**AFSS CENTRAL EVALUATION SYSTEM**

Central Assessment Team (CAT), HO Islamabad

**Final Term/ Annual Examination 2016 – 2017**

**Mathematics - Class VII**

**100 marks 3 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.

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

***OBJECTIVE-40(marks)***

**Q No1:Fill in the blanks. 10**

i) The measure of the quantity of surface occupied by a figure is known as its \_\_\_\_\_\_\_\_\_\_\_\_.

ii) Volume of a rectangular solid = length x \_\_\_\_\_\_\_\_\_ x height.

iii) The distance all around a shape is called its \_\_\_\_\_\_\_\_\_.

iv) A \_\_\_\_\_\_\_\_\_\_\_ is a quadrilateral in which the opposite sides are parallel.

v) Any one of the corresponding pair of parallel sides of parallelogram is called

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-.

vi) A chord that passes through the Centre of the circle is called \_\_\_\_\_\_\_\_\_\_\_.

vii) 10x + 6 = 4, this algebraic statement is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

viii) The square of (4a+1) is equal to \_\_\_\_\_\_\_\_\_\_\_­­­­­­\_\_\_\_.

ix) (a2 – b2) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

x) In 42, 4 is called \_\_\_\_\_\_\_\_\_\_\_ and small raised number is called exponent.

**Q No2:Write ‘T’ for true or ‘F’ for false statement . 5**

i) A circle is a parallelogram. \_\_\_\_\_\_

ii) = \_\_\_\_\_\_

iii) xm × xn = xm+n ­­­­­­­­­­­­­\_\_\_\_\_\_

iv) Zero is a odd number. \_\_\_\_\_\_

v) All integers are real numbers. \_\_\_\_\_\_

**Q No3:Match the column A with Column B. 5**

|  |  |
| --- | --- |
| **Column A** | **Column B** |
| Volume of a cube | × (sum of the parallel sides) x altitude. |
| Area of rectangle | (b × h) |
| Area of triangle | *6l* 2 |
| Surface area of the cube | *l* × b |
| Area of a Trapezium | *l* × *l* × *l=l3* |

**Q. No. 3: Choose the best answer. 10**

i) is a

a) rational no (b) irrational no (c) none of them

ii) Sum of and is equal to

a) (b) (c) 0

iii) 24 = \_\_\_\_\_\_\_\_\_\_\_\_

a) *2* (b) (c) 16

iv) (a +b)2 = \_\_\_\_\_\_\_\_\_\_\_\_

a) a2 + b2 + 2ab (b) a2 + b2 - 2ab (c) none of these

v) The sum of three consecutive multiples of 9 is 81.The least of them is

a) 36 b) 27 c) 9 d) 18

vi) If m + = 2 then the value of m - is

a) b) 4 c) 1 d) 0

vii) If 2x - 10 = 6 then the value of x is equal to

a) 5 (b) 8 (c) 4 (d) 2

viii) An acute angle is less than

a) 90O (b) 180 O (c) 360 O

ix) If A = {2,4,6,8}, B = {1,3,5,7} then A U B is:

a) {1,2,3,4,5,6,7,8} (b) {1,2,3} (c) {1,2}

x) (2-4)2 = \_\_\_\_\_\_\_\_\_\_

a) 25 (b) 2-8 (c) 210

**Q No4:Solve any 5 of the following short questions. 5 x 2 = 10**

i) Expand (1 +m-3n)2.

ii) Evaluate with the help of formulae 994 x 994

iii) Solve the equation .3(x + 4) + 5(x + 3) = 2x - 27

iv) Resolve into factors x4+ x2+1.

v) Find the square of 2q2 +3q2

vi) Multiply (4a +5)(4a-5)

vii) Simplify

***SUBJECTIVE-60***

**Solve any five of the following questions. 5 x 12 = 60**

**Q No1(a):**Simplify .

**(b):**The difference between three-fourths and three-fifths of a number is

9.Determine the number.

**Q No2(a):**Construct the triangle ABC with BC = 4cm, CA=5cm and

∠ABC = 60O.

**(b):**Draw ΔABC with BC = 6cm, CA = 12cm, AB = 13cm and verify the

Pythagoras theorem.

**Q No3(a):**Find the greatest common factors of ab2(a+b)2, a2b(a2-b2), a2b2(a+b).

**(b):**The dimensions of a room are (3x+1), (2x-1) and (x+3) units

respectively, Determine the area of the floor and the volume.

**Q No4(a):**The length of the of the triangle is twice its breadth. Find its perimeter

if its length is 12cm.

**(b):**Multiply (x2-5x-6) and (x-4).

**Q No5(a):**Find the greatest common factors of (ab)(a – b) ,a2 (a – b) , b2 (a – b)2

**(b):**Resolve x4 + x2 + 1 into factors.

**Q No6(a):** Find the area of a rhombus is 54cm2 and its perimeter is 36cm.Find its

altitude.

**(b):** If a -, then find the value of a4+ .

**Q No7(a):** Show that - ) =( x x .

**(b):** If A = {0,3,6,9}, B = {1,3,5,7} then find (i) A B (ii) B A