

CADET COLLEGE PETARO

ENTRY TEST 2014 For Admission to CLASS-VII

MATHEMATICS

Max Marks: 100

Time 1 Hour

Passing Marks: 50

SECTION – I

(MARKS-70)

QNo.1: Write TRUE or FALSE for each of the following statements. Each part carries 2 marks. [30]

- i. $y = 4$ is a solution of $3y - 2 = 10$ (_____)
- ii. There is no unit for ratio. (_____)
- iii. $-a \times 2(-b)^2 = 2ab^2$ (_____)
- iv. The sum of all angles on a point is 360° (_____)
- v. If we subtract $x^2 - 20xb - 3y^2$ from $2x^2 - 15xb - 9y^2$, we get $x^2 - 5xb - 12y^2$ (_____)
- vi. The distance between the centre and any point on the circle is called diameter. (_____)
- vii. $(-2) - (-3) = -5$ (_____)
- viii. 6% discount on Rs.6000 is 360 rupees. (_____)
- ix. $\frac{3}{2}, \frac{4}{3}, \frac{5}{4}$ etc. are proper fractions. (_____)
- x. $7\frac{1}{2}\% = \frac{3}{40}$ (_____)
- xi. $\frac{1}{100}$ is read as "1 Percent" (_____)
- xii. In $2 - x$, the co-efficient of x is 2 (_____)
- xiii. 25% of 150 < 20% of 140. (_____)
- xiv. $2.25\% = 0.0225$ (_____)
- xv. Product of x^2 and x^4 is x^8 (_____)

- i. A line segment joining any two points of a circle is called _____.
- ii. The degree of $x^2y + xy^2$ is _____.
- iii. Nazim has Rs.120. He spends 25% of the amount. The remaining amount he has _____.
- iv. **- 3** _____ **- 4** (Fill in the blank with < or >)
- v. $\frac{1}{3}, \frac{1}{5}, \frac{1}{7}$ are in _____ order.
- vi. If $\frac{x}{3} = \frac{8}{12}$, **then x =** _____.
- vii. Portion of circle between two radial segments is called _____.
- viii. A circular diagram in which values are represented by sectors is called _____.
- ix. The simple form of the ratio $1\frac{3}{4} : \frac{7}{8}$ is _____.
- x. Triangle is a closed figure which has three angles and three _____.
- xi. The solution of $7y - 2 = 47$ is _____.
- xii. **20%** of 180 is _____.
- xiii. $13 - 8 = 5$ is a _____ sentence.
- xiv. One third of $10\frac{1}{2}$ is _____.
- xv. The ratio between **25cm** and **1m** is _____.
- xvi. The numbers left of zero on a number line are _____ number.
- xvii. Zakat on 21000 rupees is _____ rupees.
- xviii. *Average* = $\frac{\text{.....}}{\text{Number of Quantities}}$.
- xix. The sum of **x** and **6** is **14** then **x =** _____.
- xx. $\frac{3}{5} + \frac{4}{5} \times \frac{25}{4} =$ _____ (Simplify)

Note: Attempt any two questions from this section. Each question carries 15 marks.

QNo.3

- a. A gentleman paid Rs.1675.50 as Zakat. Find the amount on which zakat was paid. **[05]**

- b. A room is 8.5m long, 6.5m wide and 5m high. Find the area of its four walls. Also find the cost of white wash of four walls, if the cost per square meter white wash is Rs.20. **[10]**

QNo.4

- a. Solve $5(2x - 1) = 10(3x + 2)$ **[05]**

- b. A school bag is purchased for Rs.180 and is sold out for Rs.225. Find the loss or profit percent. **[10]**

QNo.5

- a. Subtract $2ab - 5b^2 - 2a^2$ from $4a^2 - 6b^2 + 2ab$ **[05]**

- b. Draw an angle of 90° and bisect it. Use the compass and ruler only. **[10]**
(Don't write steps of construction)

(THE END)
