

Mid Year Examination 2015

Mathematics

Grade 07

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Time: 2 hours

Name/ Index No.

Part I

- Answer all questions on paper itself.

01 Denote 3450m is kilometers and meters.

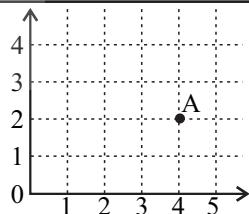
02 If the price of 1kg sugar is Rs. 88, find the price of 750g sugar.

03 Simplify. $4a + 7 + 3a + 13$

04 If $4 : x = 16 : 64$, find the value of x .

05 What is the value of 6 in the number 3.265

06 Using the coordinate plane above write the point A as ordered pair.



07 Draw a circle using a pair of compasses. Measure and write down the length of its diameter.

08 Write the following percentage as a fraction 32%.

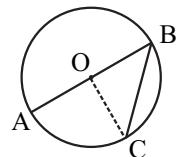
09 Find the quantity of medicine in 8 bottles of medicine having 230ml in each.

10 Simplify 0.73×2

11 Find the area of a square of side of length 8cm.

12 When $x = 3$ and $y = 1$ find the value of $2x + 3y$

13 Name the chord and the radius of this circle. O is the center of the circle.



14 Length of the cuboid is 20cm. breadth 15cm and height 10cm. Find the volume of the cuboid.

15 What is the value of $32\text{cm } 8\text{mm} \div 8$?

16 Write the expression obtained when "4 is subtracted from the number a and the divided by 10."

17 Name two things those having paralleled edges.

18 40 students in a class sat an examination. 30 of these students passed the examination. Denote the number of students passed as a percentage of the number of students who sat the examination.

19 When Rs. 1200 is divided in the ratio $5 : 3$ between x and y , how much money will y receive ?

20 The perimeter of a rectangular frame is 580cm. If the length of the frame is 150cm find its breadth.

(2 x 20 = 40)

Part - II

- **Answer first question and four other questions. 16 marks in first question and 11 marks in each other questions.**

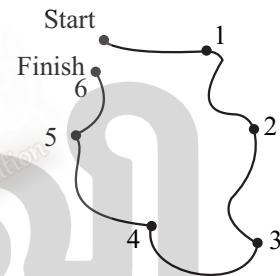
01 (a) Find the value in column A which is appropriate to each of the values in column B and join it by a line.

	A	B
(i)	100cm	20cm 8mm
(ii)	50cm x 3	2km 118m
(iii)	5cm 2mm x 4	1m
(iv)	4km 236m ÷ 2	12m 99cm
(v)	15m 2cm - 2m 3cm	1m 50cm

(b) A 5m long beam and the lengths of three reepers brought from a timber shop to repair a roof as follows. 3m 40cm, 4m 15cm, 3m 45cm

- (i) Find the total length of reepers.
- (ii) If the price of 1m of reeper is Rs. 60, find the amount spent for reepers.
- (iii) The length of beam needed is 4m 65cm. If the beam brought from the shop is used, what length is wasted ?

(c) In a cross country race five check points are placed at equal distances between the start and the finish. The total distance of the race track is 8km 40m. Find the distance between two successive check points.



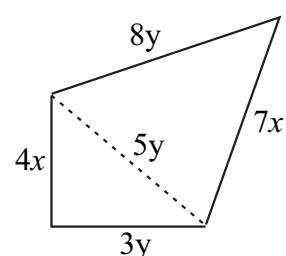
02 (a) Write the algebraic expression obtained when "Added 4 to the number x, then multiply by 5 and subtract the answer from $10x$ "

(b) Simplify

(i) $11x - 4y + 3x + 8y$ (ii) $5a - 2b - 6a + 7a$

(c) If $x = 3$, $y = 2$ find the value of the expression $9x - 5y$

(d) Build up algebraic expression for the perimeter of the following figure and simplify it.



03 (a) Fill in the blank spaces of the table given below.

Common fraction	Decimal fraction	Percentage
$\frac{1}{4}$		
$\frac{3}{8}$		
		$33 \frac{1}{3} \%$

(b) The ratio of the expenses for raw materials to craftsmanship in making an almirah was 7 : 3. If the total expenditure to make the almirah was Rs. 32000, find

- The expenses for raw materials.
- The amount paid for craftsmanship.

04 (i) Draw the coordinate plan and mark the following point on it.
(2, 2) (4, 4) (2, 8) (4, 9) (3, 10) (7, 10) (6, 9) (8, 8) (6, 4) (8, 2)

(ii) Join them in order by straight line segments.

(iii) What is the figure you have obtained ?

(iv) Draw axis of symmetry of the figure.

(v) Write the coordinates of the point of intersection of the point axis of symmetry and the x - axis.

05 (a) The weight of a packet of medicated powder is 5.075mg. Find the weight of 250 such packets

- in grams
- in grams and milligrams

(b) Calculate the breadth of a rectangular picture whose area is 13.25cm^2 and length is 5cm.

(c) The figure shows a rectangle PQRS. Using the data shown in it

- Name a locus of points moving at a fixed distance from PQ.
- Name a locus of points moving at a fixed distance from VT.

06 (a) A water tank is of length 4.0m, breadth 2.5m and height 1.5m. How many cubic metres is the volume of water that the tank would hold ?

(b) Above tank contains 250l 320ml of water. Because water leaking from a tap water is collected from 10.00 a.m. to 4.00 p.m. If this quantity of water is 8l 904ml.

- Find the quantity of water leaking in 1 hour.
- What is the quantity of water remaining ?
- Find the quantity of water leaking collected from 6.00 p.m. to 6.00 a.m. on the following day.

07 (i) Draw a circle with 5cm radius.

(ii) Mark its centre as O.

(iii) Mark points A, B and C on the circle and join AC, BC and CO.

(iv) Extend the line segment CO to meet the circle at D.

(v) Name the diameter, the chord and the radius of the circle.

(vi) Using the protractor and measure and write the value of angle \hat{CAD} .

(vii) What is the chord with longest length ? and what is its length ?

