EXPT. NO. NAME: PAGE NO. 4 DATE:

Develop a C program to find all possible roots of a quadratic equation using function

```
#include <stdio.h>
#include <math.h>
  int roots (int, int, int);
  int main ()

{
    int x, y, z;
    printf("enter coefficients a,b and c of quadratic
                    equation of the form ax^2 +bx+c=0 :");
    scanf ("%d %d %d", &x, &y, &z);
    roots (x, y, z);

    return 0;
}
  int roots (int a, int b, int c)
{
   float discriminant, root1, root2, real, imaginary;
   discriminant = b*b -4*a*c;

   if (discriminant > 0)
    {
      root1 = (-b + Sqrt(discriminant)) /(2*a);
      root2 = (-b - Sqrt (discriminant)) /(2*a);
```

Teacher's Signature:

EXPT. NO. NAME: Page No. Date YOUVA

```
    printf("root1 = %lf and root2 = %lf", root1, root2);
}
else if (discriminant == 0)
{
    root1 = root2 = (-b/(2*a));
    printf("root1 = root2 = %lf", root2);
}
else
{
    real = (-b/(2*a));
    imaginary = sqrt(-discriminant)/(2*a);
    printf("root1 = %lf + %lfi and root2 = %lf - %lfi",
            real, imaginary, real, imaginary);
}
return 0;
}
```

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