\frac{4}{15}$ D. $\frac{5}{27}$

53. Area of a rectangle is equal to the area of a circle whose radius is 14 cm. If the breadth of the rectangle is 22 cm, what is its length?

- A. 22cm B. 24cm C. 26cm D. 28cm

54. On simplification, $3034 - (1002 + 20.04)$ is equal to

- A. 2543 B. 2984 C. 2993 D. 3029

55. A can finish a work in 18 days and B can do the same work in 15 days. B worked for 10 days and left the job. In how many days, A alone can finish the remaining work?

- A. 4 B. 5 C. 6 D. 7

56. The present worth of Rs.1404 due in two equal half yearly installments at 8% per annum simple interest is

- A. Rs. 1300 B. Rs. 1325 C. Rs. 1350 D. Rs. 1500

57. Average age of seven persons in a group is 30 years. The average age of five persons of this group is 31 years. What is the average age of the other two persons in the group?

- A. 15 years B. 26 years C. 27.5 years D. 55 years

58. Three partners A, B, C start a business. Twice A's capital is equal to thrice B's capital and B's capital is four times C's capital. Out of a total profit of Rs.16,500 at the end of the year B's share is

- A. Rs. 4000 B. Rs. 500 C. Rs. 6000 D. Rs. 6600

59. The banker's discount on a certain sum of money is Rs.84 and true discount on the same sum for the same time is Rs.70. The sum due is

- A. Rs. 35 B. Rs. 380 C. Rs. 420 D. Rs. 45

60. If $5^a = 3125$, then the value of 5^{1-3} is

A. 15

B. 25

C. 125

D. 625