

**Chapter 2. System of real numbers, Exponents and Radicals**

1)  $\sqrt{2}$  is a \_\_\_\_\_ number.

- A) rational
- B) irrational
- C) Natural
- D) None of these

Answer: B

2)  $6 + 7 = 7 + 6$  the property used is called

- A) Closure property w.r.t addition
- B) Closure property w.r.t subtraction
- C) Closure property w.r.t multiplication
- D) None of these

Answer: A

3)  $6 \times 7 = 7 \times 6$  the property used is called

- A) Closure property w.r.t addition
- B) Closure property w.r.t subtraction
- C) Closure property w.r.t multiplication
- D) None of these

Answer: C

4) An expression which has atleast one term involving a radical sign is called

- A) rational
- B) Surd
- C) Open sentence
- D) True sentence

Answer: B

5) The element \_\_\_\_\_ is called multiplicative identity.

- A) 0
- B) 1
- C) Both A and B
- D) None of these

Answer: B

6) The additive inverse of  $\frac{1}{A-B}$  is

- A)  $\frac{1}{-A+B}$
- B)  $\frac{-1}{-A+B}$
- C)  $\frac{1}{-A-B}$
- D) None of these

Answer: A

7) The multiplicative inverse of  $\frac{1}{x-y}$  is

- A)  $(x - y)$
- B)  $(x+y)$
- C)  $(xy)$
- D) None of these

Answer: A

8) The  $x = y, y = z \Rightarrow x = z$  the property used is called

- A) Symmetric property of equality
- B) Transitive property of equality
- C) Closure property
- D) None of these

Answer: B

9) The element \_\_\_\_\_ is called additive identity.

- A) 1
- B) 0
- C) 2
- D) 4

Answer: B

10) If  $x < y, y < z \Rightarrow x < z$  the property used is called \_\_\_\_\_.

- A) transitive property of inequality.
- B) Symmetric property of equality
- C) Closure property
- D) None of these

Answer: A

11)  $5^{3^2} \div 5^{2^3} =$

- A) 25
- B) 1
- C) 2
- D) 5

Answer: D

12) If  $y = 3$  then  $y^2 + y^{-2}$  is

- A)  $\frac{82}{9}$
- B) 3
- C) 4
- D) 5

Answer: A

13) The conjugate of  $\sqrt{2} - \sqrt{3}$  is \_\_\_\_\_.

- A)  $\sqrt{2} + \sqrt{3}$
- B)  $-\sqrt{2} + \sqrt{3}$
- C)  $-\sqrt{2} - \sqrt{3}$

D) Both A and C

Answer: D