Tutorial – 3

Examples on Linear Differential Equation

Q. Solve the following

1)

$$+ P\,y = Q\,y^n$$

A] Homogeneous D.E.
 B] Linear D.E. with constant coefficient
 C] Bernoulli's D.E.
 D] Exact D.E.

 2)

   A]a B] C] D] x
  3)

   D.E. $+ P\,x = Q$ has integral factors as

   A] B] C] D]
  4)

   A] C.F.+P.I   B] P.I.   C] C.F.   D] P.I.- C.F
  5)
    If
     A]Only Real   B] Only Imaginary
     C] Real and Imaginary   C]Zero

6)
For
     A] Integrate f(D)   B]Differentiate f(D)

C]Replace D by a   D] Replace a by D

7)

How many types of non-repeated roots A.E. has

A] 0   B]1   C]2   D] 3

8)

If A.E. has

A]+   B]

C] D]

9]

If C.F. for D.E. is y = + + then roots of A.E. are

A] 3,3, B]0,3,3   C] 3,-3,0   D]0,-3,-3

10]

C.F. =

A] B]

C]   D]