**DHACSS SKBZ EXAMINATION**

**MID- TERM EXAMINATION 2021**

**MATHEMATICS**

**CLASS VI**

Max marks100

Time: 3 Hours

NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Roll No:\_\_\_\_\_\_ Sec: \_\_\_\_ Invigilator Sign: \_\_\_\_\_\_

**Section A (OBJECTIVE) (40 Marks)**

**Q1 (a):** Fill in the blanks. **(1 x 10 =10)**

1. A \_\_\_\_\_\_\_\_\_\_\_ is a collection of well-defined and distinct objects.
2. Right bisector of a given line segment is a line which makes an angle of \_\_\_\_\_\_\_\_\_\_.
3. If two set A and B have \_\_\_\_\_\_\_\_\_ elements, they are said to be equal sets.
4. A \_\_\_\_\_\_\_\_\_ is a number which divides a dividend completely leaving no remainder.
5. 0 is on\_\_\_\_\_\_\_\_\_ of -6.
6. The absolute value of -3 is \_\_\_\_\_\_\_\_\_\_\_\_\_.
7. \_\_\_\_\_\_\_\_\_ is the only even prime number.
8. A set which has unlimited number of elements is called \_\_\_\_\_\_\_\_\_\_.
9. HCF stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. A set which has no element is called \_\_\_\_\_\_\_\_\_\_\_ set.

**Q1 (b):** Choose the correct answer. **(1 x 10 = 10)**

1. There are \_\_\_\_\_\_ number of terms in 3×m×n

|  |  |  |  |
| --- | --- | --- | --- |
|  | * 1. 3 | * 1. 1 | * 1. 0 |

1. 3a + 4 = 8 is a/an \_\_\_\_\_\_\_\_\_\_\_\_ statement.

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. Not open | * 1. Open | * 1. Close | * 1. Terminating |
|  |  |  |  |

1. Which of the following number is exactly divisible by 5?

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. 3529 | * 1. 6321 | * 1. 5553 | * 1. 7535 |

1. A natural number which has more than two factors is called \_\_\_\_\_\_\_\_\_ number.

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. Even | * 1. Prime | * 1. Composite | * 1. Odd |

1. -8 \_\_\_\_ 0

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. ≠ | * 1. < | * 1. = | * 1. > |
|  |  |  |  |

1. If A= {a, b, c} and B= {a, b, c, d, e} then

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. A=B | * 1. A~B | * 1. A⊂B | * 1. A⊃B |
|  |  |  |  |

1. If set A and B are equal,we use the symbol

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. = | * 1. ~ | * 1. ≠ | * 1. ϵ |
|  |  |  |  |

1. B= {100, 200, 300, 400, ……} is a/an \_\_\_\_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. Finite | * 1. Proper | * 1. Infinite | * 1. Improper |
|  |  |  |  |

1. Element of set do not \_\_\_\_\_\_\_\_\_ itself.

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. Jumble | * 1. Repeat | * 1. Mix | * 1. None |
|  |  |  |  |

1. + − = \_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |  |  |
| --- | --- | --- | --- |
| * 1. + | * 1. − | * 1. none | * 1. All |
|  |  |  |  |

**Q1 (c):** Match the following **(1 x 5 = 5)**

|  |  |  |
| --- | --- | --- |
|  | **Column A** | **Column B** |
| 1) | ⊇ | Null set |
| 2) | ∅ | Is not equal to |
| 3) | **⊆** | Super set |
| 4) | ≠ | Is equivalent to |
| 5) | ~ | Subset |

**Q1 (d):** Identify True and False: **(1 x 5 = 5)**

1. {a, b, c, d} is not a set.
2. 1 is a prime number.
3. The order of elements of a set does not matter.
4. 0 is a positive integer.
5. Positive integer is always greater than negative integer.

**Q1 (e):** Attempt all **FIVE** quick solutions **(2 x 5 = 10)**

1. Write the variables of the following expressions.
2. Solve:(+5) + (-4)
3. Which of the following are equivalent sets?
4. {p, a, t} and {t, a, p}
5. Set of odd numbers less than 2 and {}
6. Write the following statement in symbols,

* Product of a number y and 7 is greater than 2

1. Test whether:
2. 5123864 is exactly divisible by 8 \_\_\_\_\_\_\_
3. 210006 is exactly divisible by 2 \_\_\_\_\_\_\_\_

**SECTION: B**

Attempt any **TEN**questions. (**Max Marks: 10 x 4 = 40)**

1. Arrange the given integer in ascending and descending order:

0, -4, +4, -5, +5

1. Write prime numbers between 6 to 15
2. Write all the factors of 30.
3. Write in tabulate form
4. Set of letters in word ‘Pakistan’.
5. Set of first ten numbers exactly divisible by ‘2’.
6. Subtract
7. +6 from -10
8. 15 from +25
9. Draw a right bisector of AB measuring 8 cm by using a pair of compasses. (Do not write steps of construction)
10. Find the value of x and y which makes the following statements true
11. 3y + 1 = 10
12. 14 – x = 8
13. 35 – y = 29
14. 24 -x = 20
15. Solve the following:
16. (+40)-(+30)
17. (-30)-(-25)
18. Arrange the absolute values of given numbers in ascending and descending order.
19. -4,+1,-6,+3,0,+5
20. -20,-10,+11,+7,0,-4
21. Write first 7 multiples of 12.
22. Write like terms in the following.

2xy, 4Lm, -7xz, 140xy, 13mn, xz, ⅕ xy, -9xyz, ¼ xy, -2p, 1/3 xy, -2xy, 5xy, xyz, 46p, 5Lm

1. Find the product of:
2. (-16) × (-25)
3. (20) × (+17)
4. Find the quotient of:
5. (-20) ÷ (-5)
6. (-8) ÷ (+4)
7. Write the constants of the following expressions.
8. Which of the following numbers are exactly divisible by 6?
9. 2456
10. 7121700
11. 19206
12. 10005

**SECTION: C**

Attempt any **TWO**questions**.** (**Max Marks: 2 x 10 =20)**

**Q1 (a):** Find the HCF by long division method

1. 2241,8217,747

(**b):** Construct an angle of using compass. Write down steps of construction.

**Q2 (a):** Find the least quantity which can be exactly measured by buckets of capacity 12 litres, 16 litres and 24 litres.

**(b):** Construct angle of 45⁰ using compass. Write down steps of construction.

**Q3 (a):** Using prime factorization method, find the LCM of,

1. 35, 65 and 75

**(b):** Find the greatest length of wooden scale which can be used to measure 540 cm and 360 cm exactly.