**AFSS CENTRAL EVALUATION SYSTEM**

Central Assessment Team (CAT), HO Islamabad

**1st Mid Term Examination 2016 – 17**

**MATHEMATICS - Class VIII**

**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***

**Q. No. 1:a) Tick at the correct answer.**

i) If A = 1, b = -2 and c = -3 then the value of (a+b)xc is equal to:

 a) 2 b) 1 c) 3

ii) If A is a set which is equal to {1,2,3} then the set of all subsets of A is called

 a) power set of A b) null set of A c) Complement of A

iii) If A = {a,b,c} then A∩φ is equal to:

 a) ∅ b) Ac c) A

iv) For any number ‘n’ $\sqrt[2]{n}$ is called a radical, and n is called:

 a) radicand b) index c) rational

v) (-2)3 is equal to:

 a) 8 b) - 8 c) - 6

vi) $\sqrt[3]{mn}$ is equal to:

 a) $\frac{\sqrt[3]{m}}{\sqrt[3]{n}}$ b) $\sqrt[3]{m} . \sqrt[3]{n}$ c) m x n

vii) The most important system that is used for all numerical calculation by the computer is called:

 a) Binary System b)Octal system c)Arabic numerical system

viii) If am ÷ an then

 a) am+n b) amxn c) am-n

ix) $\sqrt{3} × \sqrt{3} × \sqrt{3} × \sqrt{3}$ is equal to:

 a) 8 b) 9 c) 27

x) In $l=\frac{p×r×t}{100}$, where ‘p’ is called the:

 a) compound interest b) principal c) number of years

**Q. No 2: Solve any five short question of the following questions. 2\*5=10**

i) List of members of the following sets

 a) P b) O

ii) Simplify (a2 + b2 – c2) – (b2 + c2 – d2) – (d2 + a2 – b2)

iii) Find the square of (2a + b)

iv) Solve 6 + 5*x* – 4*x* = 3*x* + 2

v) List the members of the power set of {0}

vi) Subtract the second binary number of 111012 - 10112

vii) Evaluate $\frac{\sqrt{4}}{20}$

***SUBJECTIVE - 30***

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

**Q. No. 1: Simplify** $\frac{\sqrt{27} × \sqrt{243} × \sqrt{12}}{\sqrt{125} × \sqrt{18}}$

**Q. No. 2: Find the cube root of 274625.**

**Q. No. 3:** **Find the compound interest on Rs. 5000 for 2years at 4% per annum.**

**Q. No. 4:** **The product of positive numbers is** $9\frac{18}{25}$ **and one of them us three times the other find the numbers.**

**Q. No. 5:** **If U = {1,2,3,4,5}, A = {1,3}, B = {2,4}, C = {5}. Find**

 **a) A U (B ∩ C) b) (A U B)**