

GIRLS CADET COLLEGE MARDAN
ENTRY TEST 8th CLASS MODEL PAPER- MATHS

Time: 1 Hour

Marks: 50

Instruction:- Use of calculator is not allowed.

Part:A (Objectives)

Q1:MultiplechoiceQuestions.(15marks)

1.	Let $A = \{1,3,5\}$ and $B = \{2,4,6\}$ then A and B are _____ sets. A. Singleton B. Disjoint C. Overlapping D. Subsets	2.	$\frac{a}{b} * \frac{c}{d} = \frac{c}{d} * \frac{a}{b}$ is the _____ property of rational numbers. A. commutative B. associative C. distributive D. None
3.	_____ is the comparison between two different quantities. A. Ratio B. Rate C. Proportion D. None	4.	$2(2 + 2 * 2) + 2(0) =$ _____ A. 12 B. 16 C. 18 D. 20
5.	The square root of a decimal number less than 1 is _____ the decimal. A. Smaller than B. Greater than C. Equal to D. Less than or equal to	6.	$\frac{1}{0}$ is equal to _____ A. 0 B. 1 C. Un-defined D. None
7.	$\frac{63}{7}$ is a _____ number. A. Rational B. Irrational C. Recurring decimal D. None	8.	Find the value of y when $48 = 2y + 8$. A. 10 B. 20 C. 30 D. 40
9.	What is the multiplicative inverse of $- \frac{3}{5}$? A. $\frac{3}{5}$ B. $- \frac{5}{3}$ C. $\frac{5}{3}$ D. 3	10.	The percentage of zakat is _____ A. 1.5% B. 2.5% C. 3.5% D. 4.5%
11.	$\frac{(a+b)^2}{a-b} \div \frac{3}{a-b} =$ _____? A. $(a+b)(a-b)$ B. $(a+b)^2$ C. $\frac{(a+b)^2}{3}$ D. $\frac{3(a+b)^2}{(a-b)^2}$	12.	What are the factors of $x^2 - 20x + 100$? A. $(x-10)^2$ B. $(x+10)^2$ C. $(x+10)(x-10)$ D. None
13.	Set builder form of a set of natural numbers is A. $\{1,2,3,...\}$ B. Set of Natural Numbers C. $\{x x \in N\}$ D. None	14.	Square of a negative number is _____? A. Positive B. Negative C. Neither positive nor negative D. Undefined

15.	Which one of the following is a monomial? A. $\frac{1}{3xy}$ B. $6x^{-2}$ C. $4x$ D. None
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Q2: Fill in the blanks.(10marks)

- $8 : 4 = 10 : \underline{\hspace{2cm}}$
- If A and B are disjoint sets then $B \setminus A = \underline{\hspace{2cm}}$
- The number which is one half of one tenth of 480 is $\underline{\hspace{2cm}}$
- $\frac{3}{7} \underline{\hspace{0.5cm}} \frac{5}{21}$ (Choose: <, >, =)
- $4x = -x + 2$, then $x = \underline{\hspace{2cm}}$
- 25% of 400 = $\underline{\hspace{2cm}}$
- Perimeter of a rectangular ground is $\underline{\hspace{2cm}}$
- If Rs. 240 is shared between two sisters in the ratio of 2:4, the second sister will get an amount of Rs. $\underline{\hspace{2cm}}$
- $\frac{1}{2} + [-\frac{3}{5} + 6 * (3 - 5)] = \underline{\hspace{2cm}}$
- If "r" is the radius of a circle then its area is given by $\underline{\hspace{2cm}}$

Part: B (Subjectives)

Q3: Attempt all questions. Each question carries five marks.(25marks)

- Find the square root of 30.25. (05)
- Think of a number and add 4 to it. If you double the sum, the result is 30. Find the number? (05)
- A coin is tossed twice. What is the probability of getting two heads? (05)
- Let $A = \{1, 2, 3, 4\}$, $B = \{2, 4\}$ and $C = \emptyset$. Verify Associative property of intersection. (05)
- Arrange the following rational numbers in ascending order. (05)

$$\frac{32}{515}, -3\frac{1}{2}, -2\frac{7}{10}, 7$$