

CADET COLLEGE KALLAR KAHAR

ENTRANCE TEST FOR CLASS 8TH JAN. 2015

Paper Mathematics

Time: 80 Mins

Marks: 70

Note: Use of Calculator not allowed.

Q. 1 Simplify (مختصر کریں) (10)

a. $(5 + 2) \div 2 \times \frac{3}{4}$

b. $\left[\frac{7}{15} + \frac{3}{5} - \frac{4}{5} \right] \left[3\frac{3}{4} \right]$

c. $\left[1\frac{1}{15} + 3\frac{3}{10} - 2\frac{4}{5} \right]$

d. Find the product (حاصل ضرب) of 3604 and 439.

e. Solve (حل کریں): $\frac{2x+6}{2} = \frac{x+3}{4}$

Q. 2 Evaluate (حل کریں) Each of the following expression if a = 4, b=5, c=-3 and d=-1 (4)

a. $\frac{2b-a}{2d+c}$

b. $\frac{4bd}{7c+a}$

Q.3 A Real estate agents' commission rate is 8%. What will be the amount of commission on the sale of Rs. 85000 home? (4)

Q. 4 The ratio (نسبت) of boys to girls at a college is 7 to 5. How many girls students are there, if there are 3500 boys. (4)

Q.5 A round pillar is 4 meter long its diameter is 60cm. Find its surface area ($\pi=3.14$) (4)

Q.6 Haider works for 4 hours and received Rs. 175. How much he will get, if he work for 16 hours. (4)

Q. 7 A rectangle is 2 inches longer (لمبائی) than it is wide (چوڑائی). The area of the rectangle is 63 square inches. What are the dimensions (لمبائی، چوڑائی) of the rectangle (مستطیل). (4)

Q. 8 Arrange (ترتیب) the following decimals in order form smallest to largest. (4)

0.0600

0.609

0.690

0.0609

0.6191

(P.T.O)

- Q. 9 Subtract (تفریق) $6x^2 - 5x + 3$ from the product of (حاصل ضرب) $(3x+2)$ and $(2x-5)$ (4)
- Q.10 Ali's father is twice as old as he is. 20 years ago Ali's father was 7 time old as his son. Find there ages. (4)
- Q.11 Abid sold (فروخت) a motorcycle for Rs. 45000. He bore (برداشت) 20% loss on his sale find purchase price (قیمت خرید). (4)
- Q. 12 Fill in the blanks (20)
- A set having single element is called : _____
 - Set $A = \{1,3,5\}$ and set $B = \{3,1,5\}$ are _____ sets.
 - $A \cup B$ is equal = _____
 - Set $\{2,3,5,7,11,13\}$ is a set of _____.
 - π is a ration (نسبت) between _____ of a circle.
 - $A^c \cap A =$ _____.
 - If $a=b$ and $b=c$ then $a=c$ indicate _____ property.
 - Write down additive (جمع) and multiplicative inverse (ضربی معکوس) of $\frac{1}{2}, 3\sqrt{3}, 0, \sqrt{37}$
 - Which one is greater $\frac{1}{2}, \frac{4}{7}$
 - Factorize (تجزی) $x^2 - x - 20$

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ENTRANCE TEST FOR CLASS 8TH - JAN 2016

PAPER MATHEMATICS

- تجزی کریں
- Q1: a) Factorize $x^2 - 62x + 336$ (4 + 4)
کثیر رقمی محلہ
- b) Product of two polynomials is $x^4 - 1 + x$. If one polynomial is $x - 1$. Find the second polynomial.
- حزب
- Q2: a) Find the square root of 648.7209 by division method. (4)
تقریب
- b) Subtract $2x^4 + 3x^3 - 2$ from the sum of $3x^4 - 3x^2 + 5x$ and $x^4 - 2x^3 + 3x - 5$ (4)
مجموعہ
- حل کریں
- Q3: Solve (2+2+4)
- a) 15% of two-third of 450.
- b) Find the number, whose 35% is 175.
- قیمت خرید قیمت فروخت
- c) Find profit or loss percentage, if purchase price is Rs 175000 and sales price is Rs 137500.
نفع نقصان
- نسبت
- سات گناہ
- Q4: The age of a man 5 years ago was seven times the age of his son. The ratio of their ages after 5 years will be 3 : 1. Find their present ages. (8)
- Q5: A price of a cup and a glass is Rs 8 and Rs 12 respectively. If same number of both are purchased in RS 120. How much glasses and cups will be purchased. (8)
رداس
- اندرونی
- Q6: a) The radius of a tank is 3.5 m and the length is 6 m. Find the cost of paint for the inner surface of tank if the rate is Rs 10 per square meter. (8)
سطح
- b) The diameter of a wheel of a motor cycle is 49cm. In how many rounds, the wheel of motor cycle will cover 6.16km distance. (4)
قطر
- جگہ
- Q7: Construct the triangle with $m\angle A = 55^\circ$ if $m\angle B = 75^\circ$ and $m\angle C = 60^\circ$. Construction steps are not required and use compass for making angles. (8)
مثلث
- Q8: Fill in the blanks. (10)
- درجہ
- a) Polynomial $x^4y + x^3y + 18$ has degree _____.
- b) $(-5) + (-6) \div (+36) \times (-4) =$ _____
- c) π is a ratio between _____ and _____.
- d) If $a = b$ and $b = c$ indicates _____ property. خاصیت
- e) Multiplicative inverse of $\frac{-\sqrt{3}}{5} =$ _____
ضربی معکوس

CADET COLLEGE KALLAR KAHAR
ENTRANCE TEST FOR CLASS 8TH JAN, 2017
PAPER MATHEMATICS

Time: 80 min

Marks: 65

P-1

Note: All questions are compulsory. Use of calculator is not allowed.

Q 1. Solve the following. (3x10=30)

- a. Prove $A \cup B = B \cup A$
- b. If $A = \{ 1, 2, 3 \}$ then write all subsets of A.
- c. Solve $x^3 \cdot x^5 \div x^4$
- d. Solve by using formula $(16+9)^2$
- e. When $\frac{22}{7}$ is irrational why $\frac{10}{3}$ is rational.
- f. Simplify $\frac{\sqrt{3}}{\sqrt{3 \times 4}}$
- g. Find the number whose 35% is 75.
- h. $\frac{2y-3}{2} = \frac{y+4}{4}$ Find the value of y.
- i. Factorize $a^2 - a - 20 = 0$
- j. Simplify $(7+11) \div (2 \times 3) - 2$

Q 2. Ali sold a car for Rupees 450,000. He Suffered 30% loss on his sale. Find the purchase price of car. (5)

Q 3. Find $x^2 + y^2$, if $x - y = 5$ and $xy = 16$. (5)

Q 4. Find the square root of 625 by division method. (5)

Q 5. if $x=2$, $y=4$ and $t=0$. Solve $\frac{(2y-t)+(x+y)}{t+x}$ (5)

Q 6. Subtract $6y^2 - 5y + 3$ from the product of $3y + 2$ and $2y - 5$. (5)

Q 7. The length and width of a rectangle are 8 cm and 6 cm respectively. Find the length of its diagonal. (5)

Q.8. Ahmad purchased 12 dozen of eggs at price of Rs. 60 per dozen. When he opened the basket he found two dozen of eggs broken. At what price per egg will he sell so that he does not suffer loss. (5)