Student ID

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

Example Student ID

0	2	4	7	2	6
●	0	0	0	0	0
1	1	1	1	1	1
2	●	2	2	●	2
3	3	3	3	3	3
4	4	●	4	4	4
5	5	5	5	5	5
6	6	6	6	6	●
7	7	7	●	7	7
8	8	8	8	8	8
9	9	9	9	9	9

Oriental Public School Mardan

Class: 8th

Paper: Maths

Mid Term Examination - 2019

Multiple – Choice (1 Point each)

Time: 30 Minutes **Marks: 20**

Instructions:

1. **Please fill only one circle for each question. Filling more than one circle shall consider the answer incorrect.**
2. **Use only lack or blue ball point or marker. Do not use any other color.**
3. **Attempt all the questions. Don't leave any question un attempted. There is no negative marking.**

1. $\{0, \pm1, \pm2, \pm3 \ldots\ldots\ldots\ldots\} \textit{ is called set of}.$

   A. Natural number B. Whole numbers C. Prime number D. Integers

2. $a \in A \textit{ stands for}$

   A. a is a member of A B. a is subset of A C. a is not member of A D. a is less than A

3. $According\ to\ the\ De-Morgan's\ law\ (A \cup B) =$

   A. $\acute{A} \cup \acute{B}$ B. $\acute{A} \cap \acute{B}$ C. $(A \cap B)'$ D. $A \cap B'$

4. $The\ sets\ A = \{a, b, c\} and\ B = \{c, b, a\} are.$

   A. Infinite sets B. Equal sets C. singleton sets D. Disjoint sets

5. Number of elements in power set of {3,4,5,6} will be

   A. 5 B. 10 C. 16 D. 32

6. $Q \cup Q' =$

   A. W B. N C. R D. Z

7. 0.333….. is called _____ decimal

   A. Non recurring B. Terminating C. Recurring D. None

8. $\sqrt{}\ \ is\ called$

   A. cube root B. summation C. radical D. Phi

9. $6^3 =$

   A. 6 B. 18 C. 36 D. 216

10. $\sqrt{3 \times 3} =$

    A. 1 B. 3 C. 9 D. 0

11. Which number is an irrational number?

    A. $\frac{1}{2}$ B. $\sqrt{2}$ C. -2 D. 2

12. $(10)_2 + (10)_2 =$

    A. $(10)_2$ B. $(110)_2$ C. $(100)_2$ D. $(111)_2$

13. 10+3 in decimal will be _____ in base 5

    A. $(13)_5$ B. $(23)_5$ C. $(20)_5$ D. $(30)_5$

14. In converting octal number to decimal number, each digit is multiplied with same power of:

    A. 8 B. 10 C. 2 D. 5

15. Number of digits used in base 5 number system are:

    A. 10 B. 8 C. 5 D. 2

MCQ's Answer Sheet

ہر سوال کے سامنے دیئے گئے چار دائروں میں سے ایک کا انتخاب کریں اور منتخب دائرہ کو کالے رنگ کے بال پین یا مار کر سے بھر دیں۔

1	(A)	(B)	(C)	(D)
2	(A)	(B)	(C)	(D)
3	(A)	(B)	(C)	(D)
4	(A)	(B)	(C)	(D)
5	(A)	(B)	(C)	(D)
6	(A)	(B)	(C)	(D)
7	(A)	(B)	(C)	(D)
8	(A)	(B)	(C)	(D)
9	(A)	(B)	(C)	(D)
10	(A)	(B)	(C)	(D)
11	(A)	(B)	(C)	(D)
12	(A)	(B)	(C)	(D)
13	(A)	(B)	(C)	(D)
14	(A)	(B)	(C)	(D)
15	(A)	(B)	(C)	(D)

Oriental Public School Mardan

Class: 8th

Paper: Maths

Mid- Term Examination - 2019

Subjective Part

Time: 2:30 Minutes **Marks: 60**

Section "B"

Attempt any Nine questions from the following. **(36)**

1. $If\ A = \{1,3,5,7,9\}, B = \{0,4,8,12,16,20\}$ verify the following $A \cup B = B \cup A$
2. Verify the following

   $B \cap (C \cap A) = (B \cap A) \cap A. If\ A = \{1,3,5,7,9\}, B = \{0,4,8,12,16,20\}, C = \{0,1,2,4\}$
3. $If\ A = \{2,8,12\}, B = \{10,12,16\}, C = \{6,12,18\}$use Venn diagram to represent.

   $i.\ A \cup (B \cup C)$ $ii.\ A \cap (B \cap C)$
4. For the sets: $A = \{1,2,3,4,5\}, B = \{4,5,6,7,8\}, C = \{5,8,9,10,11\} use\ venndiagram\ to$

   verify $A \cup (B \cup C) = (A \cup B) \cup C$
5. Write two rational and three irrational number that are between 3 and 4.
6. Find the squares of the following: a. 21 b. 700
7. Find the square roots of the following: a. 5184 b. 0.04
8. $if\ a^3 = 729$, What is a?
9. $Simplify$: $a.\ (374)_8 + (677)_8$ $b.\ (13615)_2 - (4726)_8$
10. Convert the following into binary system : $a.\ 72$ $b.\ 689$
11. Find the cube of the following numbers: a. 20 b. - 15

Section "C"

Attempt any 3 questions. **(27)**

1. The sum of the lengths of any two sides of a triangle is greater than the length of the third side.
2. Triangles on the same base and of the same altitude are equal in Area.
3. Construct ΔABC, draw their angle bisectors and verify their concurrency.

   m $\overline{AB} = 4.5cm$ m $\overline{BC} = 3.1cm$ and m $\overline{CA} = 5.2$ cm
4. Draw a rectangle PQRS such that m $\overline{PQ} = 5cm$ and m $\overline{QR} = 3.5$ cm. Construct a square equal in area to rectangle PQRS.