



**University of  
Education,  
Winneba**

**MATURE CANDIDATES' ENTRANCE EXAMINATION, 2019/2020  
GAT111 - General Aptitude Test**

**Duration: 2 hours**

**English Language**

**Read the passage below carefully and answer the questions based on it.**

It happens always on the streets of cities in Africa where a shabbily-dressed man clutching a purse, wallet or bag, and racing with lightning speed through a crowd of startled pedestrians and onlookers runs for his dear life. At his heels, an enraged mob follows screaming their lungs out in chorus: "Thief! Catch him! Kill him! Kill the thief! The man is then trapped in an alley, kicked, punched and assaulted mercilessly until he is beaten into a pulp and left to wallow in his pool of blood. If he is lucky, the police arrives to whisk him to the hospital, ironically, to die. If not, the rescue team arrives too late only to scoop up his charred body from the dying embers of car tyres.

Although mob justice is a common phenomenon in sub-Saharan Africa, there are fewer countries that experience it with such regularity or brutality. In countries such as Kenya, Nigeria and Ghana, statistics indicate that instant justice is meted out to about six people in broad day light each day. The number has increased in recent times because petty thieves are put through these painful deaths: stabbed, slashed with machetes, stoned, or sometimes set ablaze whereas the politicians are left on the hook with their booty.

Some psychologists ascribe the increase in violence to our exposure to violence and instant justice on the Internet and on our screens. Pundits claim that one major cause of the insurgence of mob actions in Africa is the ineffectual criminal-justice system that allows offenders of petty crimes to be severely punished by the law but not the corrupt politician. They add that not only do the police lack essential equipment like radios and vehicles, but also, they are not well protected to risk their own lives rescuing victims from mob justice.

Some people have also argued that mob action is on the increase because when criminals are processed for court, it takes forever for judgement to be handed down. That is if it ever happens. They emphasise that it is **exasperating** to see criminals back on the streets wearing a grin on their faces with impunity, as if to spite those who had helped to put them behind bars.

Some critics say that instant justice actioneers are like vigilantes who dispense justice in the streets in full view of people. Surprisingly, whereas the petty thieves are unprotected the vigilantes are protected by politicians and are even christened in some circles as 'government-sponsored thugs', 'party militias', 'ballot-box protectors', 'party foot soldiers', 'cadres', 'foot soldiers', you name them. Vigilantes thus see their opponents in other political parties as enemies who must be crushed by any means possible. It is a sad reflection that such developments stand in our way in our march towards attaining full democracy status. We should not be unmindful that violence begets more violence, and unleashing chaos undermines the rule of law in every country. The bottom line is, no matter how inadequate a country's institutions, there can never be a justification for violence and mob justice, and particularly, vigilantism.

1. According to the passage, what happens to a petty thief if he is unlucky and the police arrives late?
  - A. He is set ablaze
  - B. He is scooped
  - C. He is trapped in an alley at the hospital
  - D. He is chased by pedestrians
  - E. he is treated like a vigilante
2. The Pundits claim that one major cause of mob justice in Africa could be attributed to the.....
  - A. fact that petty thieves are unprotected
  - B. lack of equipment to combat crime
  - C. ineffectual criminal-justice system
  - D. inadequate police training and policing
  - E. the absence of communication gadgets
3. Which of the following is true about the insurgence of mob action in the passage?
  - (I) exposure to violence on the Internet and on our screens
  - (II) the ineffectual criminal-justice system
  - (III) lack of punishment for criminals processed for court
  - (IV) absence of protection and sponsorship for vigilantes
  - A. I only
  - B. II and IV
  - C. IV and III
  - D. III and I only
  - E. I, II and III
4. Give an antonym of the word "exasperating" as used in the passage.
  - A. maddening
  - B. frustrating



- C. annoying
- D. gratifying
- E. infuriating

5. What is the meaning of the expression below as used in the passage?

*'...that violence begets more violence...'*

- A. violence is the root of all evil
- B. violence leads to vigilantism
- C. violence stands against our march towards democracy
- D. violence calls for more violence
- E. none of these

6. What figure of speech is used in the expression below as shown in the passage?

*'...to wallow in his pool of blood ...'*

- A. simile
- B. hyperbole
- C. personification
- D. metaphor
- E. onomatopoeia

**From the list of words lettered A to E select the word or words that best completes each of the following sentences.**

7. No sooner had the bell gone..... the electorates assembled at the ceremonial ground.

- A. when
- B. before
- C. than
- D. until
- E. and

8. Neither Philip nor the students .....ushered into the huge auditorium yesterday.

- A. was

- B. were
- C. are
- D. Is
- E. Has been

9. We do not know what the future holds for us. ....

- A. do we?
- B. can we?
- C. don't we?
- D. didn't we?
- E. haven't we?

10. If I.....his advice, my problem would have been solved as we stand here.

- 1. have taken
- 2. had taking
- 3. have taking
- 4. take
- 5. had taken

11. Rice from Thailand and Taiwan.....cheap in the market these days.

- A. sell
- B. have sold
- C. selling
- D. sells
- E. are sold

From the words lettered A to E below each of the following sentences, choose the word or group of words that is nearest in meaning to the underlined word or phrase as it is used in the sentence.

12. After speaking to the doctor, the patient discarded the idea of committing suicide.

- A. accepted
- B. maintained
- C. rejected
- D. conjectured
- E. allowed

13. The judge rejected John's application for bail because he was impertinent.

- A. insolent
- B. courteous
- C. deferential

- D. Polite
- E. Respectful

In the following sentences, there is one word underlined and one gap. From the list lettered A to E choose the word that is **most nearly opposite in meaning** to the word **underlined** and which will at the same time, correctly fill the gap in the sentence.

14. Some states appealed against the installation of the toxic waste plants in their neighbourhood but the others called for their.....
- A. rehabilitation
  - B. demolition
  - C. allocation
  - D. acquisition
  - E. possession
15. Sowah's father was disappointed in his performance but his mother was simply .....
- A. discouraged
  - B. angry
  - C. delighted
  - D. appalled
  - E. desolate
16. When the accident occurred, most victims died but the baby crawled out of the wreckage unscathed.
- A. disfigured
  - B. slightly injured
  - C. seriously injured
  - D. mutilated
  - E. unhurt

**Read the extract below and use it to answer questions 17 and 18.**

Mwangi planted his feet firmly on the ground and lifted the hoe over his head in anger. He struck the first blow with all the fury in him. He struck another and another and groaned like a woman in labour. Thud, thud, thud, went the hoe and on and on, he poured out his frustrations and pain in his digging.

17. Which literary device is used in the extract below?

*... and groaned like a woman in labour...*

- A. alliteration
- B. simile
- C. metaphor
- D. hyperbole
- E. personification

18. The underlined portion in the extract is an example of a/an.....

- A. onomatopoeia
- B. Sonnet
- C. irony
- D. satire
- E. euphemism

19. A poem essentially sung in honour of the dead is called a/an... ..

- A. pastoral
- B. elegy
- C. epilogue
- D. eulogy
- E. allegory

20. When a writer writes about his/her own life, the work is called a/an.....

- A. biography
- B. autobiography
- C. parody
- D. Chronicle
- E. tribute

## INTEGRATED SCIENCE

Answer the following questions by shading the appropriate letter (*A to D*) on your scannable answer sheet.

21. Which of the following is a correct order of producers to consumers in a food chain.

- A. Hawk, snake, frog, grasshopper and plant
- B. Plant, grasshopper, frog, snake, and hawk
- C. Hawk, snake, frog and grasshopper



- D. Grasshopper, frog, snake and Hawk
22. In a science laboratory, if Yao wants to test for protein contents in a food substance, he will have to conduct a/an.....
- A. biuret test
  - B. emulsion test
  - C. cholesterol level test
  - D. glucose level test
23. A substance that dissolves other substances to form a concentrated solution is referred to as .....
- A. a solute
  - B. a solvent
  - C. a mixture
  - D. a solution
24. Which of the following petroleum fractions is used in road construction?
- A. Coal
  - B. Diesel
  - C. Naphtha
  - D. Bitumen
25. The colour code for a neutral wire in an electrical plug is usually.....
- A. red
  - B. yellow
  - C. blue
  - D. green
26. The inorganic components of soil includes the following;
- I. Soil particles
  - II. Air
  - III. Humus
  - IV. Mineral salts
  - V. Water
- A. I, II, III, and IV only.
  - B. II, III, IV and V only.

- C. I, II, IV and V only  
D. I, II, III, IV, and V
27. Any substance that speeds up a chemical reaction is generally termed.....  
A. enzyme  
B. catalyst  
C. chemical accelerator  
D. none of the above
28. The tooth that is sharp and pointed, and its used for tearing food in carnivores is called.....  
A. molars  
B. premolars  
C. incisors  
D. canines
29. The resultant quantum of force per unit area is referred to as.....  
A. capacity  
B. pressure  
C. momentum  
D. acceleration
30. The deliberate ending of a pregnancy is termed.....  
A. ectopic pregnancy  
B. menstrual cycle  
C. abortion  
D. rhesus factor
31. If an element **X** is written as  $^{35}_{17}\text{X}$ , the value of 35 is the elements'.....  
A. Mass Number  
B. Atomic Number  
C. Proton Number  
D. Neutron Number
32. The components a white light when dispersed with a triangular glass prism produces all the following colours;



- A. Red, yellow, violet, purple, indigo, green and Orange.
- B. brown, indigo, red, orange, yellow, blue and green
- C. Indigo, violet, green, blue, red, orange, and yellow
- D. Green, red, pink, orange, blue, indigo and violet.

33. The normal human body temperature is scaled at?

- A. 34°C
- B. 73°C
- C. 57°C
- D. 37°C

34. The S.I. unit for measuring the "*M*" component of the equation above is.....

- A. Km/h
- B. Kg
- C. J
- D. M

35. The instrument used to measure the intensity of an earthquake is termed.....

- A. seismograph
- B. barometer
- C. seismometer
- D. manometer

36. Oil paint stains can best be removed by using.....

- A. water and soap
- B. grease
- C. carbon (iv) oxide
- D. turpentine.

37. In the process of testing for starch in a leaf, a scientist dipped the leave in alcohol. A reason for doing this was to...

- A. remove the all the starch in the leave.
- B. soften the leaves.
- C. remove the green pigments in the leave.

- D. kill all the leaving cells in the leave.
38. The system in the body of an animal that comprise the heart, blood and blood vessels is referred to as.....
- A. the respiratory system
  - B. the circulatory system
  - C. the transport system
  - D. the excretory system
39. A method used to reproduce an organism using one normal cell instead of two sex cells, where by the organism produced is the exact duplicate of the original organism is termed?
- A. Grafting
  - B. Cloning
  - C. Hybrid
  - D. Artificial Insemination
40. Which of the following phenomena is affected by the moon?
- A. Earthquake
  - B. Sea breeze
  - C. Tides
  - D. Volcano
41. A/an.....is substance that cannot be broken down into simpler particles substances.
- A. atom
  - B. element
  - C. compound
  - D. molecule
42. Which of the following organs in the human body has a dual function among the following systems; circulatory, excretory and respiratory systems.....
- A. the lungs
  - B. the liver
  - C. the heart

D. the kidney

43. A .....is a series of events that is continuous and eventually lead back to the starting point.

A. sequence

B. routine

C. cycle

D. process

44. In terms of feeding, organisms that are considered producers are referred to as.....

A. autotrophs

B. parasites

C. saprophytes

D. holozoic

*All moving objects have Kinetic energy which is given by  $\frac{1}{2}MV^2$ . Use this information to answer question 25 and 26.*

45. The "M" component in the equation above represents.....

A. motion

B. mass

C. momentum

D. mechanical energy



46. Which of the following instruments can be used to measure the diameter of a thin wire?
- A. Meter rule
  - B. Micrometer screw gauge
  - C. Pair of caliper
  - D. Tape measure
47. A drug that cures diseases by killing or stopping the growth of bacteria in the body is called.....
- A. antigen
  - B. antiseptic
  - C. antibiotic
  - D. vaccine
48. A man who weighs 100kg was able to pull a truck through a distance of 20m. If the force applied was 3500N, the work done by the man will be?
- A. 70000J
  - B. 700J
  - C. 17500J
  - D. 7000000J
49. In reproduction the characteristics of the parents are passed on to the Children through the process of.....
- A. mitosis
  - B. inheritance
  - C. chromosomes
  - D. heredity
50. Diabetes in humans may result from the deficiency of a hormone called.....
- A. adrenaline
  - B. insulin
  - C. thyroxine
  - D. estrogen

## MATHEMATICS

51. Find the Highest Common Factor (HCF) of  $18$ ,  $36$  and  $120$ .
- A.  $2^3 \times 3^2 \times 5$
  - B.  $2^3 \times 3 \times 5$
  - C.  $2^3 \times 3^2$
  - D.  $2 \times 3$
52. In a class of 10 pupils, 5 pupils read Mathematics, 4 read English and 3 read both Mathematics and English. How many pupils did not read either Mathematics or English?
- A. 2
  - B. 3
  - C. 5
  - D. 4
53. A tank holds 240 litres of water. How much water is in the tank when it is  $\frac{4}{5}$  full?
- A. 240 litres
  - B. 192 litres
  - C. 132 litres
  - D. 60 litres
54. Evaluate  $\frac{2^3 \times 3^4 \times 3^3}{2^2 \times 2 \times 3^5}$ .
- A. 6
  - B. 9
  - C. 12
  - D. 18
55. Simplify  $-27 + 18 - (10 - 14) - (-2)$ .
- A. -3
  - B. -7
  - C. -11
  - D. -35
56. Simplify  $200 \times 0.01 \times 372$ , leaving your answer in standard form.
- A.  $74.4 \times 10^1$

- B.  $7.44 \times 10^1$
- C.  $7.44 \times 10^2$
- D.  $7.44 \times 10^3$

57. A man has  $6p$  sheep and  $5q$  goats. He sells  $3p$  sheep and  $2q$  goats. How many animals are left after the sales?

- A.  $3p - 3q$
- B.  $3p + 3q$
- C.  $9p - 5q$
- D.  $9p + 9q$

58. Factorize completely the expression  $xy + 5x + 2y + 10$ .

- A.  $(x+5)(2y+10)$
- B.  $(x+2)(y+10)$
- C.  $(x+5)(y+2)$
- D.  $(x+2)(y+5)$

59. Mark is 30 years old. Yaw is half as old as Mark. Paul is 10 years older than Yaw. How old is Paul?

- A. 30 years
- B. 25 years
- C. 20 years
- D. 15 years

60. The sum of the ages of Kweku and Kojo is 30 years. Kweku is 4 years older than Kojo. How old is Kojo?

- A. 19 years
- B. 17 years
- C. 13 years
- D. 11 years

61. The least number in a set of real numbers is 24 and the greatest is 30. Which of the following is the best interpretation of this statement?

- A.  $24 \leq x \leq 30$
- B.  $24 < x \leq 30$
- C.  $24 \leq x < 30$



D.  $24 < x < 30$

62. Find  $(x + y)$  if  $2x - 5y = -6$  and  $4x - 3y = -12$ .

A. -3

B. 0

C. 3

D. 9

63. The temperature of an object is given by  $F = \frac{9}{5}^{\circ}C + 32^{\circ}$ . Find the temperature if  $C = 40$ .

A. 49

B. 78.4

C. 104

D. 129.6

64. Convert  $320_{five}$  to a base ten numeral.

A. 25

B. 77

C. 85

D. 86

65. Write  $37_{ten}$  as a base two numeral.

A. 100101

B. 100111

C. 101101

D. 110101

66. A woman bought 210 oranges for 65 Ghanaian cedis. She sold all of them at 3 for 2 cedis.

How much profit did she make?

A. 35.00 cedis

B. 45 cedis

C. 65 cedis

D. 75 cedis

67. Mansah obtained 150 marks out of 240 marks in a Mathematics test. What was her percentage score?

- A. 33.33%
- B. 36.50%
- C. 41.67%
- D. 62.50%
68. An amount of money was shared between Kofi and Ama in the ratio 3 : 5 . If Ama received *Ghc*650.00 , what was Kofi's share?
- A. *Ghc*930.00
- B. *Ghc*1550.00
- C. *Ghc*1743.75
- D. *Ghc*2790.00
69. It takes 15 men an average of 48 days to weed a plot of land. How many men can weed the same plot of land in 16 days, if they work at the same rate?
- A. 45
- B. 32
- C. 18
- D. 5
70. The scale of a map is 1 : 100,000 . What is the distance (in kilometres) between two towns 4 cm apart on the map?
- A. 0.04
- B. 400
- C. 4.0
- D. 0.4
71. Which one of the following set of angles can form the interior angles of a right-angled triangle?
- A.  $\{20^\circ, 50^\circ, 90^\circ\}$
- B.  $\{80^\circ, 60^\circ, 90^\circ\}$
- C.  $\{45^\circ, 45^\circ, 90^\circ\}$
- D.  $\{65^\circ, 90^\circ, 35^\circ\}$
72. The diameter of a circular ray is 28 cm . Find the area of the ray. Take  $\pi = \frac{22}{7}$
- A. 44 cm<sup>2</sup>

- B.  $88 \text{ cm}^2$
- C.  $154 \text{ cm}^2$
- D.  $616 \text{ cm}^2$

73. A square of side  $6 \text{ cm}$  has the same area as a rectangle of length  $9 \text{ cm}$ . Find the length of the rectangle.

- A.  $3 \text{ cm}$
- B.  $4 \text{ cm}$
- C.  $6 \text{ cm}$
- D.  $24 \text{ cm}$

74. How many faces has a closed cylindrical object?

- A. 1
- B. 2
- C. 3
- D. 4

75. The volume of water in a cuboid is  $9 \text{ cm}^3$ . The length of the cuboid is  $3 \text{ m}$  and the breadth is  $2 \text{ m}$ . Calculate the depth of the water in the cuboid.

- A.  $0.15 \text{ m}$
- A.  $0.18 \text{ m}$
- B.  $1.5 \text{ m}$
- C.  $1.8 \text{ m}$

### Current Affairs

76. The 1992 Constitution of the Republic of Ghana....

- A. Provides the basic charter for the country's third attempt at republican democratic government since independence in 1957.
- B. Declares Ghana to be a federal republic with sovereignty residing in the Ghanaian people.
- C. Provides for the sharing of powers among a president, a parliament, a cabinet, a Council of State, and an independent judiciary.
- D. Fosters tolerance and bestows supreme power on a specific branch of government.



77. Who is the first female Chief of Staff of the Republic of Ghana?
- A. Georgina Theodora Wood
  - B. Akosua Frema Osei-Opare
  - C. Gloria Akuffo
  - D. Marrieta Brew Appiah Oppong
78. Ghana became a member of the United Nations in .....
- A. 1947
  - B. 1957
  - C. 1960
  - D. 2000
79. Pick the odd one out
- A. Edward Adjaho
  - B. Joyce Adeline Bamford-Addo
  - C. Ebenezer Sekyi Hughes
  - D. Aaron Mike Oquaye
80. ....was secretary to the Justice Emile Short Commission tasked with unravelling the circumstances surrounding the Ayawaso West Wuogon by-election
- A. Ernest Kofi Abotsi
  - B. Justice Emile Short
  - C. Henrieta Mensa-Bonsu
  - D. Patrick Kwarteng Acheampong
81. ...., also known as NABCO, is an initiative introduced by the government of Ghana to address graduate unemployment.
- A. The Nation Builders Corps
  - B. The Nation Builders Corp
  - C. The Nation Builders Core
  - D. The Nation Builders Corpe
82. The petroleum industry of Ghana is regulated by
- A. Ghana National Petroleum Corporation (GNPC)
  - B. Ghana Oil Company (GOIL).
  - C. Tema Oil Refinery (TOR)
  - D. The Bulk Oil Storage and Transport (BOST)
83. Ghana's Jubilee Oilfield which contains up to 3 billion barrels (480,000,000 m<sup>3</sup>) of sweet crude oil was discovered in
- A. 2005
  - B. 2006

- C. 2007
  - D. 2008
84. The Bank of Ghana created the Consolidated Bank to take over assets and liabilities of the following struggling banks in the country....
- A. Sahel Sahara Bank, Royal Bank, Beige Capital, Construction Bank and Unibank
  - B. Sovereign Bank, UT Bank, Beige Capital, Construction Bank and Unibank
  - C. Capital Bank, Royal Bank, Beige Capital, UT Bank and Unibank
  - D. Sovereign Bank, Royal Bank, Beige Capital, Construction Bank and Unibank
85. Ghana officially exited the International Monetary Fund (IMF) in the .....government of the 4<sup>th</sup> Republic
- A. 2nd
  - B. 4th
  - C. 5th
  - D. 6th
86. The Director-General of the Ghana Education Service, Professor Kwasi Opoku-Amankwa, was appointed to the position in April 2017. He took over from.....
- A. Alexander Tettey-Enyo
  - B. Mr. Jacob Aaworb-Nang Maabobr Kor
  - C. Rev. Ama Afo Blay
  - D. John Budu Smith
87. The new additional regions created in Ghana as a result of the referendum are.....
- A. Bono North, North West, Ahafo Region, Western South, Savannah and Oti
  - B. Bono East, North East, Ahafo Region, Western North, Savannah and Oti
  - C. Bono West, North East, Ahafo Central, Western South, Savannah and Oti
  - D. Bono South, North East, Ahafo West, Western North, Savannah and Oti
88. The current captain of the Black Queens is .....
- A. Adjoa Bayor
  - B. Portia Boakye
  - C. Elizabeth Addo
  - D. Priscilla Okyere
89. The 'Stop Galamsey Now Campaign', which sought to fight against illegal mining in Ghana was initiated by.....
- A. Peace FM 104.3
  - B. Adom FM 106.3
  - C. Citi FM 99.3
  - D. Joy FM 99.7

90. The .....is the highest ranking officer in the Ghana Army.
- A. Brigadier
  - B. General
  - C. Lieutenant General
  - D. Major General
91. The 2030 Agenda for Sustainable Development has .....
- A. 17 Sustainable Development Goals (SDGs) and 17 targets
  - B. 17 Sustainable Development Goals (SDGs) and 169 targets
  - C. 17 Sustainable Development Goals (SDGs) and 126 targets
  - D. 17 Sustainable Development Goals (SDGs) and 150 targets
92. The 2018 FIFA World Cup final was contested by .....
- A. France and Russia
  - B. Belgium and France
  - C. Croatia and France
  - D. Brazil and France
93. The 2019 Africa Cup of Nations will be hosted by....
- A. Cameroon
  - B. Morocco
  - C. South African
  - D. Egypt
94. The Republic of the Sudan is a country in....
- A. Northeastern Africa.
  - B. East-Central Africa.
  - C. The Horn of Africa
  - D. Eastern Africa
95. Aircraft manufacturer Boeing has grounded its entire global fleet of 737 Max aircraft after two fatal crashes in .....
- A. Guyana and Ethiopia
  - B. Malaysia and Ethiopia
  - C. Indonesia and Ethiopia
  - D. Bristol and Ethiopia
96. Naomi Osaka is associated with which of the following sports?
- A. Table Tennis
  - B. Tennis



- C. Golf
  - D. Hockey
97. The headquarters of the United Nations is in....
- A. Geneva
  - B. New York
  - C. Paris
  - D. Berlin
98. Capital-gain could be best described as.....
- A. Net income on the cash flow statement
  - B. Income from investing in the financial market
  - C. Profit made when an asset is sold more than the price at which it was bought
  - D. Current asset on a company's balance sheet
99. Which of the following disciplines is Nobel Prize awarded?
- A. Physics and Chemistry
  - B. Physiology or Medicine
  - C. Literature, Peace and Economics
  - D. All of the above
100. The best way to tackle local environmental problems is to.....
- A. Use the local administrative machinery
  - B. Implement environmental laws strictly
  - C. Provide environmental education to the local people and create awareness
  - D. Leave it to the local public to decide

❧ .We wish you good success. ❧