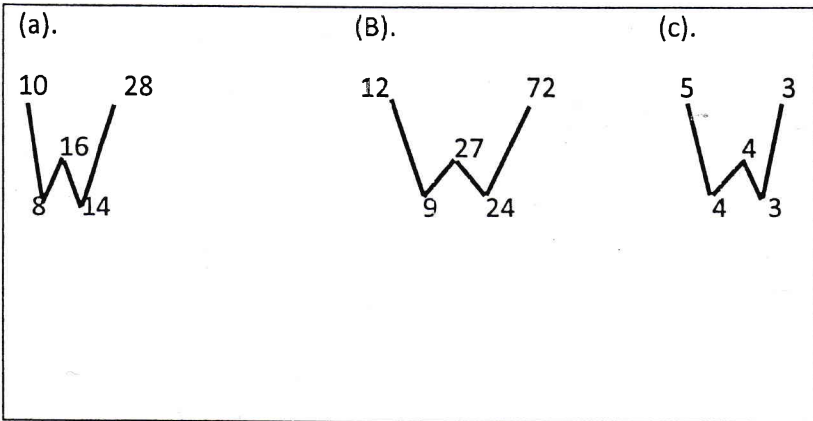# INTRUCTIONS

ATTEMPT ALL 50 QUESTIONS. DO NOT MAKE ANY MARK ON THE QUESTION PAPER. DO ALL CALCULATIONS AND ROUGH WORK ON THE PLAIN SHEET PROVIDED. WRITE YOUR ANSWERS IN INK ON THE ANSWER SHEET PROVIDED.
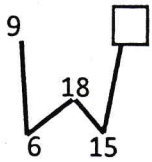
Q1-4. The diagrams below are given with numbers fixed at various places. Study carefully the samples given. Find the relationship among the numbers with that solve the problems Q1-Q4.
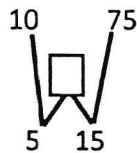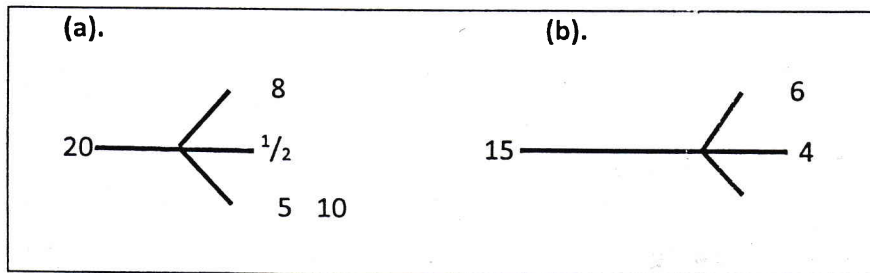
Q1-Q2   SAMPLE

(a).   (B).   (c).

10   28   12   72   5   3

16   27   4

8 14   9   24   4   3

Q1.   Q2.

9   ☐   10   75

18   ☐

6   15   5   15

Q3-Q4   SAMPLE

(a).   (b).

          8   6

20———<— ½   15———<— 4

          5 10

Q3.   Q4.

          4   5

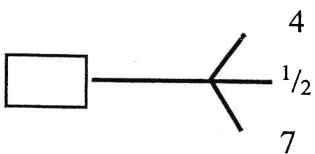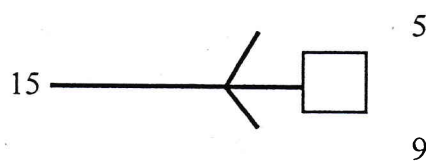☐——<— ½   15———<☐

          7   9

1

<u>Q5-Q6</u>. Provide the next two figures or letters for the series below

Q5.   8   5   4   9   1   7   6   _____   _____

Q6.   E   F   F   N   O   S   S   _____   _____

Q7. Inside each of three separate equal sized boxes are two separate small boxes. Inside each small box are four smaller boxes. How many are there altogether?

Q8. Imagine a rectangle that is three times as high as its wide. Next imagine drawing two lines parallel to the base so that the rectangle is divided into three equal parts. Now draw (in your mind) two diagonal, one from each corner of the original rectangle to the opposite corners. How many segments are now in the rectangle?

Q9. If your car was going 60 mph and you increased your speed by 5 mph every minute for seven consecutive minutes, how fast would you be going at the end?

Q10. A teacher had 23 pupils to her class. All but 7 of them went on an excursion trip and thus were away for the day. How many students remained in class that day?

<u>Q11- Q13</u>.
Determine whether the conclusions at the end of each set of arguments are valid or invalid.

Q11. (a) Scholarship is given to the poor.

(b) Charity is given to the poor.

<u>**Conclusion:**</u> Therefore scholarship is Charity.

Q12. (a) If there is a solar eclipse then the streets will be dark.

(b) The streets are dark.

<u>**Conclusion:**</u> There is a solar eclipse.

Q13. (a) All the artists are beekeepers.

(b) All the beekeepers are chemists.

<u>**Conclusion:**</u> Therefore all the chemists are beekeepers.
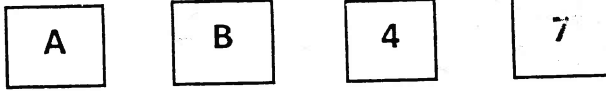
<u>**Q14.**</u> Kojo, Ebo and Ama share GHS420.00 among themselves. Kojo had twice as much as Ebo and Ebo also had twice as much as Ama. How much did Ama get?

Q15. Kweku is twice as old as Yaw. Three years ago, he was three times as old as Yaw. How old is Yaw?

Q16. A shop is owned by Akosua, Yaa and Abena. At the end of a certain month, they shared the profit earned in the ratio of 3:4:2 respectfully. If Akosua and Yaa got a total of GHS4,200 .00. What was the total profit shared by the three women?

Q17. Two train stations are 50 miles apart. Just as the trains pullout of the station, a vulture springs into the air from the front of the first train and flies to the front of the second train. The bird continues to do this until the trains meet. If both trains travel at the rate of 25 mph and the bird flies at 100 mph. how many miles would the bird have flown before the trains meet?

Q18. Imagine that the four cards shown below are placed in front of you.

| A | B | 4 | 7 |

Each card has a single letter written on one side and a number on the side. The following rule may apply to the cards.
If the card has vowel on one side, then it has an even number on the other side.
Your task is to choose two cards that you could turn over to be certain that the rule is valid. Which would you choose?

Q19 – 20.

Complete the sentences below.

Q19. The Police _____ us to provide information on suspected criminals

(a) want (b) are wanting (c) has been wanting (d) wants

Q20. Either she or I _____ trying to hide the truth

(a) are (b) is (c) am (d) to be

Q21. The first lady _____ a new ship to be used by the Ghana navy to patrol the coastal waters of Ghana

(a) Inaugurated (b) Baptized (c) Commissioned (d) decorated.

Q22-24. Provide the plural for each of the following

Q22. personnel _____

Q23. testis _____

Q24. Son – in – Law _____

Q25. Two cars start from a certain town and travel in opposite directions. One goes East art 54mph while the other goes West at 36mph. After how long will they be 135 miles apart?

Q26. A note book costs four times more than a pencil. The pencil costs ¢30 less than the notebook. What is the cost of the notebook?

Q27. State whether the conclusion is <u>logical</u> or <u>illogical</u>

(a). Socrates is a person

(b). Socrates is mortal

<u>Conclusion</u>: Therefore, persons are mortal

3

Q28 – 29. Provide the next two letters in the series for each of the following

Q28. ABDEBCEF ____   ____

Q29. OTTFFSSE ____   ____

Q30. Your drawer contains 19 black socks and 13 blue socks. Without during on the light, how many socks you have to pull out of the drawer to be sure you have a complete set?

Q31 -34. Rearrange these words to form an English word.

Q31. IAPLTSHO   _____

Q32. DNSUO   _____

Q33. IASYD   _____

Q34. RCWDO   _____

Q35. A set of nine books is arranged in orderly fashion on a shelf. Each book has 100 pages (i. e. sheets of paper with printing on both sides making 900 pages in all). A worm starting on the first page of the eats through to the last page of the last book. How many pages does it eat?

Q36- 37. You driving a bus that's leaving from Tamale. To start off with, there were 32 people on the bus. At the next bus stop, 11 people got off and 9 people got. on. At the next bus stop 12 people got on and 16 people got off. At the next stop, 5 people got on and 3 people got off.

Q36. How many people are now on the bus?

Q37. How many people were on the bus when it left the second stop.

Q38. Water hyacinths double in area every 24 hours. On the first day of March there is one water hyacinth. It takes 30 days for the lake to become covered with water hyacinth. On what day is the lake half covered?

Q39-41. There are five friends A, B, C, D, and E. English is the favorite subject of A and D. The others prefer Mathematics, C and D have motor bikes. B and D prefer playing football. The others like tennis. Now solve the problems below.

Q39. He has neither a car nor a motor bike. He does not like English but likes playing football. Who is he?

Q40. Two friends are playing tennis. They both like mathematics. Who are they?

Q41. Two friends are playing tennis one has a car with a car likes math's, the other with a motor bike likes English. Who are they?

Q42. On which color of the Ghana flag is the Black start embossed?

Q43. A farmer had 17 sheep. All but 9 died. How many sheep did he have left?

Q44. A stranger approached a museum curator and offered him an ancient bronze coin.

The coin had on authentic appearance and was marked with the date 544BC. The curator had happily made acquisitions from suspicious sources before, but this time he promptly called the police and had the stranger arrested. Why?

Q45. Suppose you are a bus driver on the first stop, you pick up 6 men and 2 women. At the second stop, 2 men leaves and 2 women stop 1 man leaves and 2 women enter the bus. At the fourth stop, 3 men get on, and 3 women get off. At the fifth stop, 2 men get off; and 3 men including Mr. Humphrey. What is the name of the driver?

Q46. J.J Rawlings is to 1 as John Mahama is to (a) 6   (b) 5   (c) 4   (d) 3

Q47. Mary drives from Accra to Takoradi at 11am going at 50mph. At 11:30am Joyce leaves Takoradi to Accra averaging a speed of 65mph. Both take the same route which extends 200 miles between the two cities. At 12.30pm who is nearer to Accra.

Q48. One board is 24cm longer than another board. Which the boards are laid end to end the total length is 2 meters. How long is the shorter board?

Q49. A bag of rice feed 100 pupils on the school feeding program for 12 days. How long would the same bag feed 80 pupils?

Q50. Animal is to cat as
(a). Apple is to Mango
(b). Tire is to Rubber
(c). Furniture is to Chair
(d). Body is to Toe

ANSWERS

1. 45	26. ¢40
2. 25	27. Illogical (Invalid)
3. 14	28. C, D
4. 3	29. N, T
5. 3, 2	30. 3
6. T, T	31. Hospital
7. 33	32. SOUND
8. 10 Segments	33. DAISY
9. 95mph	34. CROWD
10. 7	35. 702 Bonus
11. Invalid	36. 28
12. Invalid	37. 30
13. Invalid	38. 29th Day
14. ¢60	39. B
15. 6 years	40. C, E
16. 5400	41. A, C
17. 100 miles	42. Gold (Yellow)
18. A, 7	43. 8
19. A (want)	44. Stolen belongs to him
20. C (am)	45. The candidates name
21. A	46. C (4)
22. Personnel	47. Mary
23. Testes	48. 88cm
24. Sons-in-law	49. 15 Days
25. 1½ hours	50. C (Furniture : Chair)