YEKA SUBCITY EDUCATION OFFICE
DEJAZMACH WONDIRAD SECONDARY SCHOOL CLUSTER

TIME ALLOWED: 2:00 MINUTES

GENERAL DIRECTIONS

THIS EXAM PAPER CONTAINS SCHOLASTIC APPTITUDE TEST (SAT) EXAMINATION. IN THIS EXAMINATION, THERE ARE A TOTAL OF **60 MULTIPLE CHOICE** QUESTIONS. CAREFULLY SELECT THE BEST ANSWER AND BLACKEN ONLY THE LETTER OF YOUR CHOICE ON THE SEPARATE ANSWER SHEET PROVIDED. FOLLOW THE INSTRUCTIONS ON THE ANSWER SHEET AND THE EXAMINATION PAPER CAREFULLY. USE ONLY **PENCIL** TO MARK YOUR ANSWERS; YOUR ANSWER MARK SHOULD BE **HEAVY** AND **DARK**, COVERING THE ANSWER SPACE COMPLETELY. PLEASE ERASE ALL UNNECESSARY MARKS COMPLETELY FROM YOUR ANSWER SHEET.

YOU ARE ALLOWED TO WORK ON THE EXAM FOR 1**20 MINUTES.** 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 TO CHEAT IN THE IN 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.

Part 1: Vocabulary: Word analogy

Instruction: Each questions 1-7 below consists of a related pair of words or phrases, followed by five pairs of words or phrases labelled A through E. ***Select the pair that best expresses a relationship similar to that expressed in the original pair.***

1. COAL: MINERAL:

A. oxygen : water B. river : dam C. gold : metal D. silver : mine E. laboratory chemical

2. TRAIL: HIKERS:

A. airport : pilots B. pasture : horses C. highway : motorists D. forest : animals E. track : footprints

3. COMPETITION: CONTESTANT:

A. trial: witness B. journey : traveller C. royalty : monarch D. cure : patient E. election : candidate

4. GONG: MALLET:

A. guitar : string B. orchestra : baton C. clarinet : reed D. maraca : rattle E. drum : stick

5. ARCHIVE: DOCUMENTS:

A. warehouse : merchandise B. theatre : plays C. cinema : projector D. library : shelves
E. farm : crops

6. RIDDLE: PUZZLEMENT:

A. comedy : stage B. clown : costume C. quip : wit D. jest : laughter E. pun : meaning

7. INVENTORY: GOODS:

A. agenda : meeting B. snapshot : image C. ballot : voters D. compass : directions E. roll : members

Part 2: **Analytical and reasoning questions**

Instruction: Read the information given below and answer the question that follows.

There are 4 exams to be conducted on four days from Monday till Thursday at Dejazmach Wondirad Senior Secondary School. The exams to be conducted are English, Mathematics, Physics and Biology.

- Neither English nor Physics is to be conducted on Thursday.
- Neither Physics nor Mathematics is to be conducted on Tuesday.
- There are 3 exams to be conducted after Biology.

8. In which day will physics be given?

A. Monday B. Wednesday C. Thursday D. Tuesday E. Friday

Part 3: **Synonyms**

Instructions: Questions 9-14 consist of words printed in bold and italics and underlined letters followed by four words. Choose the word that is ***most nearly similar in meaning*** to the word in capital letter.

9. I hope that club does not ***deprive*** poor children of the opportunity to participate in sports.

A. Deny B. Retract C. Improvise D. Dilute E. Fret

10. The government took some ***drastic*** measures against reckless drivers to be able to decrease the number of traffic accidents.

A. Moderate B. Compromising C. Radical D. Sensible E. Wild

11. It is usually ***futile*** to argue with a person once he has made up his mind.

A. Unpleasant B. Encouraging C. Helpful D. Useless E. Harmful

12. The minister preferred to resign rather than be accused publicly of ***infamous*** conduct.

A. Outstanding B. Unprecedented C. Mysterious D. Disgraceful E. Meritorious

13. A Japanese Company ***pioneered*** the use of the Bessemer process for making steel and improved the quality of steel.

A. Hid B. Initiated C. Explored D. Disguised E. Illustrated

14. Mr. Simon's treatment of his employees is ***ruthless***.

A. Rash B. without mercy C. rational D. liberal E. sluggish

Part 4: Antonyms

Instructions: Questions 15-19 consist of words printed in bold letters followed by four words. Choose the word that is ***most nearly opposite in meaning*** to the word in bold letters.

15. **Ill** A. sick B. healthy C. poor D. painful

16. **Adult** A. disabled B. aged C. immature D. old

17. **Bitter** A. sweet B. stale C. rotten D. moldy

18. **Cautious** A. fussy B. reckless C. nervous D. careful

19. **Minority** A. majority B. population C. mankind D. people

Part 5: The Logic List

Instruction: Identify the word which is out of the logic list.

20. A. settlement B. combat C. war D. battle

21. A. chant B. yell C. clap D. shout

22. A. outcome B. consequence C. gap D. result

23. A. hurt B. injure C. damage D. split

24. A. placard B. brochure C. leaflet D. catalogue

25. A. shock B. bewilder C. astonish D. enlighten

Part 6: Reading Comprehension

Instruction: Read the following two texts very carefully and answer the questions accordingly.

TEXT -1

In an interview yesterday Mr. Wilson was questioned about the harmful effects of horror movies on teenagers. He argued that such effects were often exaggerated and claimed that other types of films were far more dangerous for young people. When asked to prove this, he pointed out that horror films were often set in unreal situations and were clearly not to be taken seriously. In contrast, he claimed that films showing violent crime were often set in everyday life, and were therefore more damaging.

26. In Mr. Wilson's opinion, horror films _____.

A. cost more than other kinds of films.
B. are more popular among the elderly than among the young.
C. should be banned altogether.
D. are less damaging to young people than films of violent crimes.
E. have recently ceased to appeal to the young.

27. For Mr. Wilson the main difference between a horror film and one showing violent crime is that the former
A. is mainly concerned with everyday situations.
B. is liked by the young, and the latter by the old.
C. is unrelated to real life, whereas the latter is.
D. is less expensive to produce than the latter.
E. rarely receives any attention from the young.

28. The interviewer wanted to find out whether _____.

A. young people were being harmed by horror films.
B. Mr. Wilson had himself been affected by horror films.
C. Mr. Wilson preferred horror films to films of violence.
D. people were seriously objecting to horror films.
E. the effects of crime films were being exaggerated.

TEXT-2

The famous Tower of London was built as a fortress by William the Conqueror. Early in the middle Ages the kings used it as a palace; later on it was turned into a prison, but only distinguished prisoners, including statesmen and princes, were held there. Today the Tower is a national museum, where, among other things, the jewellery of the English kings and queens is on display.

29. It is obvious from the passage that the functions of the Tower of London _____.

A. were all established by William the Conqueror.
B. have always been controlled by the kings.
C. have varied greatly over the centuries.
D. are all of a military nature.
E. have not changed at all since the Middle Ages.

30. We learn from the passage that the Tower _____.

A. was not originally intended to be a fortress.
B. was never a prison for ordinary people.
C. is still a unique example of medieval architecture.
D. was never a residence of English kings.
E. functions today only as a jewelers museum.

31. William the Conqueror's original purpose in building the Tower of London _____.

A. was one of defense
B. was to exhibit his valuable jewellery.
C. was strongly criticized later in the Middle Ages.
D. remains unknown even now.
E. is still being debated among historians.

Part 7: Statement and Conclusion Questions

Instruction: In each question below is given a statement followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

32. **Statement:** The Bank of England moved to auction 25 metric tons of gold which drew plenty of bidders looking for a bargain, but was criticized by major gold producers worldwide.

Conclusions:
I. The Bank of England should not auction gold which it possesses to keep steady international prices of gold.
II. Bidders should quote higher gold prices to retain present value of gold in the international markets.

A. if only conclusion I follows
B. if only conclusion II follows
C. if either I and II follows

D. if neither I nor II follows and
E. if both I and II follow

33. **Statement:** The use of non-conventional sources of energy will eliminate the energy crisis in the world.
Conclusions:

I. Modern technology is gradually replacing the conventional sources of energy.
II. The excessive exploitation of environment has led to depletion of conventional sources of energy.

A. if only conclusion I follows
B. if only conclusion II follows
C. if either I and II follows
D. if neither I nor II follows and
E. if both I and II follow

Part 8: Sentence Completion

Instruction: Each of the following sentences has a blank space, indicating that a word has been omitted. Beneath the sentences are fie lettered words. Choose the word that best completes the meaning of the sentence as a whole.

34. The teacher became _______ at the students' disrespectful behaviour.
A. ostentatious B. mercurial C. indignant D. insufferable E. enunciated
35. The writer stated her position on her topic in a (n) _____.

A. deference B. proffer C. thesis D. Ruse E. anachronism

SECTION TWO: Quantitative Reasoning (Questions 36-60)

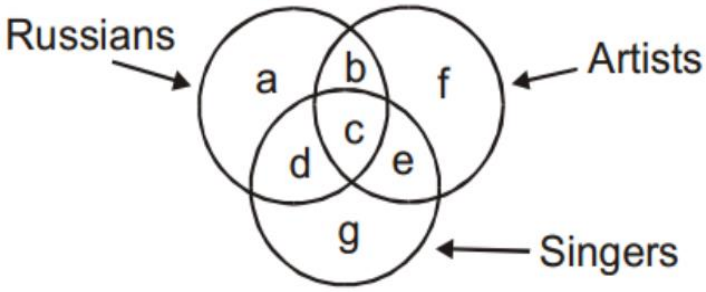
DIRECTIONS: solve each of the problems given below and select the best answer from the given alternatives and **blacken** the letter of your choice on the separate answer sheet provided.

36. If $\sqrt{1+\frac{x}{529}}=\frac{24}{23}$, then the value of x is
A. 47 B. 15 C. 30 D. 27
37. The number of common terms in the two sequences $17,21,25,,\ldots,417$ and $16,21,26,\ldots,466$ are
A. 19 B. 20 C. 22 D. 78
38. 75% of 104 is the same as 60% of what number?
A. 130 B. 133 C. 136 D. 140
39. If $x-y=11$, what is the value of $2x-2y-7$?
A. 4 B. 15 C. 22 D. 29
40. The altitude of an equilateral triangle is $4\sqrt{3}$ cm. What is its perimeter?
A. 12cm B. 18cm C. 24 cm D. $12\sqrt{3}$cm

41. If the average of m and $m+2$ is x and if the average of m and $m-2$ is y. What is the average of x and y?

A. m B. $\frac{1}{2}m$ C. $m+\frac{1}{2}$ D. $2m$

42. In the following diagram there are three intersecting circles each representing certain sections of people. Different regions are marked $a-g$. Which of the following statement is **not true** according to the diagram?



A. Russians who are artists but not singers is b.
B. Artists who are neither Russians nor singers is f.
C. Russians who are singers but not artists is a.
D. Russians who are artists as well as singers is c.

43. If $a+\frac{1}{a}=p^2$, then what is $a^2+\frac{1}{a^2}$ in terms of p ?

A. p^4-2 B. p^4+2 C. p^2-2 D. p^2+2

44. Let $x\neq -3, x\neq 2$ and $x\neq \frac{-9}{7}$. Then $\left(\frac{3}{x+3}+\frac{5}{x-2}\right)\div\left(\frac{8x+9}{3x-6}\right)$ is equal to

A. $\frac{5}{x-2}$ B. $\frac{2}{8x+9}$ C. $\frac{8x+9}{x+3}$ D. $\frac{3}{x+3}$

45. If the point $(3,-7)$ is the center of a circle and the point $(8,5)$ is on the circle, what is the circumference of the circle?

A. 13π B. 15π C. 8π D. 26π

46. Compare the following two quantities and choose the correct statement from the given alternatives.

Quantity A	Quantity B
$\sqrt[4]{5}$	$\sqrt[3]{4}$

A. The two quantities are equal.
B. Quantity A is greater than quantity B.
C. Quantity B is greater than quantity A.
D. The two quantities cannot be compared

47. Two dies are rolled. What is the probability of getting the sum is **not** 9?

A. $\frac{1}{6}$ B. $\frac{8}{9}$ C. $\frac{5}{6}$ D. $\frac{1}{9}$

48. A man has 2 parents, 4 grandparents ,8 great-grand parents, and so on. Find the number of ancestors during the 10 generations preceding his own

A. 1023 B. 450 C. 2046 D. 510

49. Present age of Navawit and Hanna are in the ratio of $5:4$ respectively. Three years later, the ratio of their ages will become $11:9$ respectively. What is Hanan's present age in years?
    A. 27 B. 30 C. 24 D. 40

50. If $x^4 - 3x + 5$ is divided by $2x - 1$, then the remainder is
    A. $\frac{35}{16}$ B. $\frac{-35}{16}$ C. -9 D. $\frac{57}{16}$

51. If the line passing through (x, y) and $(2, -3)$ has slope of 2 and the line passing through (x, y) and $(3,1)$ has slope of 3, then (x, y) equals
    A. $(-1,5)$ B. $(1, -5)$ C. $(-1, -5)$ D. $(1,5)$

52. Derartu gave 30% of her income to her mother and 15% to her father. If she still has 7700 birr. How many Birr she has originally?
    A. 41,000 B. 10,000 C. 14,000 D. 17,000

53. If $(x + m)(x + n) = x^2 - 5x - 36$ what is the value of $\frac{m+n}{mn}$?
    A. $\frac{-4}{9}$ B. $\frac{5}{36}$ C. $\frac{9}{4}$ D. $\frac{36}{5}$

54. The prime factorization of 504 can be written in the form of $a^n b^m c^r$ what is the value of $a + b + c - mnr$?
    A. 6 B. 4 C. 10 D. 11

55. A circular region has circumference C and area K. If $C = 3k$, what is the radius of the circle?
    A. $\frac{2}{3}$ B. $\frac{3}{2}$ C. $\frac{1}{3}$ D. 3

56. Which ordered pair is in the solution set of the system of the inequality $y \leq 3x + 1$ and $x - y > 1$?
    A. $(-1, -2)$ B. $(-1,2)$ C. $(1,2)$ D. $(2, -1)$

For questions 57-60 use the following information

Study the table carefully on the number of pages printed by 5 printers during 5 days and answer the given questions.

Printers days	A	B	C	D	E
Mondays	139	147	211	141	184
Tuesdays	141	189	164	189	151
Wednesday	115	141	159	156	136
Thursday	89	223	120	147	113
Friday	187	93	257	160	124

57. What is the respective ratio between total number of pages printed by printer B on Wednesday and Thursday together and total number of pages printed C on Monday and Friday together?
    A. 7: 9 B. 7 : 11 C. 9 : 11 D. 11 : 13

58. What is the average number of pages printed by printer B on Monday, Tuesday and Friday?

A. 138 B. 140 C. 141 D. 143

59. The number of pages printed by printer A on Wednesday is what percent of the number of pages printed by printer D on Friday?

A. $65\frac{1}{8}\%$ B. $69\frac{1}{4}\%$ C. $71\frac{7}{8}\%$ D. $75\frac{3}{8}\%$

60. The number of pages printed by printer E on Monday is what percent more than the number of pages printed by printer C on Thursday?

A. $53\frac{1}{2}\%$ B. $53\frac{1}{3}\%$ C. $53\frac{2}{3}\%$ D. $57\frac{1}{2}\%$