

**ADDIS ABABA CITY ADMINISTRATION EDUCATION BUREAU**

**GRADE 12 SCHOLASTIC APTITUDE TEST (SAT) MODEL EXAMINATIONS**

**MESKEREM 2015/SEPTEMBER 2022**

**NUMBER OF QUESTIONS: 60**

**TIME ALLOWED: 2:00 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**

**Directions: Find the synonym of the capitalized words.**

1. I hope you are not going to **ABANDON** your project.  
(A) give up completely    (B) change    (C) modify slightly    (D) postpone
2. The only cure for alcoholism is complete **ABSTINENCE** from alcohol.  
(A) Absence    (B) avoidance    (C) sickness    (D) prescription
3. There is **AMPLE** rain and intense sunlight in tropical climates; consequently, plant life is luxuriant and varied.  
(A) scant    (B) abundant    (C) hard    (D) detrimental
4. Many countries nowadays restrict the exportation of **AUTHENTIC** artifacts.  
(A) particular    (B) rare    (C) tentative    (D) genuine
5. Further arms limitations talks were **CALLED OFF** when Congress failed to ratify the treaty.  
(A) cancelled    (B) postponed    (C) scheduled    (D) interrupted

**Directions: Find the antonym of the following words written in capitals.**

6. I opened the door and saw a **DECEASED** man.  
(A) sick    (B) invisible    (C) new born    (D) old
7. In the 18th century England **SEIZED** many colonies in the old and new world.  
(A) captured    (B) freed    (C) occupied    (D) lost
8. He **WENT ON** smoking, as far as I knew him.  
(A) continued    (B) started    (C) kept on    (D) stopped
9. My friend stopped his car and asked me to **HOP IN**.  
(A) jump in    (B) get out    (C) take from    (D) keep out

10. John Bull was described as a man of the gentleman farmer type, good natured, but easily **OFFENDED**.

- (A) hurt                      (B) insulted                      (C) sick                      (D) pleased

**Directions:** Each of these questions has four items. You are required to select the one which does not belong to the group.

11. (A) authority                      (B) cruel                      (C) kind                      (D) loyal  
12. (A) revenue                      (B) income                      (C) expenditure                      (D) receivables  
13. (A) courage                      (B) strength                      (C) valour                      (D) warrior  
14. (A) Apt                      (B) Relevant                      (C) Appropriate                      (D) Adept  
15. (A) Gold medalist                      (B) Athlete                      (C) Olympic Champion                      (D) Record holder  
16. (A) Ring                      (B) Shoulder                      (C) Finger                      (D) Write  
17. (A) Abstract                      (B) Conceptual                      (C) Material                      (D) Idealist  
18. (A) Cease                      (B) Launch                      (C) Initiate                      (D) Commence  
19. (A) Taxi                      (B) Cruiser                      (C) Amble                      (D) Cab  
20. (A) Hiatus                      (B) Break                      (C) Pause                      (D) End

**Directions:** Each question has a pair of CAPITALIZED words followed by four pairs of words. Choose the pair of words which best expresses the relationship similar to that expressed in the capitalized pair.

**21. SYMPHONY: COMPOSER**

- (A) RAIN: FLOOD                      (C) NOVEL: AUTHOR  
(B) LIGHT: SWITCH                      (D) SONG: MUSIC

**22. TREE: TRUNK**

- (A) PEN: INK                      (C) CABIN: LOG  
(B) CAR: CHASSIS                      (D) ARM: BODY

**23. CIRCLE: ARC**

(A) LINE: SEGMENT

(B) PART: WHOLE

(C) PERCENT: FRACTION

(D) SMALL: BIG

**24. COW: HERD**

(A) GRASS: GREEN

(B) CHILD: FAMILY

(C) BALD: HAIR

(D) HORSE: JOCKEY

**25. BUILDING: BRICK**

(A) LIME: CEMENT

(B) HIGHWAY: ASPHALT

(C) RIVER: BRIDGE

(D) VEHICLE: ROAD

**26. LIQUID: GASEOUSNESS**

(A) SERUM: FUME

(B) HUMID: ARID

(C) THAW: DISTIL

(D) SMOKE: CLOUD

**27. FISSION: FUSION**

(A) IMPLOSION: EXPLOSION

(B) SEPARATION: COMBINATION

(C) INTRUSION: EXTRUSION

(D) ENEMY: FRIEND

**28. MASTER: OCUVGT**

(A) LABOUR: NCDQWT

(B) LABOUR: NDERWT

(C) LABOUR: NBCRWT

(D) LABOUR: NEDRWT

**29. ATMOSPHERE: STRATOSPHERE**

(A) NIMBUS: CLOUD

(B) INSTRUMENT: CALIBRATION

(C) AIRCRAFT: JET

(D) CLIMATE: RAIN

**30. ACTION: REACTION**

(A) INTROVERT: EXTROVERT  
TREATMENT

(B) ASSAIL: DEFEND

(C) DISEASED:

(D) DEATH: REBIRTH

## **SECTION TWO: READING COMPREHENSION**

***Directions: Read the following passage carefully and answer the questions according to the information therein.***

Among those who call themselves socialists, two kinds of persons may be distinguished. There are, in the first place, those whose plans for a new order of society, in which private property and individual competition are to be superseded and other motives to action substituted, are on the scale of a village community or township, and would be applied to an entire country by the multiplication of such self-acting units; of this character are the systems of Owen, of Fourier, and the more thoughtful and philosophic socialists generally. The other class, which is more a product of the continent than of Great Britain and may be called the revolutionary socialists, has people who propose to themselves a much bolder stroke. Their scheme is the management of the whole productive resources of the country by one central authority, the general government. And with this view some of them avow as their purpose that the working classes, or somebody on their behalf, should take possession of all the property of the country, and administer it for the general benefit.

Whatever may be the difficulties of the first of these two forms of socialism, the second must evidently involve the same difficulties and many more. The former, too, has the great advantage that it can be brought into operation progressively, and can prove its capabilities by trial. It can be tried first on a select population and extended to others as their education and cultivation permit. It need not, and in the natural order of things would not, become an engine of subversion until it had shown itself capable of being also a means of reconstruction. It is not so with the other; the aim of that is to substitute the new rule for the old at a single stroke, and to exchange the amount of good realized under the present system, and its large possibilities of improvement, for a plunge without any preparation into the most extreme form of the problem of carrying on the whole round of the operations of social life without the motive power which has always hitherto worked

the social machinery. It must be acknowledged that those who would play this game on the strength of their own private opinion, unconfirmed as yet by any experimental verification — who would forcibly deprive all who have now a comfortable physical existence of their only present means of preserving it, and would brave the frightful bloodshed and misery that would ensue if the attempt was resisted — must have a serene confidence in their own wisdom on the one hand and the recklessness of other people's sufferings on the other, which Robespierre and St. Just, hitherto the typical instances of those united attributes, scarcely came up to. Nevertheless this scheme has great elements of popularity which the more cautious and reasonable form of socialism has not; because what it professes to do, it promises to do quickly, and holds out hope to the enthusiastic of seeing the whole of their aspirations realized in their own time and at a blow.

31. Who among of the following is not a socialist?

(A) Robespierre      (B) Fourier      (C) Owen      (D) All are socialists

32. Which of the following, according to the author, is true?

(A) The second form of socialism has more difficulties than the first.

(B) The second form of socialism has the same difficulties as the first.

(C) The second form of socialism has less difficulties than the first.

(D) The author has not compared the difficulties of the two.

33. According to the author, the difference between the two kinds of socialists is that

(A) one consists of thinkers and the others are active people.

(B) the first have a definite philosophy and the second don't have any definite philosophy.

(C) the first believe in gradual change while the others believe in revolutionary change.

(D) the first are the products of Britain, while the others are products of Russia.

34. Which of the following were characteristics of St. Just and Robespierre?

- (A) Unconcern for other's suffering
- (B) Full confidence in their own wisdom
- (C) Neither (a) nor (b)
- (D) Both (a) and (b)

35. Which of the following according to the author, may not be the result of not verifying the desirability of socialism experimentally first?

- (A) Bloodshed
- (B) Deprivation of current comfortable existence
- (C) Corruption in high places
- (D) Misery caused by resisting the change

36. According to the philosophy of revolutionary socialism,

- (A) the government takes over the villages first, and then gradually the whole country.
- (B) the government takes over all productive resources of the country at one stroke.
- (C) the government declares a police state and rules by decree.
- (D) there is no government as such: the people rule themselves by the socialist doctrine.

37. The word 'avow' in the context of the passage means \_\_\_\_\_

- (A) proclaim
- (B) vow
- (C) affirm
- (D) deny

38. It may be inferred from the passage that the author's sympathies are for

- (A) the first type of socialism.
- (B) the side of the socialist doctrine.
- (C) the second type of socialism.
- (D) Neither side

### **SECTION THREE: LOGICAL AND ANALYTICAL REASONING**

39. Cigarettes constitute a mere 20 per cent of tobacco consumption in India, and fewer than 15 per cent of the 200 million tobacco users consume cigarettes. Yet these 15 per cent contribute nearly 90 per cent of the tax revenues to the exchequer from the tobacco sector. The punitive cigarette taxation regime has kept the tax base narrow, and reducing taxes will expand this base.

Which of the following best bolsters the conclusion that reducing duties will expand the tax base?

- (A) The cigarette manufacturers' association has decided to indulge in aggressive promotion.
- (B) An increase in duties on non-cigarette tobacco may lead to a shift in favor of cigarette smoking
- (C) The cigarette manufacturers are lobbying for a reduction on duties.
- (D) There is a likelihood that tobacco consumers will shift to cigarette smoking if cigarette prices were to reduce.

40. P, Q, R and S are four statements. Relation between these statements is as follows.

- I. If P is true, then Q must be true.
- II. If Q is true, then R must be true.
- III. If S is true, then either Q is false or R is false.

Which of the following must be true?

- |                                        |                                       |
|----------------------------------------|---------------------------------------|
| (A) If R is true, then Q must be true  | (C) If Q is true, then P must be true |
| (B) If S is false, then Q must be true | (D) If P is true, then S is false     |

**Directions:** Answer the given two questions based on the following information.

Amar, Akbar and Anthony are three friends. Only three colors are available for their shirts, viz. red, green and blue. Amar does not wear red shirt. Akbar does not wear green shirt. Anthony does not wear blue shirt.

41. If Akbar and Anthony wear the same color of shirts, then which of the following is not true?

- (A) Amar wears blue and Akbar wears green
- (B) Amar wears green and Akbar wears red
- (C) Amar wears blue and Akbar does not wear blue
- (D) Anthony wears red

42. If two of them wear the same color, then how many of the following must be false?

- I. Amar wears blue and Akbar does not wear green
- II. Amar does not wear blue and Akbar wears blue
- III. Amar does not wear blue and Akbar does not wear blue
- IV. Amar wears green, Akbar does not wear red, Anthony does not wear green

(A) None                      (B) One                      (C) Two                      (D) Three

***Directions: Choose the option in which the statements are most logically related.***

43. A. No cowboys laugh. Some who laugh are sphinxes. Some sphinxes are not cowboys.

B. All ghosts are florescent. Some ghost do not sing. Some singers are not florescent.

C. Cricketers indulge in swearing. Those who swear are hanged. Some who are hanged are not cricketers.

D. Some crazy people are pianists. All crazy people are whistlers. Some whistlers are pianists.

(A) A and B              (B) C only              (C) A and D              (D) D only

44. A. All good people are knights. All warriors are good people. All knights are warriors.

B. No footballers are ministers. All footballers are tough. Some ministers are players.

C. All pizzas are snacks. Some meals are pizzas. Some meals are snacks.

D. Some barkers are musk deer. All barkers are sloth bears. Some sloth bears are musk deer.

(A) C only      (B) B and C      (C) A only      (D) C and D

45. A. Dinosaurs are prehistoric creatures. Water-buffaloes are not dinosaurs. Water-buffaloes are not prehistoric creatures.

B. All politicians are frank. No frank people are crocodiles. No crocodiles are politicians.

C. No diamond is quartz. No opal is quartz. Diamonds are opals.

D. All monkeys like bananas. Some GI Joes like bananas. Some GI Joes are monkeys.

(A) C only      (B) B only      (C) A and D      (D) B and C

46. A. All earthquakes cause havoc. Some landslides cause havoc. Some earthquakes cause Landslides.

B. All glass things are transparent. Some curios are glass things. Some curios are transparent.

C. All clay objects are brittle. All XY are clay objects. Some XY are brittle.

D. No criminal is a patriot. Ram is not a patriot. Ram is a criminal.

(A) D only      (B) B only      (C) C and B      (D) A only

47. A. MD is an actor. Some actors are pretty. MD is pretty.

B. Some men are cops. All cops are brave. Some brave people are cops.

C. All cops are brave. Some men are cops. Some men are brave.

D. All actors are pretty. MD is not an actor. MD is not pretty.

(A) D only      (B) B and C      (C) A only      (D) C only

**Directions:** Given below are six statements followed by sets of three. You are to mark the option in which the statements are most logically related.

48. 1. Some pins are made of tin.  
2. All tin is made of copper.  
3. All copper is used for pins.  
(A) 123                      (B) 356                      (C) 341                      (D) 125
49. 1. An ostrich lays eggs.  
2. All birds lay eggs.  
3. Some birds can fly  
(A) 251                      (B) 125                      (C) 453                      (D) 532
50. 1. Some paper is wood.  
2. All wood is good.  
3. All that is good is wood  
(A) 254                      (B) 246                      (C) 612                      (D) 621
4. Some tin is copper  
5. Some pins are used for tin  
6. Some copper is used for tin
4. An ostrich cannot fly  
5. An ostrich is a bird  
6. An ostrich cannot swim
4. All wood is paper  
5. All paper is good  
6. Some paper is good.

## SECTION FOUR: ARITHMETHIC COMPUTATIONS

51. The rate of increase of the price of sugar is observed to be two percent more than the inflation rate expressed in percentage. The price of sugar, on January 1, 2004, is Br. 20 per kg. The inflation rate for the years 2004 and 2005 are expected to be 8% each. The expected price of sugar on January 1, 2006 would be
- (A) Br.23.60      (B) Br.24.00      (C) Br.24.60      (D) Br.24.20
52. An intelligence agency decides on a code of 2 digits selected from 0, 1, 2..., and 9. But the slip on which the code is hand-written allows confusion between top and bottom, because these are indistinguishable. Thus, for example, the code 91 could be confused with 16. How many codes are there such that there is no possibility of any confusion?
- (A) 25      (B) 75      (C) 80      (D) None of these

53. Two oranges, three bananas and four apples cost Br.15. Three oranges, two bananas and one apple cost Br. 10. I bought 3 oranges, 3 bananas and 3 apples. How much did I pay?

- (A) Br.10      (B) Br.8      (C) Br.15      (D) cannot be determined

54. Three times the first of three consecutive odd integers is 3 more than twice the third. What is the third integer?

- (A) 15      (B) 9      (C) 11      (D) 5

55. Instead of a meter scale, a cloth merchant uses a 120 cm scale while buying, but uses an 80 cm scale while selling the same cloth. If he offers a discount of 20% on cash payment, what is his overall profit percentage?

- (A) 20%      (B) 25%      (C) 40%      (D) 15%

**Directions: Answer the given questions based on the following table.**

Machine M1 as well as machine M2 can independently produce either product P or product Q. The time taken by machines M1 and M2 (in minutes) to produce one unit of product P and product Q are given in the table below: (Each machine works 8 hour per day).

| PRODUCT | M1 | M2 |
|---------|----|----|
| P       | 10 | 8  |
| Q       | 6  | 6  |

56. What is the maximum number of units that can be manufactured in one day?

- (A) 140      (B) 160      (C) 120      (D) 180

57. If M1 works at half its normal efficiency, what is the maximum number of units produced, if at least one unit of each must be produced?

- (A) 96      (B) 89      (C) 100      (D) 119

58. What is the least number of machine hours required to produce 30 pieces of P and 25 pieces of Q respectively?

- (A) 6 hr 30 min      (B) 7 hr 24 min      (C) 6 hr 48 min      (D) 4 hr 6 min

59. If the number of units of P is to be three times that of Q, what is the maximum idle time to maximize total units manufactured?

- (A) 0 min      (B) 24 min      (C) 1 hr      (D) 2 hr

60. If equal quantities of both are to be produced, then out of the four choices given below, the least efficient way would be

- (A) 48 of each with 3 min idle      (C) 53 of each with 10 min idle  
(B) 64 of each with 12 min idle      (D) 71 of each with 9 min idle