**III UNIT TEST**

**CLASS XII MATHS**

**Time -40 min One mark Questions M.M.40**

**NOTE- *Attempt all questions*.**

**1.**

**2.**

**3. Write order and degree of the given differential equation **

**4. Write the integrating factor of the differential equation:**

**5 .E**

**6**

**Two marks Questions**

**7.**

**8. E**

**9. Form the differential equation representing the family of circles touching the y-axis at origin.**

**Four Marks Questions**

**10. Find the area of the region bounded by the two parabolas**

**11.**

**12. Solve the differential equation:**

**13. Find the general solution of the differential equation :(x+y)dy+(x-y)dx=0**

**Six Marks Questions**

**14. Show that the differential equation:is homogenous and find its particular solution, given that x=0 when y=1.**

**15. Make a rough sketch of the region given below and find its area using integration:**

**OR**

**Using the method of integration find the area of the triangle ABC whose vertices are A(2, 0)**

**B(4, 5) and C(6, 3).**

**THE END**