RÉPUBLIQUE DU CAMEROUN
Paix-Travail-Patrie

MINISTÈRE DES ENSEIGNEMENTS SECONDAIRES

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TEACHERS' RESOURCE UNIT TRU-RIP-STA MOCK EXAMS CMR-BAMENDA NORTH WEST REGION

REPUBLIC OF CAMEROON
Peace-Work-Fatherland

MINISTRY OF SECONDARY EDUCATION

TEACHERS' RESOURCE UNIT
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MARCH 2020

The Teachers' Resource Unit and the Regional Inspectorate of Pedagogy, in collaboration with MTA	SUBJECT CODE NUMBER **0570**	PAPER NUMBER **1**
GENERAL CERTIFICATE OF EDUCATION AND INTERMEDIATE TECHNICAL AND VOCATIONAL EDUCATION REGIONAL MOCK EXAMINATION	SUBJECT TITLE **MATHEMATICS**	
CANDIDATE NAME:..... CANDIDATE NUMBER:..... CENTRE NUMBER:.....		
ORDINARY LEVEL	DATE **Saturday 21st March 2020 MORNING**	

Time Allowed: One and a half hours

INSTRUCTIONS TO CANDIDATES:

Mobile phones are **NOT ALLOWED** in the examination room.

1. USE A SOFT HB PENCIL THROUGHOUT THIS EXAMINATION.
2. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Before the Examination begins:

3. Check that this question booklet is headed "Ordinary level –0570 code and subject title—Mathematics -Paper 1".
4. Insert the information required in the spaces above.
5. Without opening the booklet, pull out the answer sheet carefully from inside the front cover of this booklet. Take care that you do not crease or fold the answer sheet or make any marks on it other than those asked for in these instructions.
6. Insert the information required in the spaces provided on the answer sheet using your HB pencil:

Candidate Name, Centre Number, Candidate Number, Subject Code Number, and Paper number

How to answer questions in this examination:

7. Answer ALL the 50 questions in this examination. All questions carry equal marks.
8. Non-programmable calculators are allowed.
9. For each question there are four suggested answers, A, B, C and D. Decide which answer is correct. Find the number of the question on the Answer Sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen. For example, if C is your correct answer, mark C as shown below:

[A] [B] [C] [D]

10. Mark only one answer for each question. If you mark more than one answer, you will score zero for that question. If you change your mind about an answer, erase the first mark carefully, and then mark your new answer.
11. Avoid spending much time on any question. If you find a question difficult, move to the next . You can come back to the question later.
12. Do all rough work in this booklet using, where necessary, the blank spaces in the question booklet.
13. **You must not take this booklet and answer sheet out of the examination room. All question booklets and answer sheets will be collected at the end of the examination**

1) The exact value of $18 - 13 + 10 \div 5$ is
A. 3
B. -3
C. 7
D. -7

2) Simplifying $\frac{2}{5} + \frac{1}{3}$ gives
A. $\frac{3}{8}$
B. $\frac{11}{15}$
C. $\frac{1}{15}$
D. $\frac{3}{15}$

3) The range of values of x for which $x - 2 > 3x$ is
A. $x < 1$
B. $x > -1$
C. $x < -1$
D. $x > 1$

4) The value of the digit 4 in the figure 13.940 is
A. Four hundred
B. Four tens
C. Four units
D. Four hundredth

5) Evaluating 0.53 X 1.71 and expressing to two significant figures gives
A. 0.906
B. 0.91
C. 0.90
D. 0.96

6) The value of n for which $0.000420 = 4.2 \times 10^n$ is
A. -4
B. 4
C. -5
D. 5

7) 19:30 hours on a 24 hour clock will read on a 12 hour clock as
A. 19:30 am
B. 19:30pm
C. 5:30 pm
D. 7:30 pm

8) A bookseller sold a book at 8500FCFA, making a loss of 2125 FCFA. The cost of the book is
A. 6,375FCFA
B. 10,025 FCFA
C. 10,625
D. 10,825FCFA

9) Baba II and Baforchu villages are 1km apart. The distance between these two villages in centimeters(cm) is
A. 100,000cm
B. 1,000,000cm
C. 1000cm
D. 10,000cm

10) Given that T = {2,4,6,8}. The cardinality of the power set of T is
A. 2
B. 8
C. 6
D. 4

11) The shaded region in figure 1 represents

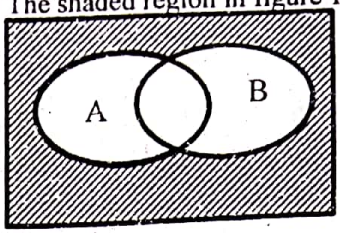


Figure 1
A. $A' \cup B'$
B. $A' \cap B'$
C. $(A \cap B)'$
D. $A \cup B$

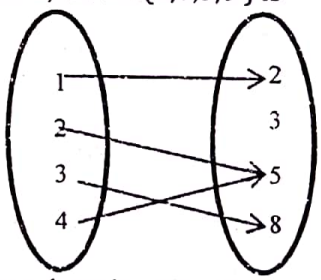
12) The negation of the statement $3 > 2$ is
A. $3 < 2$
B. $2 < 3$
C. $2 \leq 3$
D. $3 \leq 2$

13) The inverse of the implication $p \rightarrow q$ is
A. $\sim q \rightarrow \sim p$
B. $p \rightarrow \sim q$
C. $\sim p \rightarrow q$
D. $\sim p \rightarrow \sim q$

14) Given that $f : x \mapsto 4x - 3$, the image of -1 is
A. $\frac{1}{2}$
B. -7
C. 7
D. $-\frac{1}{2}$

15) Given the mapping in figure 2, the set {2,3,5,8} is called

Figure 2



A. Domain
B. Codomain
C. Range
D. Image

16) Given that $p(x) = 3x + 4m$, for $x \in \mathbb{R}$ and $p(-1) = 1$, then the value of m is
A. $\frac{1}{2}$
B. $-\frac{1}{2}$
C. 1
D. -1

17) Given that $0° < \theta < 90°$, the angle θ is called
A. an acute angle
B. an obtuse angle
C. a reflex angle
D. an adjacent angle

18) In figure 3, triangles PQR and STU are said to be

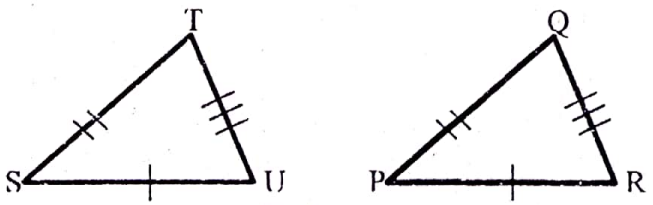


Fig 3
A. similar
B. isosceles
C. congruent
D. equilateral

19) In figure 4, QT is a tangent to the circle at P, RS is a chord produced to T. Given that PT = 8cm, ST = 4cm and RS = y cm, then the value of y is

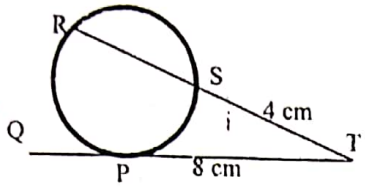


Fig 4

A. 4cm
B. 10cm
C. 16cm
D. 12cm

20) Figure 5 is a circle with center at O, the size of the angle labelled θ given that angle $A\hat{O}B=150°$ is

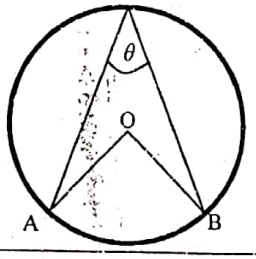


Fig 5

A. 150°
B. 105°
C. 70°
D .75°

21) The size of each exterior angle of a regular pentagon is

A .72°
B. 144°
C. 180°
D. 360°

22) Figure 6 is a circle with center at O, the line AB is

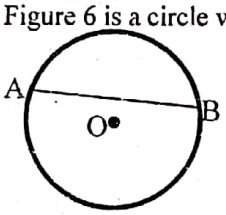


Fig 6

A. a chord
B. a secant
C. a tangent
D. a diameter

23) The volume of the cuboid in figure 7 is

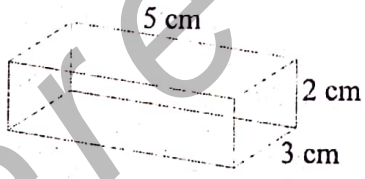


Fig 7

A. $10cm^3$
B. $15cm^3$
C. $30cm^3$
D. $6cm^3$

24) Given that the curved surface area of a cone of base radius 3.5cm is $33cm^2$. The slant height of the cone is (take $\pi = \frac{22}{7}$)

A. 11cm
B. 3.3cm
C. 3cm
D. 1.1cm

25) The number of regions found in the network diagram shown in figure 8 is:

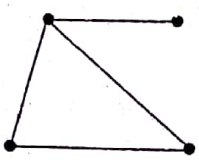


Fig 8.

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

26) Given that figure 9 represents the graph of $f(x) = x^2 - kx + 4$, then the value of k is

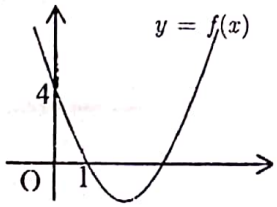


Fig 9

A. -4
B. 4
C. -5
D. 5

27) The point with y-coordinate 5 and x-coordinate 3 is simply written as

A. (3, 5)
B. (3, 5)
C. (5, 3)
D.(5, 3)

28) The lines 2y - 4x = 3 and y - 2x = 5 are

A. perpendicular
B. concurrent
C. parallel
D. short

29) The simplest form of the expression 6a – 2b – 4a + 4b is

A. 10a – 6b
B. 6a + 4b
C. 2a – 2b
D. 2a + 2b

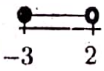
30) The value of x in the equation $16^x = 2^8$ is

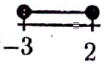
A. 2
B. -2
C. ½
D. 4

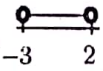
31) Given the formula c = 2r – ab, then r is equal to

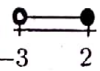
A. $\frac{c-ab}{2}$
B. $\frac{c+ab}{2}$
C. $\frac{ab-c}{2}$
D. $\frac{-ab-c}{2}$

32) The interval $-3 \leq x < 2$ represented on the number line is

A 

B 

C 

D 

33) The value of x in the equation $\frac{2}{x-1} = \frac{3}{x-4}$ is

A. -5
B. 3
C. -3
D. 2

34) The n^{th} term of a sequence is given as $T_n = 3(2n - 6)$. The ninth term is

A. 30
B. 18
C. 9
D. 36

35) The bearing N45°W is also written as
A. 045°
B. 225°
C. 135°
D. 315°

36) Sin60° + tan60° in surd form is equal to
A. $\frac{\sqrt{3}}{2} + \sqrt{3}$
B. $\frac{\sqrt{3}}{2} - \sqrt{3}$
C. $\frac{\sqrt{3}}{2} - \frac{1}{\sqrt{3}}$
D. $-\frac{\sqrt{3}}{2} - \frac{1}{\sqrt{3}}$

37) Given that the bearing of point B from A is 75°, then the bearing of pointA from B is
A. 345°
B. 285°
C. 255°
D. 165°

38) A boy uses his rolling wheel of diameter 70cm to measure the distance round their rectangular plot. Given that the wheel made 35 complete revolutions to exactly go round , then the perimeter of the plot is
A. 220m
B. 24.5m
C. 22m
D. 77m

39) Given that the vector $\overrightarrow{OA} = k\mathbf{i} + 4\mathbf{j}$ is perpendicular to the vector $\overrightarrow{OB} = 2\mathbf{i} - 3\mathbf{j}$, then the value of k is
A. -6
B. 6
C. -2
D. 2

40) Given that $\overrightarrow{OP} = 3\mathbf{i} - 5\mathbf{j}$ and $\overrightarrow{OQ} = -2\mathbf{i} + 3\mathbf{j}$, then $|\overrightarrow{OP} + \overrightarrow{OQ}|$ is equal to
A. $-\sqrt{5}$
B. $\sqrt{-5}$
C. $\sqrt{5}$
D. 5

41) The coordinates of the midpoint of the line joining two points with position vectors $2\mathbf{i} - \mathbf{j}$ and $10\mathbf{i} + \mathbf{j}$ is
A. (6, 0)
B. (-4, 1)
C. (-8, 0)
D. (4,1)

42) The image of the point (-4,-9) under the translation $\binom{7}{5}$ is
A. (3, -4)
B. (-11,-14)
C. (-3,-4)
D. (11, 14)

43) The matrix $M = \begin{pmatrix} 2 & 5 & 16 \\ 4 & 0 & 5 \end{pmatrix}$ is a
A. row matrix
B. column matrix
C. 2 x 3 matrix
D. 3 x 2 matrix

44) Given that $M = \begin{pmatrix} 3 & -2 \\ 4 & 0 \end{pmatrix}$ and $N = \begin{pmatrix} 1 & 3 \\ 2 & 5 \end{pmatrix}$, then MN =
A. $\begin{pmatrix} 3 & -6 \\ 8 & 0 \end{pmatrix}$
B. $\begin{pmatrix} -1 & -1 \\ 4 & 12 \end{pmatrix}$
C. $\begin{pmatrix} 1 & 1 \\ 4 & 12 \end{pmatrix}$
D. $\begin{pmatrix} -1 & -1 \\ -4 & -12 \end{pmatrix}$

45) Given that the matrix $\begin{pmatrix} 3 & k \\ 2 & 6 \end{pmatrix}$ is singular, then the value of k is
A. 6
B. 9
C. 4
D. 1

46) Given that the pie chart in figure 10 is representing votes cast in an election for 3 candidates A, B and C. The percentage of votes cast in favour of candidate B is

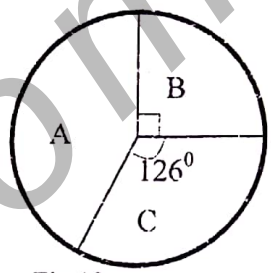


Fig 10

A. 65%
B. 45%
C. 35%
D. 25%

47) The mode in the following frequency distribution table is

Age(years)	1	2	3	4	5
frequency	4	7	8	7	4

A. 8
B. 5
C. 4
D .3

48) The median of the distribution 4,8,2,3,1,2,4,3,2 is
A. 3
B. 4
C. 2
D. 1

49) Given that the GCEB is to choose a month of the year convenient for GCE exams. The probability that the GCEB chooses a month that begins with letter J is
A. $\frac{1}{12}$
B. $\frac{1}{4}$
C. $\frac{1}{3}$
D. $\frac{3}{4}$

50) Given that A and B are mutually exclusive events and $P(A) = \frac{3}{5}$, $P(B) = \frac{1}{3}$, then $P(A \cup B) =$
A. $\frac{3}{15}$
B. $\frac{14}{15}$
C. $\frac{4}{15}$
D. $\frac{11}{15}$

END
GO BACK AND CHECK YOUR WORK.