PRIMARY END TERM 3 EXAMS
2016

MATHEMATICS
STD 7

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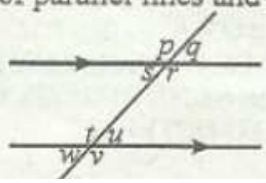
STANDARD SEVEN

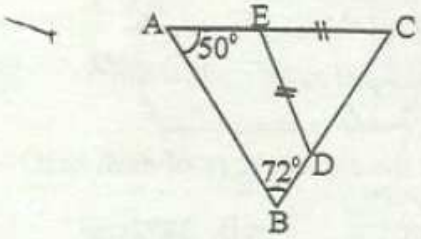
MATHEMATICS

TIME: 2 HRS

1. What is thirty one million, twenty thousand and eight hundredths in figures?
   A. 31020800 B. 31020000.8
   C. 31020000.08 D. 31020000.008
2. How many times is the value of digit 8 greater than the value of digit 4 in the number 12758.134?
   A. 2 B. 8
   C. 2000 D. 7.975
3. Work out $\frac{1.44 \times 1.2 \times 0.7}{5.6 \times 8.4 \times 0.3}$
   and give your answer to 2 decimal places.
   A. 0.9 B. 0.009
   C. 0.09 D. 0.0009
4. Which of the following numbers are arranged in descending order?
   A. 0.979, 0.977, 0.9756, 0.9718, 0.917
   B. 0.979, 0.977, 0.917, 0.9756, 0.9718
   C. 0.9756, 0.9718, 0.979, 0.977, 0.917
   D. 0.917, 0.9718, 0.9756, 0.977, 0.979
5. What is 899.70456 rounded off to the nearest hundredths?
   A. 900 B. 899.80
   C. 899.70 D. 899.8
6. In a church the number of women was three times that of men. Children were 203 fewer than women. There were 421 children. How many more women than men were in the church?
   A. 416 B. 103
   C. 313 D. 832
7. A farmer had 400 animals of which 50% were cattle, 30% were goats and the rest were sheep. He decreased the number of cattle by 20% and increased the number of goats by 25% and sheep by 50%. How many animals did he finally have?
   A. 450 B. 620
   C. 430 D. 510
8. The figure below shows angles formed by a pair of parallel lines and a transversal.



   In which group below is each angle equal to t?
   A. r, q, u B. v, r, p
   C. w, s, p D. v, r, q
9. Which of the following numbers is not divisible by both 6 and 9?
   A. 8952 B. 7956
   C. 6354 D. 9376
10. A cylindrical container has a diameter of 3.5m and a height of 2m. How much water does it hold when full?
    A. 19250l B. 1925l
    C. 38500l D. 3850l
11. Toto visited his uncle in the morning of 25th February 2003 and came back home in the morning of 20th March 2003. How many days did he stay at his uncle's place?
    A. 22 B. 23
    C. 24 D. $23\frac{1}{2}$
12. In the figure below lines EC and ED are equal. Angle CAB = 50° and angle ABC = 72°.



    What is the size of angle AED?
    A. 64° B. 122°
    C. 135° D. 116°
13. In a business deal Kings and moran shared their profits in the ratio 4:5. If Kings got sh. 12000, what was the difference in their shares?
    A. sh. 3000 B. sh. 27000
    C. sh. 2400 D. sh. 1500
14. Three buses Galaxy, Paradiso and Astral leave the bus station at intervals of 15 minutes, 25 minutes and 30 minutes respectively. If they left together at 5.30a.m, when would they leave together next?
    A. 6.30a.m B. 7.00a.m
    C. 8.00a.m D. 9.30a.m

15. Work out the value of

$9\frac{3}{7} \div \left(\frac{1}{2} \text{ of } 3\frac{1}{7} - 1\frac{1}{4}\right) \times \frac{9}{11}$.

A. $14\frac{2}{3}$ B. 24

C. $\frac{9}{28}$ D. 12

16. The temperature of ice was -10°c. After warming the ice for sometime, the new temperature became 45°c. What was the rice in temperature?

A. 45°c B. 55°c

C. 35°c D. 65°c

17. The marked price of an item is sh. 1000. Njogu bought the item at sh. 800. What percentage discount was he given?

A. 200% B. 25%

C. 20% D. 10%

18. Work out

t	kg	g
15	0	0
-	46	735

A. 14t 530kg 365g B. 14t 530kg 265g

C. 14t 531kg 265g D. 14t 529kg 265g

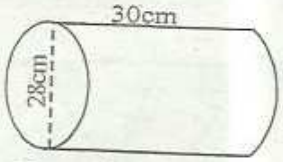
19. Simplify the expression

$2(3x + 7y + 3) + 4(5x + 2y - 1)$

A. $26x + 10 + 22y$ B. $26x + 22y - 2$

C. $26x + 22y - 1$ D. $26x + 22y + 2$

20. The figure below is a log of wood. Peter divided it into two equal parts.



What is the surface area of each half? (Take $\pi = {}^{22}/_{7}$)

A. $118cm^2$ B. $3872cm^2$

C. $874cm^2$ D. $1936cm^2$

21. A trader bought 5 trays of eggs at sh. 120 per tray. Ten eggs went bad and he sold the rest at sh. 6 per egg. A tray holds 30 eggs. What percentage profit did he make?

A. 40% B. $28\frac{3}{4}\%$

C. 50% D. 240%

22. A shopkeeper had money inform of notes as follows:

Value of notes (sh)	50	100	200	500	1000
No. of notes	30	25	18	16	12

If he changed all the money into two hundred shilling notes, how many notes did he get?

A. 27600 B. 276

C. 128 D. 138

23. The fractions $\frac{5}{9}, \frac{3}{7}, \frac{3}{5}, \frac{1}{2}, \frac{2}{3}$, are to be arranged from the smallest to the largest. Which of the following is the correct order?

A. $\frac{5}{9}, \frac{3}{7}, \frac{3}{5}, \frac{2}{3}, \frac{1}{2}$ B. $\frac{3}{7}, \frac{1}{2}, \frac{5}{9}, \frac{3}{5}, \frac{2}{3}$

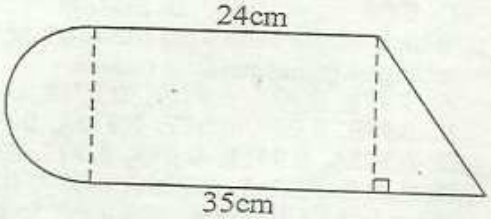
C. $\frac{1}{2}, \frac{2}{3}, \frac{3}{5}, \frac{3}{7}, \frac{5}{9}$ D. $\frac{1}{2}, \frac{5}{9}, \frac{3}{5}, \frac{2}{3}, \frac{3}{7}$

24. A pupil sat for six continous assessment tests and got an average score of 5.5. He scored 7, 2, 5, 4 and 8 in the first five tests. What is the median score of the six tests?

A. 4.5 B. 6

C. 7 D. 5.6

25. The area of the semi-circular part in the figure below is $308cm^2$.



What is the perimeter of the figure?

A. 148cm B. 14800cm

C. 192cm D. 19200cm

26. Ismael spent ${}^{3}/_{8}$ of his salary on house rent, ${}^{2}/_{5}$ of the remainder on household expenses and saved the rest. How much was his salary if he saved sh. 12000?

A. sh. 32000 B. sh. 40000

C. sh. 8000 D. sh. 20000

27. Express 0.036 as a percentage.

A. 3.6% B. 360%

C. 0.36% D. $3\frac{3}{5}\%$

28. The charges for sending a telegram are sh. 20 for the first ten words or less. Each additional word is charged sh. 1.50. A tax of 18% of the total is also charged. How did Kaimenyi pay to send the following telegram?

WILSON BOX 6784 KERICHO
WEEDING SEASON READY PAYMENT
NOT MADE SEND MONEY QUICKLY
JACOB KAIMENYI

A. sh. 27.50 B. sh. 32.45
C. sh. 34.22 D. sh. 30.60

29. Solve $\sqrt{1\frac{24}{25}} + \sqrt{5\frac{1}{16}}$

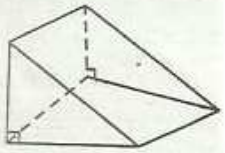
A. $\frac{13}{20}$ B. $3\frac{17}{20}$

C. $3\frac{13}{20}$ D. $2\frac{13}{20}$

30. The cash price of a bicycle was sh. 4500. Wekesa bought it on hire purchase terms. The amount he paid was 40% more than the cash price. He paid a deposit plus 10 equal monthly instalments of sh. 400 each. How much deposit did he pay?
A. sh. 1800 B. sh. 6300
C. sh. 500 D. sh. 2300

31. With a ruler and a pair of compasses, construct triangle PQR, where PQ = 3cm, PR = 4cm and angle QPR = 120°. Construct a circle to pass through P, Q and R. What is the radius of the circle?
A. 3.5cm B. 4.5cm
C. 7cm D. 9cm

32. What is the sum of the vertices, edges and faces of the wedge below.



A. 22 B. 18
C. 20 D. 16

33. Six workers take 24 days to complete a certain job. How many more workers would be needed in order that they do the same job in 18 days?
A. 6 B. 2
C. 8 D. 4

34. Jusper travelled 110km in $2^1/_2$ hours and further 160km at an average speed of 80km/hr. What was his average speed for the whole journey in metres per second?

A. 60m/s B. $16\frac{2}{3}$ m/s

C. 40m/s D. 25m/s

35. Maloba borrowed sh. 15000 from a bank that charged a simple interest at the rate of 8% p.a. If he paid the money at the end of 3 years, how much did he pay altogether?
A. sh. 3600 B. sh. 18600
C. sh. 16200 D. sh. 1200

36. The table below shows inland charges for surface mail

Type of article	Weight step	sh cts
Letters (limit of mass 2kg)	Upto 20g	31 50
	Over 20g upto 50g	37 50
	Over 50g upto 100g	42 00
	Over 100g upto 250g	63 00
	Over 250g upto 500g	105 00
Aerogrames	All types	31 50
Small packets (limit of weight 1kg)	Upto 100g	42 00
	Over 100g upto 250g	57 00
	Over 250g upto 500g	63 00
	Over 500g upto 1kg	75 00

James posted 3 letters whose masses were 18g, 44g and 135g, an ordinary aerogramme and a small packet of mass $^3/_4$kg. How much did he pay?
A. sh. 238 B. sh. 226.50
C. sh. 243 D. sh. 238.50

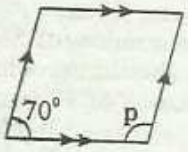
37. Simplify the inequality

$3(2y + 1) > 2\frac{1}{2}y + 7$.

A. $7y < 8$ B. $7y > 4$
C. $7y > 8$ D. $7y < 4$

38. A painter placed the bottom of a ladder 0.7m away from the wall which was 2.4m high. If the end of the ladder was leaning at the top of the wall, how long was the ladder in cm?
A. 250 B. 2.5
C. 3.1 D. 310

39. What is the size of the angle marked P?



A. 70° B. 140°
C. 80° D. 110°

40. A road connecting two towns X and Y on a map is 2.5cm. If the actual length of the road is 5km, what is the scale used in the map?
A. 1:20000 B. 1:200
C. 1:2000 D. 1:200000

41. What is the value of $\frac{uv + t^2 - rt}{uvt}$, when $r = 2$, $u = 1$, $v = 3$ and $t = 4$?

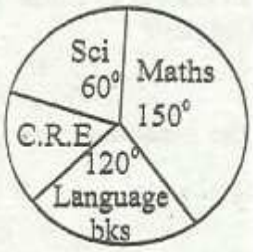
A. $\frac{11}{12}$ B. 24

C. $1\frac{1}{9}$ D. $\frac{6}{7}$

42. Below are properties of a certain quadrilateral:
(i) The opposite sides are parallel
(ii) The diagonals bisect each other at right angle
(iii) The diagonals bisect the angles at the vertices
(iv) The opposite angles are equal

The quadrilateral described above is likely to be
A. rhombus
B. trapezium
C. parallelogram
D. square

43. The pie chart below represents 72 shelves of books. Each shelve had 60 books.



How many more Mathematics books than C.R.E books were there?
A. 1800 B. 360
C. 1440 D. 24

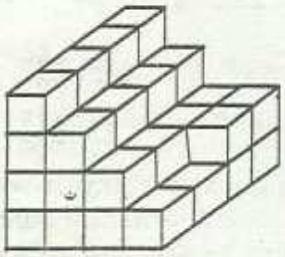
44. Which of the following measurements can give a right angled triangle?
A. 3cm, 4cm, 5cm
B. 7cm, 14cm, 25cm
C. 4cm, $7\frac{1}{2}$cm, 8.5cm
D. 9cm, 16cm, 25cm

45. A wheel has a radius of 56cm. How many revolutions should the wheel make to cover a distance of 17.6km?
A. 10000 B. 500
C. 5000 D. 1000

46. Janet went to the shop and bought the following items?
$1\frac{1}{2}$kg of rice @ sh. 12 per kg
5kg onion for sh. 32
$\frac{1}{2}$kg of meat @ sh. 80 per kg

She paid using a five hundred shilling note. How much balance did she get?
A. sh. 282 B. sh. 370
C. sh. 416 D. sh. 410

47. How many blocks have been used to make the stack below?

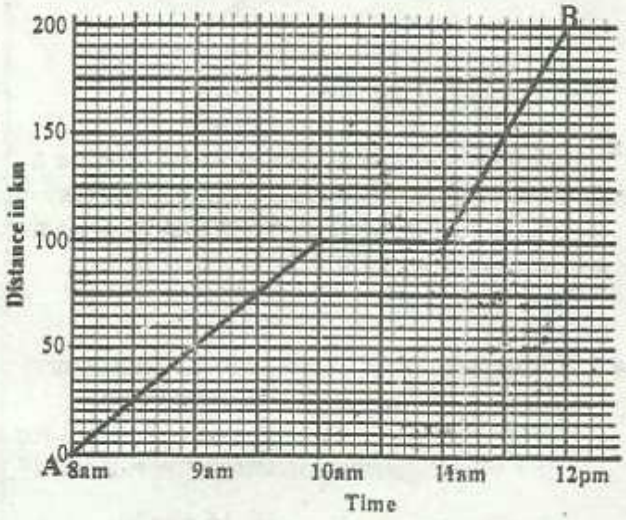


A. 42 B. 44
C. 46 D. 40

48. A father is four times older than his son. In six years time, the father will be three times older than his son. How old is the son now?
A. 18 years B. 12 years
C. 6 years D. 10 years

49. A square field has an area of 70.56 ares. What distance in kilometres does Wasonga cover after running round the field five times?
A. 84 B. 1.68
C. 420 D. 1680

50. The graph below shows a motorist's journey from town A to town B.



What was the average speed for the whole journey?
A. $66\frac{2}{3}$ km/hr B. 50km/hr
C. 60km/hr D. 100km/hr