**Question(1**)

………………………………………………………………

**Question(2**)Find the following integral:

…………………………………………………………

**Question(3**)Find the following integral:

………………………………………………………………

**Question(4**)Evaluate the integral: x , show your work

…………………………………………………………………..

**Question(5**)Find the equivalent integration :

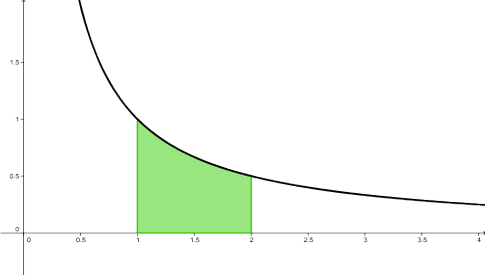
…………………………………………………………………

**Question(6)**Given

………………………………………………………………………

**Question(7**) Given.Find

………………………………………………………………………Which of **Question(8**)the following integrals represents the shaded area?

A.

B.

C.

**Question(9**) What is the area of the region bounded by the graph of

, x-axis , x = 0 and x = 2

…………………………………………………………



**Question(1**0)

Using the graph of f(x) alongside,

If ,

And the total area shaded on the graph is 20 , what isthe

……………………………………………………………………

**Question(11**)A particle moves in a straight line with velocity v(t) = 3t2 – t +2 What is the displacement of the particle at the end of the first second?

A.

B.

C.

D.

……………………………………………………………………

**Question(1**2)An object starts at the origin with a constant acceleration its initial velocity is which of the following represents the velocity formula?

**Question(1**3)The velocity of a moving object is given by the formula, where is the time in seconds .How far will the object be for its starting point after 2 seconds

……………………………………………………………………..

**Question(1**4)The marginal profit for producing dinner plates per week is given byper plate. Find the profit function.

…………………………………………………………………

**Question(1**5)

…………………………………………………….

**Question(1**6)

………………………………………………..

**Question(1**7)

…………………………………………………

**Question(1**8).

…………………………………………………

**Question(1**9).

…………………………………………………

**Question(**20)Evaluate the following integralBy using the substitution

**Question(**21)Given , which of the following is the integral ***?***

………………………………………………………..

**Question(2**2)Evaluate the following integral:

……………………………………………………….

**Question(**23) Which of the following is the solution for the differential equation - 2x = 5

………………………………………………………….

**Question(**24)Find the general solution for the following differential equation :

**=**

…………………………………………………………

**Question(**25)Which of the following is the volume of the solid that is generated when the region bounded by the function Y = , X- axis and x= 0 , x = 4 is rotated about the x-axis

……………………………………………………….

**Question(**26)Find the volume of the solid that is generated when the region under Y = x3 from x=1 to x=2 is rotated about x-axis

………………………………………………………..

**Question(**27)Find the function , if and at

**Question(**28)Find the integration of the function

………………………………………………………………………..

**Question(**29)Evaluate the integral: x

……………………………………………………………………………….

**Question(**30) Evaluate if and

………………………………………………………………………………

**Question(31**) If , find

……………………………………………………………………………

**Question(3**2)The velocity of a moving object is given by the formula *𝑣=2* , where is the time in seconds .

How far will the object be for its starting point after 6 seconds

………………………………………………………………………

**Question(33**)The amount of water in a tank is changing at rate of per a day .Initially there was 3000in the tank Express the volume of water in the tank in terms of

…………………………………………………………………………..

**Question(**34)Find the integral :

…………………………………………………………….

**Question(35**) Evaluate the integral :

**Question(36**)If , then find the integral

………………………………………………………………………

**Question(37**)Evaluate the following integral :

………………………………………………………………………

What is the solution for the differential equation: **Question(3**8) 

…………………………………………………………………….

**Question(39**)Find the area of the region enclosed by: 

………………………………………………………………………

**Question(40**)If y = **** , find 

………………………………………………………………………

**Question(41**)Which of the following represents the integral 

……………………………………………………………………………

**Question(4**2)Which of the following represents the integral

……………………………………………………………………………

**Question(4**3)Which of the following represents the integral

**Question(44**)Find the following integral : 

……………………………………………………………………..

**Question(45**)Which of the following represents the integral

………………………………………………………………………………..

**Question(46**)Find the integral : 

……………………………………………………………………………

**Question(47**)Which of the following represents the integral

………………………………………………………………………….

**Question(48**)What is the solution of the differential equation

…………………………………………………………………..

**Question(49**)

…………………………………………………………………..

**Question(50**) Find the general solution of the differential equation.

……………………………………………………………………..

**Question(51**)The rate of change of the mass in grams of a piece of radioactive substance At the end of t years is given by .If the initial mass was 100 grams, find the mass at any time t .