Ethiopian University Entrance Examination (EUEE)

Scholastic Aptitude Test

Ginbot 2010/June 2018

BOOKLET CODE:32 **SUBJECT CODE: 03**

NUMBER OF ITEM: 60 **Time allowed 2 hours**

Section one verbal reasoning

This section contains a total of 35 verbal reasoning questions with subsections of synonyms, antonyms, analogy, sentence completion, classification, reading comprehension, and logical and analytical reasoning. Each sub-section has its own directions.

Analogy

DIRECTIONS: For questions 1-7 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.

1. FOOT is to LEG as HAND is to:
   A. FINGERS
   B. THUM
   C. TOE
   D. ARM

2. BEEF is to:
   A. LION
   B. PIG
   C. GOAT
   D. SHEEP

3. BEGIN is to START as EMPLOY is to:

A. END

B. FIRE

C. HIRE

D. CELEBRAT

4. ADULT is to CHILD as CAT is to:
   A. HERD
   B. KITTEN
   C. MARE
   D. ANIMAL

5. CAP is to HEAD as RING is to:
   A. HAND
   B. EAR
   C. LEG
   D. NECK

6. CROWD is to DISPERSED as MEETING is to:
   A. DEPRESSED
   B. RECESSED
   C. ADJOURNED
   D. DISCUSSED

7. SUCCESS is to EFFORT as FAILURE is to:
   A. DEVOTION
   B. DISASTER
   C. CHANCE
   D. LAZINESS

Antonyms

DIRECTIONS: Questions 8-10 consist of words printed in capital letters followed four words. Choose the word that is most nearly opposite in meaning to the word in capital letters. Then, find the question number and blacken the letter of your choice on the separate answer sheet provided.

8. MEAN
   A. Cruel
   B. Friendly
   C. Malicious
   D. Unkind

9. SELFISH:
   A. Greedy
   B. Meager
   C. Altruistic
   D. Generous

10. CONDENSE:

A. Block
B. Convert
C. Summarize
D. Expand

Synonyms

DIRECTIONS Questions 11-13 consist of words printed in capital letters followed by four words. Choose the word that is most nearly similar in meaning to the word in capital letters. Then, find the question number and blacken the letter of your choice on the separate answer sheet provided.

11. POVERTY
    A. Destitution
    B. Humility
    C. Restraint
    D. Deficit

12. MISFORTUNE:
    A. Collapse
    B. Adversity
    C. Crisis
    D. Defenselessness

13. MISERABLE
    A. Challenging
    B. Refutable
    C. Violent
    D. Abject

Reading comprehension

DIRECTIONS: Questions 14-18 deal with restoring words correctly into a passage. The following five words listed at random are removed from the passage given below. Numbers are written instead of the words. Read the passage and choose the word that correctly completes the passage. Then, blacken the letter of your choice on the separate answer sheet provided.

Emissions exception unprecedented warmest trend

The Earth's climate has changed throughout history. The current warming --- 1—is of particular significance because most of it is extremely likely to be the result of human activity since the mid-20th century and proceeding at a rate that is --- 2---. The planet's average surface temperature has risen about 1.1 degrees Celsius since the late 19th century, a change driven

largely by increased carbon dioxide and other human-made -3- into the atmosphere. Most of the warming occurred in the past 35 years, with 16 of the 17 warmest years on record occurring since 2001. Not only was 2016 the –4—year on record, but eight of the 12 months that make up the year – from January through September, with the –5—of June – were the warmest on record for those respective months.

14. Which of the following is the correct word that should replace 4 (the fourth blank in the passage) is ----------.
    A. Exception
    B. Warmest
    C. Trend
    D. Unprecedented

15. The correct word that should replace 1 (the first blank in the passage) is --------.
    A. Emissions
    B. Unprecedented
    C. Warmest
    D. Trend

16. Which of the following is the correct word that should replace 3(the third blank in the passage) is ----------.
    A. Trend
    B. Emissions
    C. Warmest
    D. Unprecedented

17. Which of the following is the correct word that should replace 5 (the fifth blank in the passage) is ---------.
    A. Warmest

B. Trend

C. Exception

D. Unprecedented

18. Which of the following is the correct word that should replace 2 (the second blank in the passage) is ----------–.

A. Exception

B. Emissions

C. Warmest

D. Unprecedented

Sentence completion

DIRECTIONS: Answer questions 19-21 by selecting the choice that contains the word or pair of words that correctly complete the statements. Then, blacken the letter of your choice on the separate answer sheet provided.

19. It was a war the prime minister and her wise counselors wished to ----------if they could and were determined in any event to ---------- as long as possible. They were repeatedly meeting and discussing on this issue until the case was under their control.

A. Curtail: promote

B. Oppose: fight

C. Provoke : delay

D. Avoid : postpone

20. The natural balance between prey and predator has been increasingly ----------, usually because of the human intervention.

A. Recognized

B. Disturbed

C. Observed

D. Predicted

21. Typically legal proceedings begin with an investigation meant to ---------- evidence, followed by a trial that establishes whether that evidence ---------- a criterion ----- ``beyond a reasonable doubt`` in criminal proceedings, and ``according to the preponderance evidence`` in civil proceedings.

A. Show : declare

B. Verify : contradicts

C. Collect : meets

D. Mean : amounts

DIRECTIONS: In questions 22-26 three of the words are in the same classification, the remaining one word does not belong to the others. From the given four alternatives, choose the word that does not belong in the same classification as the others and blacken the letter of your choice on the separate answer sheet provided.

22. Choose the word that is different from the other three.

A. Zoology

B. Ecology

C. Psychology

D. Biology

23. Choose the word that is different from the other three.

A. Leaf

B. Root

C. Stem

D. Dirt

24. Which one of the following words does Not belong with the others?

A. Orange
B. Apple
C. Sugarcane
D. Grape

25. Choose the odd one out of the following words.

A. Anger
B. August
C. Disgust
D. Laughter

26. Which one of the following words does NOT belong with the others?

A. Earth
B. Mars
C. Jupiter
D. Cosmos

Logical and analytical reasoning (27-35)

DIRECTIONS: Read the following assumptions and answer questions 27-28.

Assume J, L, N , M, P, W, C, A, B, F, E, and R represent persons living in a university dormitory. All live in a building having six floors each having two rooms/apartments. No more than two persons live in any apartment/room. Some rooms may be empty.

L and his roommate live two floors above a and his roommate, C.

J lives alone, three floors below W and two floors below E.

M lives alone, three floor below A and C.

N lives three floors above the floor on which B and F have single rooms.

R and P live in single rooms two floor below M.

27. Which of the following is true about where R lives?

A. Fourth floor, opposite A and C

B. Third floor, above M or E

C. First floor, below B or F

D. Second floor, below J or A and C

28. Which of the following lists the persons named in the correct order, going from the bottom floor to the top?

A. R, B, M, A, L, N

B. R, F, N, E, L, C

C. L, E, A, M, F, R

D. P, B, J, C, N, L

DIRECTIONS: Question 29 needs to be answered based on the statement, followed by two conclusions labeled I and II. You have to assume the statement is true, then consider the conclusions and decide which of them logically follows beyond a reasonable doubt from the information given in the statement. Then, blacken the letter of your choice on the separate answer sheet provided.

29. Statement: if all the players play to their full potential, we will win the football match. We have won the football match.

Conclusions: I. All players played to their full potential.

II. Some players did not play to their full potential.

A. Only conclusion I follows

B. Both I and II follows

C. Only conclusion II follows

D. Either I or II follows

DIRECTIONS: In this section (Questions 30-35) each question or a group of questions is based on a passage or set of conditions. Read each question carefully and select the best answer and blacken the letter of your choice on the separate answer sheet provided.

30. Today`s secondary school students are not being educated. They are being trained. Their teacher demand little of them other than that they memorize facts and follow directions. The current emphasis on training in basic maths and verbal skills, while a useful step, rarely leads to the essential second step: development of independence critical thinking.
The author would probably consider which of the following aspect of a student`s term paper to be most praiseworthy?
    A. Evidence of original insights and freshly developed concepts
    B. The use of grammatically correct sentence structure
    C. Evidence of extensive research prior to writing
    D. The choice of a challenging topic

31. Obesity is a serious problem in many developed countries. Research suggests that obesity can lead to a number of health problems including diabetes, asthma, and heart disease. Recent research has even indicated that there may be a relationship between obesity and some types of cancer. Major public health campaigns that increase awareness and propose simple life style changes that will, with diligence and desire, eliminate or at least mitigate the incidence of obesity are a crucial first step in battling this critical problems.
This paragraph best supports the statement that
    A. A decline in obesity would radically decrease the incidence of asthma.
    B. People in those countries watch too much television and not exercise enough.
    C. Public health campaigns that raise consciousness and propose lifestyle changes are productive way to fight obesity.
    D. Fast-food restaurants and unhealthy school lunches countries greatly to obesity.

32. A company worker has six children. No one else in the factory has six children. Which of the following conclusions logically follows from the statements given above?
    A. Some of the company workers have more than six children.
    B. Only one worker in the company has exactly six children.
    C. All workers in the company have six children each.
    D. Everybody in the company has children.

33. Hassen is standing to the right of Bereket. Beletu is standing on the opposite side of Bereket. Since the opposite of right is wrong, Beletu must be standing on the wrong side of Bereket.
    Which of the following logical errors has the author of the argument above committed?
    A. He has confused cause and effect.
    B. He has provided in factual evidence for his conclusion.
    C. He has drawn a general conclusion from an insufficient number of examples.
    D. He has used a single term to mean two different things.

34. Alula must be a basketball player; he is wearing a basketball jersey.
    The conclusion above is valid only If it is true that:
    A. Only basketball players wear basketball jerseys.
    B. All basketball players often wear basketball jerseys.
    C. Basketball players often wear basketball jerseys.
    D. Basketball players are required to wear basketball jerseys.

35. Today`s secondary school students spend too much time thinking about trivial and distracting matters such as fashion. Additionally, they often dress inappropriately on college grounds. Rather than spending time writing another detailed dress policy, we should make school uniforms mandatory. If students were required to wear uniforms, it would increase a sense of community and harmony in our schools and it would I still a

sense of discipline in our students. Another positive effect would be that teachers and administrators would no longer have to acts clothing police, freeing them up to focus on more important issues.

This paragraph best supports the statement that

A. Students are not interested in being part of a community.
B. Students who wear school uniforms get into better colleges.
C. School uniforms should be compulsory for secondary school students.
D. Inappropriate clothing leads to failing grades.

SECTION TWO: Quantitative reasoning (Questions 36-60)

Data interpretation

DIRECTIONS: Questions 36-40 are based on the hypothetical data given in the table below. Answer each question based on the data and blacken the letter of your choice on the separate answer sheet provided.

Table: Number of candidates that took and qualified in a license examination from different regions over the years.

Region	Year									
	1997-2000		1998-2001		1999-2002		2000-2003		2001-2004	
	Took	Qual.	Took	Qual.	took	Qual.	took	Qual.	took	Qual.
AA	5200	720	8500	980	7400	850	6800	775	9500	1125
AM	7500	840	9200	1050	8450	920	9200	980	8800	1020
OR	6400	780	8800	1020	7800	890	8750	1010	9750	1250
TI	8100	950	9500	1240	8700	980	9700	1200	8950	995
SP	7800	870	7600	940	9800	1350	7600	945	7990	885

36. What is the percentage of total number of qualified candidates to the total number of candidates took the exam among all the five regions in 2002?

A. 11.84%
B. 11.52%
C. 11.48%
D. 11.89%

37. What is the percentage of candidates qualified from region AM for all the years together, over the candidates took the exam from Region AM during all the years together?

A. 11.75%

B. 11.46%

C. 11.57%

D. 11.15%

38. In which of the given years the number of candidates took the exam from region OR has maximum percentage of qualified candidates?

A. 2001

B. 2003

C. 2004

D. 2000

39. What is the average number of candidates who took the exam from region TI during the given years?

A. 8800

B. 8900

C. 8860

D. 8990

40. What percent is the total number of qualified candidates in 1997-2000 to the total number of those qualified in 2001-2004?

A. 84%

B. 76%

C. 78%

D. 80%

DIRECTIONS: Questions 41-42 consist of two quantities, one in column A and one in column B. compare the two quantities and answer the questions by choosing the alternative best explains the relationship between ``column A`` and ``column B``

41. X>Y

Quantity A	Quantity B
30% of X	50% of Y

A. The two Quantities are equal.

B. Quantity A is less than Quantity B

C. The relationship cannot be determined from the information given.

D. Quantity A is greater than Quantity B.

42.

Quantity A	Quantity B
(-21)12	(-31)13

A. The two quantities are equal.

B. Quantity A is greater than quantity B.

C. Quantity A is less than Quantity B.

D. The relationship cannot be determined from the information given.

DIRECTIONS: Solve each of the problems given in questions 43-60 below and select the best answer from the given alternatives. Then, find the correct questions number and blacken the letter of your choice on the separate answer sheet provided.

43. If S is a number between 0 and 1, which of the following is Not more than S?

A. $\sqrt{S}$

B. 1/S

C. 2S

D. S^2

44. look at the pattern carefully: 10 20 25 35 40 50 55, then which of the following pair of numbers comes next?

A. 60, 65

B. 65, 70

C. 60, 75

D. 60, 70

45. What is the simplified form of (1÷10 -1) X (-1)-10?

A. 10

B. 1

C. 0.1

D. 100

46. If b ≠0 and a/5=b/7, what is the value of a/b?

A. 7/5

B. 1/7

C. 1/5

D. 5/7

47. Look at the pattern carefully: 32 , 31, 32, 29, 32, 27, 32, then which the following pair of numbers comes next?

A. 29, 32

B. 29, 30

C. 25, 32

D. 25,30

48. 1÷0.1÷0.01÷0.001 is equal to

A. 1,000,000

B. 0.001

C. 100

D. 0.00001

49. What number increased by 3 is equal to 3 less than twice the number?

A. 3

B. 9

C. 12

D. 6

50. Three professors contested an election for a University president and received 1136,7636 and 11628 votes, respectively. What percentage of the total votes did the winning professor get?

A. 65%

B. 57%

C. 59%

D. 61%

51. If one-fourth of one-third of a number is 15, then what is three-tenth of that number?

A. 39

B. 45

C. 54

D. 34

52. An athlete completes a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. what is the total journey in km?

A. 216 km

B. 225 km

C. 218 km

D. 230 km

53. If y≠0 and xy =y/6, what is the value of x?

A. ½

B. 1/8

C. ¼

D. 1/6

54. What number should come next in the series: 7, 10, 8, 11, 12, …….?

A. 13

B. 10

C. 12

D. 70

55. The difference between a positive proper and its reciprocal is 9/20. What is the value of the fraction?

A. 5/4

B. 3/5

C. 4/3

D. 4/2

56. What is the product of $\sqrt[3]{7} - 2)(7 + 2)$?

A. 5

B. 4

C. 2

D. 3

57. The sum of ages of 5 children born at the interval of 3 years each is 50 years. What is the age of the youngest child?

A. 8 years

B. 4 years

C. 6 years

D. 10 years

58. What number should come next in the series: 544, 509, 474, 439, ….?

A. 445

B. 420

C. 404

D. 414

59. A library has an average of 510 visitors on Sundays and 240 on other days. What is the average number of visitors per day in a month of 30 days beginning with a Sunday?

A. 285

B. 283

C. 275

D. 29

60. What number should come next in the series: 58, 52, 46, 40, 34 ……?

A. 32

B. 30

C. 28

D. 34



Ethiopian University Entrance Examination (EUEE)

Scholastic Aptitude Test

Ginbot 2011/June 2019

BOOKLET CODE:22 **SUBJECT CODE: 03**

NUMBER OF ITEM: 60 **Time allowed 2 hours**

This section contains a total of 35 verbal reasoning questions with subsections of synonyms, antonyms, analogy, sentence completion, classification, reading comprehension, advanced verbal anagrams, analytical and logical reasoning. Each sub-section has its own directions.

Analogy

DIRECTIONS: To answer questions 1-3, read the related pair of words written in capital letters followed by four pairs of words. Select the pair that best expresses a relationship similar to that expressed in the original capitalized pair that best expresses a relationship similar to that expressed in the original capitalized pair. then find corresponding number on the separate answer sheet and blacken the letter of your choice.

1. BELT: WAIST
   A. BRACELET: WRIST
   B. SHOE: LEG
   C. STOCKINGS: GLOVE
   D. WATCH: ARM

2. NATIVE: FOREIGN
   A. MEAN: UNKIND
   B. DOMESTIC: HOMEGROWN
   C. NAÏVE: SOPHISITCATED
   D. LOCAL: IMPORT

3. GALLON: LITRE
   A. KLOMETRE: METRE
   B. POUND:WEIGHT

C. YARD: POUND

D. MILE: KILOMETRE

DIRECTIONS: For questions 4-7 read each of the following words carefully and choose the work that correctly completes the analogy. Then blacken the letter of your choice on the separate answer sheet provided.

4. HIRE is to FIRE as SELECT is to ----------.
   A. Receive
   B. Reject
   C. Admit
   D. Employ

5. MOUNT is to HORSE as …….. is to TRAIN.
   A. Board
   B. Drive
   C. Ride
   D. Lift

6. WAR is to DESTRUCTION as GERM is to ----------.
   A. Bacteria
   B. Disease
   C. Doctor
   D. Hospital

7. QUIET is to NOISY as CALM is to ----------.
   A. Slow
   B. Arrogance

C. Dormant

D. Agitated

Synonyms

Directions: Questions 8-10 consists of words printed in capital letters followed by four words. Choose the word that is most nearly similar in meaning to the word in capital letters. Then, find the questions number and blacken the letter of your choice on the separate answer sheet provided.

8. EXTINGUISH

   A. Ignite

   B. Turn on

   C. Switch off

   D. Distinguish

9. INDEPENDENCE

   A. Individualism

   B. Sovereignty

   C. Colonialism

   D. Cordiality

10. PERSEVERANCE

   A. Frequent suffering

   B. Continuity of effort

   C. Lack of energy

   D. Severity of disease

Antonyms

Directions: questions 11-15 consists of words printed in capital letters followed by four words. Choose the word that is most nearly opposite in meaning to the word in capital letters. Then, find the question number and blacken the letter of your choice on the separate answer sheet.

11. FRAUD
    A. Authentic
    B. Fake
    C. Scam
    D. Fragile

12. SINCERE
    A. Genuine
    B. Dissent
    C. Disapprove
    D. Dishonest

13. FOLLOW
    A. Go behind
    B. Precede
    C. Trail
    D. Go after

14. EXTRAORDINARY
    A. Unique
    B. Usual
    C. Unexpected
    D. Amazing

15. DOMESTIC
    A. Local
    B. Neighborhood

C. Foreign

D. Household

Classification items

Directions: in questions 16-18, three out of the four words are In the same classification. Choose the word that does not belong in the same classification as the others and blacken the letter of your choice on the separate answer sheet provided.

16. Which of the following words has a different meaning from the others.

A. Bright

B. Shade

C. Shining

D. Luminous

17. Choose the odd one out.

A. Ignore

B. Disregard

C. Respect

D. Disobey

18. Which one of the following words is different from the others?

A. Unbreakable

B. Helpless

C. Fragile

D. Weak

Reading comprehension

Directions: 19-23, deal with restoring words correctly into a passage. The following four words listed at random are removed from the passage given below. Numbers are written instead of the words. Read the passage and choose the word that correctly completes the passage. Then, blacken the letter of your choice on the separate answer sheet provided.

Brain Potential Encouragement Creative Specialization

We all have the potential to 1. However, because of the pressures of modern living and the need for 2, many of us never have the time or opportunity, or indeed are given the 3, to explore our talents, even though most of us have sufficient ammunition to realize this 4 in the form of data which has been fed into, collated and processed by the 5 over many years.

19. Which of the following is the correct word that should replace 2 (the second blank in the passage)?
    A. Potential
    B. Brain
    C. Creative
    D. Specialization

20. Which of the following is the correct word that should replace 3(the third blank in the passage)?
    A. Brain
    B. Encouragement
    C. Specialization
    D. Creative

21. Which of the following is the correct word that should replace 5 (the fifth blank in the passage)?
    A. Specialization
    B. Potential

C. Brain

D. Creative

22. Which of the following is the correct word that should replace 4 (the fourth blank in the passage)?

A. Potential

B. Brain

C. Creative

D. Specialization

23. Which of the following is the correct word that should replace 1 (the first blank in the passage)?

A. Encouragement

B. Specialization

C. Potential

D. Creative

Advanced verbal test anagrams

Directions: Questions 24-25 deal with word anagrams. Read each question carefully and give your answer by blackening the letter of your choice on the separate answer sheet provided.

24. Only one of the groups of four letters below can be rearranged to spell-out a four-letter English word which is direction.

A. Seat

B. Norm

C. Tank

D. Inch

25. Only one the groups of seven letters below can be rearranged to yield a seven-letter English word which is an item. Identify.

    A. Visible

    B. Recital

    C. Crooked

    D. Success

Analytical and logical reasoning questions

Directions: answer questions (26-29) based on the following information. Then, blacken the letter of your choice on the separate answer provided.

The director of a small rural primary school plans to assign six teachers—kargebo, Melaku, Nahom, Paulos, Robel, and Samson – tutor/help students after school from Monday to Saturday according to the following rule:

Melaku must be before Robel

Paulos must tutor on Tuesday

Krgebo must tutor on the day immediately before or after Nahom tutored

26. If Nahom is assigned on Saturday, when should Karebo be assigned on:

    A. Monday

    B. Wednesday

    C. Friday

    D. Thursday

27. If Melaku is assigned on Wednesday, Robel cannot be assigned on:

    A. Saturday

    B. Thursday

    C. Friday

    D. Monday

28. Which can be assigned on Monday?
    A. Melaku
    B. Kargebo
    C. Paulos
    D. Robel

29. If Nahom is assigned on Wednesday, Kargebo is to be assigned on:
    A. Saturday
    B. Friday
    C. Monday
    D. Thursday

Directions: read each question (30-32) below and correct answer. Then, blacken the letter of your choice on the separate answer sheet provided.

30. Adama is one of the cities with lowest car accidents, and it is one of the few cities that require strict annual care safety inspections. Therefore, all cities of Ethiopia should apply similar safety inspection procedures.

    The argument above is based on which of the following assumptions?
    A. Most cities tend to impose few rules on the cars drivers use.
    B. Annual care safety inspections contribute significantly to reduce adama car accident.
    C. Most cities are doubtful that annual car safety inspection can reduce accidents
    D. Smaller number of accidents can be reported in other major cities of Ethiopia

31. A factory worker has one more than five. No one else in the factory has six children. Which of the following conclusions logically follows from the given statements?
    A. All workers in the factory have six children each

B. Some of the factory workers have more than six children

C. Every body in the factory has children

D. Only one worker in the factory has exactly six children.

32. According to one psychological theory, in order to be happy, one must have an intimate relationship with another person. Yet the world's greatest composers spent most of their time in solitude and had no intimate relationships. So the psychological theory must be wrong.

The conclusion above assumes that

A. The world's greatest composers were happy

B. People who have intimate relationships spend little time in solitude

C. Less well known composers had intimate relationship

D. The world's greatest composers chose to avoid intimate relationship

Directions: answer questions 33-35 based on the information given in the statement and conclusions that follow.

33. Statement : the teacher humiliated Abraham in the presence of his colleagues.

Conclusions: (I) the teacher did not like Abraham.

(II) Abraham was not popular with his colleagues.

A. Only conclusion (II) follows

B. Both conclusion (I) and (II) follow

C. Neither conclusions (I) nor (II) follows

D. Only conclusions (I) follows

34. Statement: North Korea faced growing international opposition for its decision to explode nuclear weapons at its test site.

Conclusions: (I) the citizens of the nation favored the decision.

(II) some powerful countries do not want other nations to become powerful as

they are.

A. Only conclusion (II) follows
B. Neither conclusion (I) nor (II) follows
C. Both conclusions (I) and (II) follow
D. Only conclusions (I) follows

35. Statement: population increase coupled with drought is going to be the scenario of many African countries in the days to come.

Conclusions: (I) the population of developing countries will not continue to increase will not continue to increase in the future.

(II) it will be very difficult for the government of many African countries to provide its people decent quality of life.

A. Both (conclusions (I) and (II) follow
B. Only conclusion (II) follows
C. Only conclusion (I) follows
D. Neither conclusion (I) nor (II) follows

Section Two: Quantitative reasoning (Questions 36-60)

Directions: solve each of the problems given in questions 36-52 and give your answer by blackening the letter of your choice on the separate answer sheet provided.

36. Find the value of x in the following sequence?

3, 12 x, 48, 75 ….

A. 15
B. 21
C. 36
D. 27

Given a sequence
3, 12, x, 48, 75……
$3=3*1^2$, $12=3*2^2$,$x=3*3^2$,$48=3*4^2$, $75=3*5^2$ ……
..x=27
Ans. D

37. Find the value of x in the following sequence?

10, 15, 22, x, 42, 55, 70, …….

A. 28

B. 31

C. 30

D. 29

Given a sequence
10,15,22,x,42,55,70 ……
10,10+5,15+7,22+9,31+11,42+13,55+15, ……
10,15,22,31,42,55,70,….
.x=31
Ans. B

38. What is the length of a side of square with area C?

A. 4c

B. 2c

C. √c

D. C2

A= s2, where A= area and s= length of side
. s=$\sqrt{A} \leftrightarrow s = \sqrt{\sqrt{c}, s\sqrt{incе}A = C}$
Ans. C

39. If ABCD is a four digit positive number divisible by 5 and 10, what is the value of D?

A. 0

B. 1

C. 2

D. It can't be determined

ABCD is four digit number divisible by sx 10 by divisibility test of the units (last) digit must be 0
Ans. A

40. If one-third of one-fourth of a number is 15,then what is the three-tenth of that number?

A. 35

B. 36

C. 54

D. 45

Let x be the number
1/3*1/4*x=15 ↔x=12*15=180
Hence, 3/10*180=54
Ans. C

41. Which of the following number pair is different from the other in the group?

A. 7,3

B. 3,5

C. 6,2

D. 1,7

Ans. C
because GCF (a,b)=1 except (6,2)

42. Which of the following numbers is different from the others in the group?

A. 37

B. 29

C. 17

D. 27

Ans. D
27 is composite the rest age primes

43. Find the value of x in the following sequence.

16, 8, 4, 2, X, ½ ,……

A. 2

B. 1

C. ¼

D. 1/8

Find x for 16,8,4,2,x,1/2,……
8=16/2, 4=8/2, 2= 4/2,x=2/2,1/2=x/2, …∴ $x = 1$
Ans. B

44. Find the value of x in the following sequence.

6, 9, 7, 10, 8, 11, 9, 12, x, ……

A. 15

B. 14

C. 9

D. 10

Find x s.t
7+1 8+1 9+1
6,9,7,10,8,11,9,12,x,..... ∴ $x = 10$
6+1 9+1 10+1 11+1
Ans. D

45. What is the sum of the first five prime numbers? (S)

A. 11

B. 26

C. 18

D. 28

S= 2+3+5+7+11=28
Ans. D

46. It takes two and half an hour to get from Addis Abeba to Adama travelling at a constant rate of speed. What part of the distance is travelled by 4/3 of and hour, approximately?

A. 1/3

B. ½

C. 2/3

D. ¾

S= distance covered
V= speed and t= time to cover a distance from Addis Abeba to Adama
S= vt →s= 2.5v
If we travel 4/3 hr of a total time s, covered = 2.5*4/3v =10/3v
$\therefore \frac{\frac{4}{3}}{\frac{5}{2}} \rightarrow \frac{5}{2} * \frac{4}{3} = \frac{8}{15}$ *which is pproxmatly*
Ans. B

47. Assume that Ujulu saves ¼ of his income and his father had been saving half of his income of the father, which is 5000 birr, is double of his son, how much is saved by his son?

A. 500

B. 1250

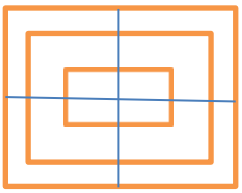
C. 625

D. 2500

Ujulu – saves $\frac{1}{4}$ *of his income*
Father – saves ½ his in come
Father income = 5000 br
Father income 2*ujulu
Ujulu income = 2500 br
Ujulu saves = 2500 * ¼ =625 br
Ans.C

48. What is the number of squares in the figure given below?

A. 18
B. 15
C. 12
D. 9



Ans.B qntes -4 squares
Middle – 4 squares
Innual – 4 squares and divided four equal parts

49. A bag contains 28 yellow, 44 black and 36 green marlbes. Ali takes out one marble from the bag at random. What is the probability that he will take out a gree marble?

A. 1/3
B. 36%
C. 1/36
D. 1/9

Bag contains 28= yellow, 44= black, 36 green total ball contains in the bag = 108 ball p(green) = $no\ of\ green\frac{balls}{no}of\ total\ balls\ = \frac{36}{108} = \frac{1}{3}$
Ans. A

50. How many irrational numbers are there between 2 and7?

-1, 0, 2, 6, x, 30, 62, …

A. 10
B. 20
C. Infinitely many
D. 30

Ans, C

51. What number should replace x in the following series?

-1, 0, 2, 6, x, 30, 62, ….

A. 14
B. 24

C. 12

D. 10

The number is given

- 0, 2, 6, x, 30, 62, …….
- -1+1, 0+2, 2+4, 6+8, 14+16, 30+32, 62+64,……..
- 0,2,6,14,30,62,128, …….
- X=14

Ans. A

52. The square of a positive number is greater than the number itself when the number is:

A. Greater than one

B. Greater than zero

C. Between zero and one

D. Impossible to determine

Ans. A $\leftrightarrow x2 > x, x2 - x > 0 = x(x-1) > 0, s, s = (1.00)$

Quantities comparison

Directions: questions 53-55 consist of two quantities, one in column A and one in column A and one in column B. compare the two quantities and answer the questions by choosing alternative that best explains the relationship betw.een ‘’Column A’’ ‘’ column B’’. give the answer by blackening the letter of your choice on the separate answer sheet provided.

53. Suppose that 0<Y<5. Compare the following two quantites.

Quantity A	Quantity B
Y2	Y3

A. Quantity A is equal to Quantity B.

B. The relationship cannot be determined from the information given.

C. Quantity A is equal to Quantity B

D. Quantity A is less than Quantity B

Ans. B

54. Compare the two Quantities.

Quantity A	Quantity B
The percent increase from 10 metres to 15	The percent increase from 50 metres to 65

metres.	,metres

A. Quantity A is equal to quantity B

B. Quantity A is less than Quantity B

C. Quantity A is greater than Quantity B

D. The relationship cannot be determined from the information given.

Ans, C

55. Compare the two quantities.

Quantity A	Quantity B
5/3	13/8

A. Quantity A is equal to Quantity B

B. Quantity A is less than Quantity B

C. Quantity A is greater than Quantity B

D. The relationship cannot be determined based on the given information

Ans. C

Data interpretation

Questions 56-60 are based on the hypothetical data in the table below. It is about the total population, primary school age population and school enrolment by sex of the seven Regions in Ethiopia

Regions	Total population		School age population		School Enrolment	
	Male	female	Boys	Girls	boys	Girls
A	1,387,000	1500000	162000	166000	220000	267000
B	756,000	603000	141000	114,000	34000	22000
C	9,309,000	9317000	1913000	1887000	1711000	1572000
D	12,934,000	12934000	2709000	2670000	2734000	2099000
E	7,203,000	7287000	1522000	1500000	1474000	1113000
F	2,268,000	1950000	445000	445000	157000	95000
G	2,080,000	2143000	443000	443,000	447000	436000
Total	35,886,000	7335000	7335000	7,335,000	6777000	5604000

56. Which region is least in enrolling girls to school compared to the boys?

A. C

B. F

C. E

D. D

Region C = G:B = $\frac{1.572}{1.711} = 1:1$

D= $\frac{2,099}{2,734}$

$E = \frac{1,113}{1,474} \cong 1:1$

a F= $\frac{95}{157} \cong 1:$

Ans, A

57. Total male population, in millions, in the seven regions is nearly.

A. 35

B. 13

C. 20

D. 26

Ans, A
Given male = 35,886,000 nearly 35

58. Assuming that the total population of the country at the time the above data is taken is 73 million, what is the share, in percent, of the population in C and D together?

A. 40

B. 50

C. 70

D. 60

Ans,D total population = 73 million
Population of C= 19 million
Population of D= 26 million
C+D= 45 million
Population in % $\frac{45}{73} * 100 \cong 60\%$

59. The proportion of girls enrolled in schools in region D to the female population is:

A. 1:2

B. 2:13

C. 1:17

D. 5:14

Ans,B region D Girl /Female = 2099:12934
$\cong 2000: 13000\ 2: 13\ s$

60. The three least populous Regions in order are:

A. A, D,G

B. B, A, E

C. A, G, F

D. B, A, F

Ans. D

Ethiopian University Entrance Examination (EUEE)

SCHOLASTIC APTITIDE TEST

Ginbot 2009/May 2017

BOOKLET CODE: 63 SUBJECT CODE: 03

Number of Items: 60 Time Allowed: 2 hours

SECTION ONE: Verbal Reasoning (Questions 1-35)

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

Analogy

DIRECTIONS: Questions 1-5 deal with analogy. In question 1, a related pair of words written in capital letters in followed by four pairs of words of phrases. Select the pair that best expresses a relationship similar to that expressed in the original capitalized pair. In questions 2-5 related pair of words are followed by a word that has similar relationship when paired with another words. 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. DEPARTURE: ARRIVAL
   A. Inception: Conclusion
   B. Beginning: Culmination
   C. Upshot : End
   D. Process : Outcome

2. WIDOW is to a WOMAN as ---------- is to MAN.
   A. Divorcee
   B. Widower
   C. Widow
   D. Fiance

3. OPINION is to DEBATE as HYPOTHESIS is to ---------- .

    A. Rejecting
    B. Discovering
    C. Stating
    D. Testing

4. CAUSE is to EFFECT as PREDECESSOR is to ----------.

    A. Foundation
    B. Outcome
    C. Successor
    D. Precursor

5. LAND is ARABLE as RIVER is to ----------.

    A. Shallow
    B. Navigable
    C. Water
    D. Impenetrable

ANTONYMS

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

6. THRIVE
    A. Trail
    B. Strive
    C. Deteriorate
    D. Distractive

7. ARROGANCE
    A. Truthful
    B. Humility
    C. Courage
    D. Self-esteem

Synonyms

DIRECTIONS: Questions 8-9 consist of words printed in capital letters followed by four words. Choose the word that is most nearly Similar in meaning to the word in capital letters. Then, find the question number and blacken the letter of your choice on the separate answer sheet.

8. CURTIL
    A. Facilitate
    B. Improve
    C. Recover
    D. Restrain

9. IMMEDIATELY:
    A. Instantly
    B. Gradually
    C. Slowly
    D. Temporarily

Language Usage

DIRECTIONS: Each of the questions below (10-12) consists of underlined phrase or word. From the given alternatives, choose the one that most nearly has the same meaning as the underlined phrase or word and blacken the letter of your choice on the separate answer sheet.

10. If you can’s make it to my graduation party, it’s not a big deal.
    A. Not tolerable
    B. No need to worry
    C. Surprising
    D. Something I dislike

11. Hannan remained as cool as a cucumber even when she was in the pressure of the competition against her opponent.
    A. Strong
    B. Ruffled
    C. Calm
    D. Agitated

12. Taciturn by nature, Eyasu speaks very little even to his own family members.
    A. Quiet
    B. Talkative
    C. Warm
    D. Obtrusive

Sentence completion

DIRECTIONS: Each sentence (13-17) below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are four words or sets 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.

13. Even after long years of extensive investigation, scientists could not discover the treatment for cancer. The treatment still remains ----------.
    A. Clear
    B. Cursory
    C. Apparent
    D. Mysterious

14. While the disease is in ---------- state it is almost impossible to determine its existence by ----------.
    A. A critical ------ examination
    B. An acute ------- analysis
    C. A latent -------- observation
    D. A dormant ----- postulate

15. As Mhammed and Abdi have planned to join University in the coming year by sponsoring themselves, they are ---------- and ---------- a lot.
    A. Reading ---- saving
    B. Applying ----- playing
    C. Teaching ----- learning
    D. Working ----- entertaining

16. Because artist Aster Aweke paved the way for later jazz-fusion musicians, she is considered a --------- of that style.

A. Beneficiary
B. Connoisseur
C. Revivalist
D. Progenitor

17. The ---------- of the apartment was unbelievable; it was difficult to realize that human beings could live in such ----------.
    A. Squalor ----- filth
    B. Stench ------ disarray
    C. Disorder ---- isolation
    D. Spacious ---- proximity

Reading Comprehension

DIRECTION: Read passage I and II bellow carefully and answer questions 18-25 based on the information stated or implied in the passages. Then find the question number and blacken the letter of your choice on the separate answer sheet.

Reading Passage I

Black holes are the most efficient engines of destruction known to humanity. Their intense gravity is a one-way ticket to oblivion, and material spiraling into them can heat up to millions of degrees and glow brightly. Yet, they are not all-powerful. Even super-massive black holes are minuscule by cosmic standards. They typically account for less than one percent of their galaxy's mass. Accordingly, astronomers long assumed that super-massive holes, let alone their smaller cousins, would have little effect beyond their immediate neighborhoods. So it has come as a surprise over the past decade that black hole activity is closely inter wined with star formation occurring farther our in the galaxy.

18. Which of the following best describes the function of the statement in lines 7-9 (``so it … galaxy``)?
    A. It challenges recent scientific findings.

B. It offers examples to support a theory.

C. It introduces a new view of information presented earlier in the passage.

D. It provides support for the argument asserted in the preceding statement.

19. Which of the following most resembles the relationship between ``black hole activity`` and ``star formation`` (lines 8-9) as described in the passage?

A. A drought in a wilderness area causes a significant loss of vegetation in that area.

B. Overfishing in a gulf leads to an increase in the population of smaller aquatic organisms.

C. A volcanic eruption on one continent results in higher rainfall totals on another continent.

D. Industrial emissions in one region lead to an increase in airborne pollutants in adjacent regions.

20. What does the word ``minuscule`` in line 4 refer to?

A. Tiny

B. Very large

C. Invisible

D. Noticeable

21. What is the primary purpose of the passage?

A. Advocating the importance of black holes.

B. Disproving an existing theory of black holes.

C. Verifying the danger of black holes for human being.

D. Explaining the role that black holes play in the formation of star.

Reading passage II

Born in Adigrat, Tigray Region OF Ethiopia, Miruts Yifter spent early part of his Youth working in different factories as a carriage driver. His talent as a long distance runner
Was noticed when he joined the Ethiopian air force.

Miruts was called to the Ethiopian national team for the 1968 summer Olympics in Mexico city . But he made his Olympic **debut** four years later in muich Olympic where he won a bronze medal 10,000 meters. In the 1973 all African games he won one gold and one silver medals in 10,000 and 5,000 meters, **respectively.** at the first African championships in 1979 he won the gold medals in 5,000 and 10,000 meters .

Miruts was unable to participate in the 1976 summer Olympics because his nation **boycotted** the event. Four year later in Moscow, miruts **made up** for his disappointments.in the final of the 10,000 metres he **sprinted** into the lead 300 meter from the finish and won ten meters difference from his follower.

Five day later, in the 5000 metres final, miruts was **boxed in** during the last lap, but with 300 meter to go, his Ethiopian teammate mohammed kedir, **stepped aside** and Mirutes again sprinted to victory. Due to his abrupt change in speed when executed his kick to finish, Miruts acquired the nickname ``Miruts the shiffer.``

Miruts Yifter died at the age of 72 on 22 December 2016 in Toronto, candada where he had lived since 2000 after suffering from respiratory problems.

22. Which of the following is closest in meaning to the word debut (line 5)?

A. First appearance
B. Second appearances
C. Usual appearances
D. Obligatory appearances

23. Which of the following is closest in meaning to the word abrupt (line 14)

A. Easy
B. Difficult

C. Storing

D. Sudden

24. According to the passage, which one of the following is TRUE about the gold medal in Moscow Olympics?

A. Miruts had to run with knee injury when he won the gold medal.

B. It would not have made any difference whether or not Mohammed Kedir had stepped aside.

C. Miruts was in uncomfortable position but he came out of that position without anyone's help.

D. Thanks to the support from Mohammed Kedir, Miruts won the medal with his unique sprint at the end

25. According to the passage, which of the following is TRUE about Miruts Yifter?

A. Miruts had won two gold medals in one Olympic.

B. Miruts had run in all Olympics since munich Olympic.

C. M iruts won a gold medal the first time he ran at the international stage.

D. Miruts began his career as long-distance runner since his childhood years.

Logical and analytical reasoning

DIRECTIONS:- Questions 26-35 deal with logical and analytical reasoning. Read the given set of conditions and assumptions for each question. Choose the answer that you think is most appropriate among the given alternatives. Then find the correct question number and blacked the letter of your choice on the separate answer sheet.

26. If you present a yellow pass, then you may enter the compound. If statement above is true, which of the following must also be true?

I. If you do not present a yellow pass, then you may not enter the compound.

II. If you may enter the compound, then you must have presented a yellow pass

III. If you may not enter the compound, you did not present a yellow pass

A. III only

B. II only

C. I only

D. I and II only

A company`s facilities were too small to accommodate the crown for a special one day meeting. The company members received a license to use the public park, and a public address system was promptly installed. Citizens who were not members of the company protested the action of the park department for having issued this license.

27. What is the best argument used by the company to retains its license

A. The company is a local taxpayer

B. No one would be excluded from entering the park during the meeting

C. Wide publicity had already been gived to the location of special meeting

D. The park had been used before by companies for meetings, concerts, rallies.

28. Which of the following is the best argument used by the citizens who protested the action by the park department?

A. Freedom of speech was violated.

B. A public referendum should have been held

C. Citizens would be denied the enjoyment of the public park during this one day.

D. The town would incur expenses to clean up the park after the one day meeting.

29. Since it is possible that substances contained in certain tree roots may provide a cure for cancer, the government must provide sufficient funds to allow thorough testing of this possibility.

What is the assumption in the argument above

A. A cure for cancer would be extremely valuable to society.

B. Substances contained in certain tree roots will probably cure cancer.

C. The possibility of finding a cure is sufficient reason for funding research into possible cancer cures.

D. The line of research mentioned offers at present the most promising possibility for finding a cure for cancer.

Questions 30-31 are based on the following conditions

MS. Halima: Mr. Abera insists that the only way for our company to increase its profits is to double the advertising budget. That obviously is not the answer. Our two major copmetitors have operations similar to ours. Both are showing increased profits while spending less on advertising than we presently spend.

30. Ms. Halima`s primary method of making her point is to:

A. Draw an analogy

B. Question Mr. Abera`s competence

C. Present evidence which was previously overlooked.

D. Suggest a different underlying cause of the problem.

31. Which of the following statements would be Mr. Abera`s most effective rebuttal of Ms. Halima argument:

A. My proposal is not `obviously` wrong. There is only one way to is find out if it wrong, and that is to try it.

B. You have offered statistics to back up neither your claims nor any proposal for an alternative solution to our problem.

C. I have been in this business for 30 years, during which time I have repeatedly proven my ability to identify and solve business problems.

D. Our two major competitors do not need to advertise as much as we do, because they are already much better known and have larger shares of the market.

Questions 32-35 are based on the following information

In order to conduct the work of a mail order concern it is necessary to have a minimum of three workers each day. The staff consists of five persons who work on a part-time basis. Mohammed can work on Mondays, Wednesday, and Fridays. Meaza connot report for work on Wednesdays. Nati can report for work on Tuesdays and Wednesdays only. Alemayehu cannot work on Fridays. Yeshi is available any time except on the first Monday and Tuesday of the month.

32. Which three are available on any Monday?
    A. Meaza, Nati, and Yeshi.
    B. Mohammed, Yeshi, and Nati
    C. Nati, Meaza, and Mohammed
    D. Alemayehu, Meaza, and Mohammed

33. Which three could you count on to report for work Friday?
    A. Meaza, Nati, and Yeshi
    B. Nati, Meaza, and mohammed
    C. Mohammed, Meaza, and Alemayehu
    D. Mohammed, Meaza, and Alemayehu

34. During which day of the week might it be impossible to obtain a full complement of workers?
    A. Monday
    B. Tuesday
    C. Thursday
    D. Wednesday

35. During which day of the week would it be necessary to call on Mohammed to complete the full complement of workers?
    A. Friday
    B. Monday
    C. Thursday

D. Wednesday

Section Two: Quantitative Reasoning (Questions 36-60)

Directions: solve each of the problems given in Questions 36-54 below and select the best answer from the given alternatives. Then find the correct question number and blacken the letter of your choice on the separate answer sheet provided.

36. When 80,000 is written as $8.0x10^n$, what is the values

A. 2

B. 3s

C. 4

D. 5

Ans, C
Sol. $80,000= 8*10^n$
N= 4

37. What is the sum of the following values

(1/4+0.25+25/100+10/40+25/50+50/100)

A. 1

B. 2

C. 3

D. 4

Ans, B
Sol. 0.25+0.25+0.25+0.25 +0.5+0.5= 2

38. If 75 percent of x is equal to Percent of 25 where p>0, what is the value of x/p?

A. 1/3

B. 3/16

C. ¾

D. 3

Ans, A
Sol, (75%) x= (p%)25
0.75x= 0.25p
$\frac{0.75x}{0.75p} = \frac{0.25p}{0.75p} = \frac{x}{p} = \frac{1}{3}$

39. What is the value of $(0.0001x20^4) \div 16/10$?

A. 2

B. 4

C. 10

D. 100

Ans.C
Sol, $(0.0001*20^{4}\left(\frac{10}{16}\right)$
$\left(\frac{1}{10000}\right)(2)^{4}\left(\frac{10}{6}\right)16((\frac{10}{16}) = 10$

40. If 15+X is 5 more than 20, what is the value of X?

A. 5

B. 10

C. 25

D. 50

Ans, B
Sol. 15+x= 20+5
X= 25-15
X= 10

41. Which of the following is less than Z is Z is a number between 0 and 1?

A. Z^2

B. $\sqrt{Z}$

C. 2z

D. 1/z

Ans A
Sol, $Z\varepsilon(0.1)$ then Z^2 is less than Z.

42. What is the value of x+10, if (x-5)=11/(x+5), for X≠-5?

A. -10

B. 4

C. 10

D. 25

Ans, B
Sol, $(x-5) = \frac{11}{x} + 5$
= (x-5)(x+5)= 11
= x2-25=11
= x2 =36
= x= $\pm$6 then x+10 = 6+10= 16
= -6+10 = 4

43. If 6/x =18/x+6,what is the value of x/3?

A. 1

B. 2

C. 3

D. 4

Ans. A
Sol. $\frac{6}{x} = \frac{18}{x} + 6 = 6x + 36 = 18x$
12x= 36
X=3

44. When a number is divided by 2 the result is equal to the result when that same number is divided by 4. What is that number?

A. -2

B. 0

C. 2

D. 4

Ans. B
Sol, let x be a number
$\frac{x}{2}=(\frac{x}{\frac{2}{4}}) = \frac{x}{2}=\frac{x}{8}$ =2x=8x
=-6x=0 x=0

45. Which of the following is the average of the first 10 odd numbers?

A. 10

B. 15

C. 20

D. 25

Ans, A
Sol, first ten odd numbers are $1 + 3 + 7 + 9 + 11 + 13 + 15 + 17 + \frac{19}{8} + 2$
$\frac{100}{10}$=10

46. A number is called ``even-odd`` if it is halfway between and even integer and an odd integer. If x is an even-odd number, which of the following must be true?

I. 2x is an integer

II. 2x is even –odd

III. X is halfway between two even integers.

A. I only

B. II only

C. I and II only

D. II and III only

Ans, A
Sol, Even – odd is an integer

47. The arithmetic mean of p and q is 15 and the average of Y and X is 15. What is the average of p, Y, x and q?

A. 7.5

B. 15

C. 22.5

D. 30

Ans .B
Sol, average of y and x= arithmetic mean of p and q
$= \frac{15+15}{2} = 15$

48. What is the value of E, if ABCDE is a five digit positive number divisible by 5 and 10?

A. 0

B. 1

C. 2

D. 5

Ans, A
Sol. If the unit digit is zero then it can be divided by 5 and 10

49. If the sum of three consecutive integers is 33, what is the middle integer?

A. 9

B. 10

C. 11

D. 12

Ans .C
Sol, (x)+(x+1)(x+2)= 33
= 3x+3= 33
= 3x=30
= x=10 there for the middle one is 11

50. (arithmetic mean) of the three scores?

A. 60

B. 70

C. 80

D. 90

Ans, A
Sol, x+y+80= 180 then average= $\frac{180}{3}$ = 60

51. When 5 times the number x is added to 12, the result is 32. What number results when 2 times x is added to 7?

A. -15

B. -5

C. 5

D. 15

Ans, D
Sol, 5x+12= 32
5x= 20
X = 4

52. Hawa used 1/4 of her monthly salary for buying teff and ½ more than the price of teff for house rent. What fraction of her monthly salary did hawa use that month for the teff and rent combined?

A. 1/3

B. 7/12

C. 5/8

D. ¾

Ans. C
Sol, let x be monthly salary
= $(\frac{1}{4}x) + (\frac{1}{4}x) + (\frac{1}{4/2}x)$
= $\frac{1}{4}x + (\frac{1}{4} + \frac{1}{8}x)$
= $(\frac{5}{8})x$ = 5/8 of salary

53. If as many 7 meter pieces of wire as possible are cut from a wire that is 36 meters long, what is the total length of the wire that is left over?

A. 1 meter

B. 2 meter

C. 3 meter

D. 4 meter

Ans, A
Sol, if 36 divided of by 7 the remainder is 1.

54. The price for one quintal of sugar is birr 5,800 and it decreases at the rate of birr 2 every three months. The price for one quintal of coffee is birr 4,200 and it increases at the rate of birr 8 every four months. How many years will it take for the two commodities to become equal in price?

A. 10

B. 20

C. 50

D. 60

Ans, C
Sol, 5800-(4*2)x
= 4200+(3*8)x
= for x years
5800-8x= 4200+2+x
= -32x= - 1600
= x= -1600/-32
X=50 years

Data interpretation questions (55-60)

Directions: Questions 55-60 below are based on the hypothetical data given in the table below. Answer the questions based on the data and blacken the letter of your choice on the separate answer sheet provided.

Questions 55-60 are on the hypothetical data given below.

Annual income and expenditure of five schools

School	Income (in ETB)	Expenditure (in ETB)
A	1,200,000	1,000,000
B	1,400,000	1,200,000
C	1,000,000	1,100,000

D	2,000,000	1,600,000
E	1,600,000	1,100,000
Sum	7,200,000	6,000,000

55. The average annual income of the five schools in ETB is ----------.

A. 1,200,000
B. 1,400,000
C. 1,300,000
D. 1,440,000

Ans .D,
Sol, average income = $\frac{7,200,000}{5}$ = 1,440,000

56. The difference between the average annual income and the average annual expenditure of the five schools in ETB is ----------.

A. 100,000
B. 240,000
C. 200,000
D. 1,200,000

Ans, B
Sol, average annual income – average annual expenditure
= 1,440,000-1,200,000= 240,000

57. Which one of the following is **NOT TRUE** about the income-ex---------- given above?

A. The difference between income and expenditure was the school E.
B. All schools have managed to keep their expenditure lower income
C. Most of the schools had annual income which was larger than the average annual income of the five schools combined.
D. Only one school had an annual expenditure which was larger than average annual expenditure of the five schools combined.

Ans, C
Sol, most of the schools of annual income is less than the average annual income

58. How many schools had higher rate of saving compared to the rate of the saving from the total income of all school?

A. 1

B. 2

C. 3

D. 4

Ans, B
Sol, two of the schools save more than 240,000 school D and E

59. If each school was expected to save at least 10% of its income, how many schools have met the expectation?

A. 1

B. 2

C. 3

D. 4

Ans, D
Sol, all schools except C have met the expectation.

60. Assume that one school will be awarded based on the proportion of saving to the income generated. Which school do you think deserves the award?

A. B

B. C

C. D

D. E

Ans, D
Sol, school E has high proportion of saving to the income generated. s