



BGS Vijnatham School

Worksheet 1

Subject: Mathematics

Step: VII

Multiple Choice Questions

Q1. Which of the following numbers is the smallest?

- (a) 0.056
- (b) 0.506
- (c) 0.065
- (d) 0.605

Q2. The product of 1.2 and 0.04 is:

- (a) 4.8
- (b) 0.48
- (c) 0.048
- (d) 0.0048

Q3. If the value of the expression $3m - 7$ is equal to 14, then the value of m is:

- (a) 3
- (b) 7
- (c) 21
- (d) 5

Q4. The word phrase "12 subtracted from 4 times a number z " can be written as:

- (a) $12 - 4z$
- (b) $4z - 12$
- (c) $4(z - 12)$
- (d) $z/4 - 12$

Q5. Evaluate: $25.4 - 8.79$

- (a) 16.61
- (b) 16.71
- (c) 17.39
- (d) 16.69

Q6. The terms of the algebraic expression $5x^2 - 3xy + 7$ are:

- (a) $5x^2$, $3xy$, 7
- (b) $5x^2$, $-3xy$, 7
- (c) 5, -3, 7
- (d) x^2 , xy , 7

Q7. What is the value of $4.8/0.6$?

- (a) 0.8
- (b) 8
- (c) 80
- (d) 0.08

Q8. The degree of a linear equation in one variable is always:

- (a) 0
- (b) 1
- (c) 2
- (d) Any number

Q9. Identify the pair of like terms from the following:

- (a) $3x$, $3y$
- (b) $4ab$, $-7ba$
- (c) $5a^2b$, $5ab^2$
- (d) $2x$, $2x^2$

Q10. Convert 7 cm into kilometers:

- (a) 0.00007 km
- (b) 0.007 km
- (c) 0.0007 km
- (d) 0.07 km

Q11. The coefficient of y^2 in the expression $-y^2 + 5y - 3$ is:

- (a) 1
- (b) 5
- (c) -1
- (d) 0

Q12. If $p = -2$, then the value of $p^3 - 2p^2 + 4p$ is:

- (a) -24
- (b) -8
- (c) 16
- (d) 0

Q13. The value of $0.9/1000$ is:

- (a) 0.009
- (b) 0.0009
- (c) 0.09
- (d) 900

Q14. An algebraic expression containing exactly three terms is called a:

- (a) Monomial
- (b) Binomial
- (c) Trinomial
- (d) Polynomial

Q15. Solve for y: $5(y - 2) = 20$

- (a) 4
- (b) 6
- (c) 8
- (d) 2

SECTION B: ASSERTION & REASON QUESTIONS (5 Marks)

Directions: In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

Q16.

Assertion (A): The sum of 0.3 and 0.07 is 0.37.

Reason (R): To add decimals, we place the decimal points one below the other so that the digits with the same place values are aligned.

Q17.

Assertion (A): The value of the expression $2x + 5$ is 15 when $x = 5$.

Reason (R): An algebraic expression has a fixed value regardless of the value assigned to its variable.

Q18.

Assertion (A): $4x^2y$ and $-9yx^2$ are like terms.

Reason (R): Like terms have the same algebraic factors, and the order of multiplication of factors does not change the term.

Q19.

Assertion (A): If $x/3 = 7$, then $x = 21$.

Reason (R): If a number divides a variable on one side of an equation, it multiplied on the other side when transposed.

Q20.

Assertion (A): ₹7 and 5 paise can be expressed in decimals as ₹7.5.

Reason (R): 1 paisa = $1/100$