OFFICE OF THE DEPUTY DIRECTOR OF PUBLIC INSTRUCTION -CHIKKAMAGALURU

MULTIPLE CHOICE QUESTIONS FOR PRACTICE

MATHEMATICS- QUADRATIC EQUATIONS

STUDENT NAME : **SCHOOL NAME:**

The four alternative /choices are given for each incomplete statement or a question. Choose the correct one.

1. The standard form of an adfected quadratic equation is……..

   A) $ax^2+bx+c=0$ B) $ax^2-bx+c=0$ C) $ax^2+bx-c=0$ D) $ax^2+c-bx=0$

2. The standard form of a quadratic equation $2x^2-3=7x$ is……

   A)$2x^2-3=7x$ B) $2x^2-3-7x=0$ C) $2x^2-7x-3=0$ D) $-2x^2-3+7x=0$

3. Which one of the following equation is not a quadratic equation?

   A)$3x^2+4x-7=0$ B) $m^2-5m-8=0$ C) $2b^2+b-6=0$ D) $0x^2-2x-9=0$

4. Which one of the following equation is a quadratic equation ?

   A)$4x^{-2}-6x+6=0$ B) $3x-8y=1$ C) $5x^3+5x-7=0$ D) $3x^2+9=7$

5. The highest power appearing in a quadratic equation $2x^2=4x-3$ is……

   A)1 B) 2 C) 3 D)4

6. The constant term in a quadratic equation $7x^2-4x=5$ is……..

   A)7 B) -4 C) 5 D) -5

7. The polynomial equation $x(x+1)+8=(x+2)(x-2)$ is a …….equation.

   A)Linear equation C) cubic equation

   B)Quadratic equation D) Simultanious equation

8. Which one of the following value satisifies the equation $x^2-3x+2=0$?

   A)1 B) 2 C) -1 D) -3

9. The maximum number of roots of a quadratic equation $ax^2+bx+c=0$ is…….

   A)2 B) 3 C) 1 D) 4

10. The roots of a quadratic equation $x^2+bx+c=0$ is given by ……

    A) $\frac{-b\pm\sqrt{b^2-4ac}}{2a}$ B) $-b\pm\frac{\sqrt{b^2-4ac}}{2a}$ C) $\frac{-b\pm\sqrt{b^2-4ac}}{2a}$ D) $\frac{-b\pm\sqrt{b^2-4c}}{2}$

11. If (y-2) and (y+3) are the factors of the trinomial y^2+y-6 then the roots of a quadratic equation $y^2+y-6=0$ are ……and …..

    A) -2+3 B) 2,-3 C)-2,-3 D) 2,3

12. If -2 is the one of the roots of a quadratic equation $x^2+3x+2=0$ then the other root is..

    A) 2 B) -1 C) +1 D) 3

13.The roots of a quadratic equation $m^2+m-12=0$ are …. and …….

A) 4, 3 B) 4,-3 C) -4,-3 D) -4,3

14.The values of x which satisfies the equation $6x^2-x-2=0$ are ----and ---

A) $\frac{2}{3},\frac{1}{2}$ B) $\frac{-2}{3},\frac{1}{2}$ C) $\frac{2}{3},\frac{-1}{2}$ D) $\frac{-2}{3},\frac{-1}{2}$

15.Which one of the following quadratic equation has -2 and +5 as a roots ?

A) $x^2-3x-10=0$ B) $x^2+3x-10=0$ C) $x^2-3x+10=0$ D) $x^2+3x+10=0$

16. If in a quadratic equation $\mathbf{ax^2+bx+c=0}$, $\mathbf{c}=0$ then the roots are ……. and …….

A) $0,\frac{-b}{a}$ B) $0,\frac{b}{a}$ C) $a,\frac{-b}{a}$ D) $b,\frac{-b}{a}$

17.For what condition,the roots of a quadratic equation $\mathbf{ax^2+bx+c=0}$ are real and distinct.

A) $b^2-4ac=0$ B) $b^2-4ac>0$ C) $b^2-4ac<0$ D) b2 -4ac = -2

18. The nature of roots of a quadratic equation $\mathbf{ax^2+bx+c=0}$ .when the $b^2-4ac<0$.

A) Real and Equal B) Real and Unequal

C) Real and Distinct D) Non-Real and Imaginary

19.The quadratic equation whose discriminant is p^2-4qr is ……..

A) $px^2+qx+r=0$ C) $qx^2+px+r=0$

B) $px^2+rx+q=0$ D) $rx^2+qx+p=0$

20. The value of discriminant of a quadratic equation $2x^2=4x-3$ is…….

A) -8 B) 8 C) 40 D) -40

21.The equation $9x^2+kx+4=0$ has two equal roots then the value of k is….

A)±12 B) ±13 C) ±11 D) ±10

22. If the discriminant of a quadratic equation is equal to zero then the roots of a quadratic equation are ……

A) Real and Distinct B) Imaginary (No real roots)

C) Real and Equal D) Irrational and Distinct

23. The discriminant of a quadratic equation $3x^2+8x-2=o$ is …….

A) 40 B) 68 C)88 D)30

24 .The discriminant of a quadratic equation $x^2+bx+c=o$ is …….

A) b^2-4ac B) b^2-4c C) b-4ac D) b^2-4a

25.The roots of a quadratic equation $ax^2+bx+c=o$ are not distinct when ……..

A) $b^2-4ac>0$ B) $b^2-4ac<0$ C) $b^2-4ac=0$ D) None of these.