MATHEMATICS PAPER
FORM 1
TERM 3 2017

MARKING SCHEME

1. Write the following numbers in words.
   (2 marks)
   (a) 6 543 654 444
   Six billion, five hundred and forty three million, six hundred and fifty four thousand, four hundred and forty four.
   (b) 75 356 765 003
   Seventy five billion, three hundred and fifty six million, seven hundred and sixty five thousand and three.
2. Write the place value of the digits in boldface.
   (3 marks)
   (a) 9**3** 777 765
   Millions
   (b) 3 4**6**8 899 789
   Ten millions
   (c) 456 79**0**
   Ones
3. To the nearest number indicated in brackets, round of each of the following numbers. (3 marks)
   (a) 667 890 567 (1000)
   667 891 000
   (b) 65 745 344 (10 000)
   65 750 000
   (c) 156 789 (100 000)
   200 000
4. (a) Work out: 6 789÷ 13
   (2 marks)

   522 rem 3

6789
-65
28
-26
29
- 26
3

13 |

Hence determine the:

(i) Quotient
(1 mark)
522

(ii) Reminder
(1 mark)
3

b) Prove that the dividend is 6 789 in the workout above.
(2 marks)

Dividend= quotient x divisor + remainder

D= 522 x 13 + 3 1 mk

D = 6786 + 3 1 mk

D = 6789

5. A company was reported to have made a profit of 93678563. Two daily newspapers gave the figure, one to the nearest 1000000 and the other to the nearest 10000. What was the

difference between the rounded off figure?

(3mks)

Nearest 1000000 – 94 000 000

Nearest 10 000 – 93 680 000

Difference=94 000 000 – 93 680 000

= 1 320 000

6. Work out:

a) 142 + 258 ÷6

(2marks)

258 divide by 6=43

142+43=185

b). $\frac{672 \times 480}{96}$

(2marks)

322 560

96

=3360

7. Three tanks are capable of holding 36,84 and 90 litres of milk. Determine the capacity of the greatest vessel which can be used to fill each one of them in exact number of times.

(2marks)

GCD of 36, 84 and 90

6 litres

8. A number n is such that when it is divided by 27,30 and 45 , the remainder is 3. Find smallest possible value of n.

(3marks)

LCM of 27, 30 and 45 = 540

The nuber= 540+3

=543

9. Express the following into improper fraction

a). $1\frac{7}{8}$

(2marks) **15/8**

b).$6\frac{3}{4}$

(2marks)

27/4

10. Using a number line, work out the following:

a) (-8) + (+5)

(2marks)

-3

b). (+3) – (+2)

(2marks)

+1

11. Evaluate:

a)(-3) x (-7)

(2marks)

21

b) 288 ÷ (-24)

(2marks)

-12

12. Find the value of the unknown in each of the following:

a) -56 ÷ n = 7

(3marks)

-56/n=7

7n=-56

n-8

b) 340 ÷ n = 17

(3marks)

340/n=17

17n=340

N=20

13. The temperature of a patient admitted to a hospital with fever was 42ºC . After treatment, his temperature settled at 36.8º C. Find the change in temperature.

(2marks)

42-36.8^{0}C=5.^{20C}

14. If x = -2 y=-6 and z =4 , find the value of each of the following.

a). 4z +2y – x

(2marks)

4(4)+ 2(-6) - -2

=16-12+2

=16+2-12=6

b). $\frac{4xy}{z}$

(2marks)

4(-2(-6))

=4(12)

=48

15. Express each of the following as a mixed number

a). $\frac{8}{3}$ (2marks)

2 2/3

b). $\frac{38}{9}$ (2marks)

4 3/9

=4 1/3

c). $\frac{340}{13}$ (2marks)

26 2/13

16. Find the value of the unknown

i. $\frac{3}{5} = \frac{x}{15}$ (2marks)

3x15=5x

45=5x

x=9

ii. $\frac{16}{y} = \frac{4}{7}$ (2marks)

16x7=4y

112=4y

y=28

iii. $\frac{3p}{5} = \frac{36}{15p}$ (2marks)

3p x 15p=36x5

$45p^2=180$

$p^2=4$

p=2

17. Evaluate the following:

i) $\frac{1}{2} + \frac{1}{9}$ (2marks)

9+2

18

11/18

ii) $8\frac{1}{9} - 2\frac{3}{4} + 2\frac{1}{4}$ (2marks)

$8 + 2 - 2 \frac{4+9-27}{36}$

$8 \frac{-14}{36}$

$7 \frac{22}{36}$

$7 \frac{11}{18}$

iii) $\frac{3}{8} \times \frac{6}{7}$ (2marks)

18/56

9/28

18. Find the reciprocal of :

a) $6\frac{3}{8}$ (1mark)

51/8

8/51

b) $\frac{7}{11}$ (1mark)

11/y

19. Work out: a) $\frac{4}{5} \div \frac{2}{3}$ (2marks)

4/5x3/2

6/5

$1\frac{1}{5}$

b) $\frac{7\frac{3}{7} \div 3\frac{1}{4}}{7}$ (2marks)

52/7x4/13

7

16/7

2 2/7

20. Convert the following decimal numbers into fractions:

a). 0.075 (2marks)

75/1000

3/40

b). 0.3 (3marks)

0.3*x*10=3.3333

0.3x100=33.333

=30/90

=1/3