MINISTRY OF EDUCATION

ST. VINCENT AND THE GRENADINES

COMMON ENTRANCE EXAMINATION

2007

MATHEMATICS

TEST CODE: 012A

Time allowed: 1 hour 30 minutes

Instructions:

1. This examination has 60 items.
   Each item has four possible answers:   A, B, C, D.
   Choose the correct answer.

2. On your answer sheet, shade the circle which contains the letter you have
   chosen for your answer.

   Please use a No. 2 HB pencil

3. Do not take any paper out of the examination room.
   Return this booklet, your answer sheet and all scrap paper to the invigilator
   before you leave the room.

4. You have 90 minutes in which to complete this test.
1) $638 + 27 + 6 =$

A 651  
B 671  
C 761  
D 771

2) $604 \times 7 =$

A 611  
B 448  
C 4228  
D 4298

3) $629 - 130 =$

A 499  
B 501  
C 510  
D 519

4) $156 \div 6 =$

A 21  
B 26  
C 206  
D 260

5) $9 \times 0 =$

A 0  
B 1  
C 9  
D 90

6) $\frac{4}{9}$ is equivalent to:

A $\frac{8}{9}$  
B $\frac{8}{27}$  
C $\frac{12}{27}$  
D $\frac{16}{27}$
7) \[ \frac{1}{4} + \frac{2}{3} \]

A \[ \frac{3}{7} \] \quad B \[ \frac{3}{12} \]

C \[ \frac{11}{12} \] \quad D \[ 1 \frac{1}{12} \]

8) The sum of 41.2, 5.23 and 8 =

A \[ 9.43 \] \quad B \[ 46.51 \]
C \[ 47.23 \] \quad D \[ 54.43 \]

9) The product of 8 and 5 can be written as

A \[ 8 + 5 \] \quad B \[ 8 \times 5 \]
C \[ 8 \div 5 \] \quad D \[ 8 - 5 \]

10) If \( 185 < \Box \), which one of the following numbers could \( \Box \) represent?

A \[ 183 \] \quad B \[ 184 \]
C \[ 185 \] \quad D \[ 186 \]

11) How many \( \frac{1}{6} \) can I get from 3 wholes?

A \[ 2 \] \quad B \[ 6 \]
C \[ 9 \] \quad D \[ 18 \]

12) If \( S \) is an even number, which one of the following is an odd number?

A \[ S + 1 \] \quad B \[ S \times S \]
C \[ S - 2 \] \quad D \[ S + 2 \]
13) How many 5-cents pieces can you get from $2.55?
   A  11  B  30
   C  51  D  111

14) Which one of the following sets of numbers below lists multiples of both 4 and 6?
   A  {4, 6, 12, 18}  B  {4, 8, 12, 16}
   C  {6, 12, 16, 18}  D  {12, 24, 36, 48}

15) 60040 written in words is:
   A  Six hundred and forty
   B  Sixty thousand and four
   C  Sixty thousand and forty
   D  Six million and four

16) The mean (average) of 38, 48 and 54 lies between;
   A  35 and 40  B  41 and 45
   C  46 and 50  D  51 and 55

17) The middle pages of a book are numbered 10 and 11. How many pages are there in the book?
   A  11  B  20
   C  21  D  22
18) When \( \frac{7\frac{5}{9}}{} \) is rounded to the nearest **whole** number the result is:

- A 7
- B 8
- C 21
- D 68

19) Which one of the fractions below is written in its simplest form?

- A \( \frac{3}{9} \)
- B \( \frac{2}{7} \)
- C \( \frac{4}{10} \)
- D \( \frac{5}{15} \)

20) Which one of the following is a composite number?

- A 3
- B 5
- C 15
- D 23

21) The value of 7 in 3572 is

- A 7 x 1
- B 7 x 10
- C 7 x 100
- D 7 x 1000

22) What amount must be added to 0.06 to make 1?

- A 0.04
- B 0.4
- C 0.94
- D 1.04
23) The length of my school building is BEST measured in:

A millimetres  B centimetres
C metres       D kilometres

24) Poles are arranged in a straight line along a road. How many poles are there between the 6th and 15th poles?

A 8   B 9   C 10   D 21

Question 25 is based on the following triangles.

25) What percentage of the triangles above is coloured black?

A 3   B 25
C $33 \frac{1}{3}$   D 30
Use the diagram below to answer question 26.

26) How much does a customer pay for the shirt?

A $ 4.00
B $ 30.00
C $ 36.00
D $ 44.00

27) In a netball match, Green House scored three times as many goals as Red House. If 52 goals were scored in the match, how many goals did Green House score?

A 13
B 26
C 39
D 52

28) Carl spent \( \frac{3}{8} \) of his pocket money on snacks. The amount he spent was $ 6.00. What amount did he get for his pocket money?

A $ 2.25
B $ 4.00
C $ 10.00
D $ 16.00
29) Ripe bananas are sold at four different rates. Which rate shown below is the cheapest?

A  3 for 12¢  B  5 for 80¢
C  8 for 40¢  D  10 for 30¢

Questions 30 and 31 are based on the following information.

There are 60 chairs in the lunchroom. The ratio of chairs to tables is 4:1

30) How many tables are there?

A  12  B  15  C  48  D  75

31) How many chairs and tables are there all together?

A  61  B  64  C  75  D  240

32) In the circle with centre O, the line OS represents a

A chord  B radius  C diameter  D circumference
33) The diagram below represents a rectangular field, 7 metres in width. Its length is 5 metres longer than its width. What is the perimeter?

\[ \text{Perimeter} = 2 \times (\text{width} + \text{length}) \]

\[ = 2 \times (7 + (7 + 5)) \]

\[ = 2 \times (7 + 12) \]

\[ = 2 \times 19 \]

\[ = 38 \text{ m} \]

A 12 m   B 19 m
C 38 m   D 84 m

34) How many vertices does a cube have?

A 4   B 6
C 8   D 12

35) How many edges does a cube have?

A 4   B 6
C 8   D 12
36) A man gives \( \frac{7}{12} \) of his money to his wife. He gives \( \frac{1}{8} \) of his money to his daughter and the remainder to the church. What fraction of his money did he give to the church?

\[
\begin{align*}
A & \quad \frac{6}{20} \\
B & \quad \frac{8}{20} \\
C & \quad \frac{7}{24} \\
D & \quad \frac{17}{24}
\end{align*}
\]

37) A Canadian tourist changed (CAN) $1000.00 to EC$.

CAN $1.00 = EC$2.28

How much money in (EC$) did the tourist receive?

\[
\begin{align*}
A & \quad $22.80 \\
B & \quad $228.00 \\
C & \quad $2280.00 \\
D & \quad $2280.28
\end{align*}
\]

38) Tickets to a World Cup Cricket match cost $60.00 for each adult and half price for each child. How much did a family of 2 adults and 1 child pay for their tickets?

\[
\begin{align*}
A & \quad $90.00 \\
B & \quad $120.00 \\
C & \quad $150.00 \\
D & \quad $180.00
\end{align*}
\]

39) Mother has $130.00 in sets of $5.00 and $20.00 notes only. If she has $50.00 in five dollar notes, how many twenty dollar notes does she have?

\[
\begin{align*}
A & \quad 2 \\
B & \quad 4 \\
C & \quad 8 \\
D & \quad 9
\end{align*}
\]
40) The area of a square plot of land is $144 \text{m}^2$. What is the length of one side?

A 12 m  
B 36 m  
C 72 m  
D 288 m

41) When it is 1500 hours on a 24 hour clock, what is the local time on a 12 hour clock?

A 3:00 am  
B 3:00 pm  
C 1:50 am  
D 1:50 pm

42) A car travels a distance of 10 km in 20 minutes. How far will it travel in 1 hour at the same speed?

A 30 km  
B 40 km  
C 50 km  
D 60 km

43) Jack went to sleep at 8:05 pm. His sister went to sleep 45 minutes before him. At what time did Jack’s sister go to sleep?

A 7:15 pm  
B 7:20 pm  
C 8:45 pm  
D 8:50 pm

44) The Headteacher drove at an average speed of 48 km per hr. He took 30 minutes to get from home to work. How far from his workplace does he live?

A 18 km  
B 24 km  
C 78 km  
D 96 km
45) Liatstar Airlines allows each customer a maximum of 23 kilograms of luggage. \(1 \text{ kg} = 2.2 \text{ pounds}\). John is travelling with 28 kilograms of luggage. By how many pounds is John’s luggage over weight?

A 5  B 10.10  
C 11  D 12.7

46) A tablespoon holds 20 millilitres of honey. How many tablespoons of honey can be obtained from a jar which contains 0.2 litres of honey?

A 1  B 5  
C 10  D 100

47) Which one of the drawings below represents the net of a cube?

A  
B  
C  
D

A  
B  
C  
D
48) A jug contained \(6\frac{3}{8}\) litres of milk. Mother used \(3\frac{1}{4}\) litres for breakfast. How many litres of milk remained in the jug?

\[\begin{array}{c|c|c|c|c}
\text{A} & 3\frac{1}{8} & \text{C} & 3\frac{7}{8} \\
\text{B} & 4\frac{1}{4} & \text{D} & 4\frac{1}{2}
\end{array}\]

49) Look at the diagram below. Which one of the following line segments is the longest?

\[\begin{array}{c|c|c|c|c}
\text{A} & RS & \text{B} & ST \\
\text{C} & TU & \text{D} & SU
\end{array}\]

50) 30 bananas are needed to make 3 bread. How many bananas are needed to make 5 such bread?

\[\begin{array}{c|c}
\text{A} & 25 \\
\text{C} & 50 \\
\text{B} & 40 \\
\text{D} & 100
\end{array}\]
51) In the triangle below what is the value of the angle marked $X^\circ$?

A $30^\circ$  B $60^\circ$
C $90^\circ$  D $120^\circ$

52) A box of sweets was shared among 8 friends. Each person received 12 sweets. If there were 7 extra sweets, how many sweets were in the box?

A 27  B 89
C 96  D 103
This graph shows the amount of money spent by children for lunch on Monday. Use the information in the graph to answer questions 53 and 54.

53) What is the total amount of money spent by all three children?

A   $4.00  
B   $5.00  
C   $12.00 
D   $14.00 

54) How much change did Pam get from $ 5.00?

A   $ 0.50 
B   $ 0.75 
C   $ 1.00 
D   $ 1.50
55) Which one of the following shapes has one line of symmetry?

A  

B  

C  

D

Use the following diagram to answer question 56.

56) The diagram above shows a star and a moon. Which of the following moves will take you from the star to the moon?

A  {1 down, 3 right, 2 up}

B  {1 down, 3 left, 2 up}

C  {1 left, 3 down, 2 left}
D  {1 right, 3 down, 2 right}

57) Below is a part of a water bill for January 2007. How many gallons of water was used by the customer for January?

<table>
<thead>
<tr>
<th>Previous Reading GALLONS</th>
<th>Present Reading GALLONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>1,660</td>
</tr>
</tbody>
</table>

A  60  B  500  C  1554  D  1766

Use the information below to answer items 58 and 59.

The students of Grade 6 made kites for Easter. The pie chart below shows the materials from which the kites were made.

58) Which was the LEAST popular material used by Grade 6 students?

A  stick  B  plastic
C  paper  D  cloth
59) Which 2 materials had equal popularity?

   A  Stick and Paper
   B  Cloth and Paper
   C  Paper and Stick
   D  Cloth and Plastic

60) A newspaper charges the following rate for advertisements:

   $ 75 for every \frac{1}{8} of a page

   How much must Mr. Caine pay to place an advertisement which covers \frac{1}{2} of a page?

   A  $ 150  B  $ 225
   C  $ 300  D  $ 600