**AFSS CENTRAL EVALUATION SYSTEM**

Central Assessment Team (CAT), HO Islamabad

**2nd MidTerm Examination 2016 – 17**

**MATHEMATICS - Class VII**

**50 marks 2 hours**

**INFORMATION FOR STUDENTS**

Marks are given against each question or part of question.

Write your name, roll number and date in the spaces provided below.

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| --- | --- |
| Student’s Name:  | Roll No: |
| Center’s Name: | Date: |
|  | Day: |
| Invigilator’s Name: | Sign: |
| Marks Obtained:  | Remarks: |
| Examiner’s Name:Date: | Sign :Day: |

***OBJECTIVE-20(marks)***

**Q No1: Fill in the blanks. 5**

1. If two parallel lines are cut by a transversal, the corresponding angles

Thus formed , are \_\_\_\_\_\_\_ in measure.

1. A line cuts two or more lines at different points is called\_\_\_\_\_\_\_\_\_\_.
2. In 24 , 2 is called the base and the small raised number is called the\_\_\_\_\_\_\_\_\_\_\_.
3. A number that is placed before the variable is called \_\_\_\_\_\_\_\_\_\_.
4. A formula (a+b)2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Q No2:Tick (✓) at the correct answer. 5**

i) a2-b2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_

 a) (a+b)(a-b) b) ab c) 2ab

ii) 4$x$ + 7=27, this algebraic statement is known as an \_\_\_\_\_\_\_\_\_\_.

 a) Polynomial b) Equation c) Quantity

iii) The \_\_\_\_\_\_\_\_\_\_ of the circle is its greatest chord.

 a) segment b) Secant c) Diameter

iv) Equal chords of the circle are equidistant from the \_\_\_\_\_\_\_\_\_.

 a) Center b) Corner c) radius

v) In a right triangle, The square of the \_\_\_\_\_\_\_\_\_\_ is equal to the sum of the

 squares of the other two sides.

 a) Hypotenuse b) Perpendicular c) Base

**Q No2: Solve any five of the following short questions. 5x2 = 10**

 i) Find the value of $x$ from the equation 8$x$-3=3$x$+17

ii) Multiply (2$ x$-5y) and (7$x$+3y)

iii) Simplify: $\frac{-18x^{3}}{12xy2}$

iv) Expand (2a-3b+4c)2.

v) Subtract 3a -2b-4c from 2a+3b+c

vi) Evaluate 998 x 998 using formula.

***SUBJECTIVE – 30(marks)***

**Solve any three questions of the following. 3×10=30**

 **Q No1(a):**Construct the triangle ABC with AB=BC= 4cm and C=600

 **b):**Draw a right angle with the help of protector. Bisect it to get an

angle of measure 450**.**

 **Q No2(a):**Two consective odd integers are such that one-third the smaller one is greater than one-seventh of the larger one by 6? Find the number.

 **b):**Solve the following simple equation.

$\frac{x-2}{3}$ **+** $\frac{x-5}{4}$ **=** $\frac{x-5}{6}$ **+** $\frac{x-7}{8}$

 **Q No3(a):**Resolve into factors.

 9a2- 4b2+16c2- 1-4b-24ac

 **b):** Find the values ofa2+ b2 and a4+ b4 when a+b=5 and ab=4.

 **Q No4(a):**Divide the first quantity by second:

-24 a2 b2c2-3 a2 bc3+6ab2c , -3ab

 **b):**Find the continued product of

 (2p+3q)( 2p-3q)(4p2+9q2)(16p4+81q4)