



To

The Principal

Dr. S. D. Devsey Arts College & Commerce
& Science College, Wada, Dist. Palghar

Date- 04 / 03 / 2021

Subject: Report of Science Day (Mathematics Department)

Respected Sir,

In the academic year 2020-21 Science Day program held in our college on Saturday 27-02-2021. Every year Science Day program run in our college with the help of departments Physics, Chemistry, Botany and Mathematics. In this year due to Covid-19 situation only few of students from each department had participated in poster presentation. One of poster content was Reimann Integral with property and applications other poster content was the name of Mathematician who had achieved prestigious Field's Medal award and last poster content was List of Formulae of Integration. All these posters had been made in group of two-three students. Nilambari Patil, Dikshit Patil, Sanket Mokashi, Vikrant Shinde, Harshada Patil, Mahesh Andher etc students had been made the posters with their views and ideas discussed with us.

Thanking you.

Your's Fathfully

(Mr. Arvind Shankarrao Salve)

PRINCIPAL

Shikshak Sanchalit Shikshan Sanstha
Dr. Shantilal Dhanji Devsey Arts College
& Commerce & Science College,
Wada, Dist. Palghar

HEAD
DEPARTMENT OF MATHEMATICS

D.S.P.D Arts And Commerce

And Science College Wada. 2020-21

INTEGRATION FORMULAS

$$1) \int dx = \text{Constant}$$

$$2) \int k dx = kx + C$$

$$3) \int x^n dx = \frac{x^{n+1}}{n+1} + C$$

$$4) \int e^x dx = e^x + C$$

$$5) \int \frac{1}{x} dx = \log x + C$$

$$6) \int \frac{1}{x^2} dx = -\log x + C$$

$$7) \int \frac{1}{\sqrt{x}} dx = 2\sqrt{x} + C$$

$$8) \int \sin x dx = -\cos x + C$$

$$9) \int \cos x dx = \sin x + C$$

$$10) \int \tan x dx = \log(\sec x) + C$$

$$11) \int \cot x dx = \log(\sin x) + C$$

$$12) \int \sec x dx = \log(\sec x + \tan x) + C$$

$$13) \int \csc x dx = \log(\csc x - \cot x) + C$$

$$14) \int \sec^2 x dx = \tan x + C$$

$$15) \int \csc^2 x dx = -\cot x + C$$

$$16) \int \sec x \tan x dx = \sec x + C$$

$$17) \int \csc x \cot x dx = -\csc x + C$$

$$18) \int \frac{dx}{\sqrt{1-x^2}} = \sin^{-1} x + C$$

$$19) \int \frac{-dx}{\sqrt{1-x^2}} = \cos^{-1} x + C$$

$$20) \int \frac{dx}{1+x^2} = \tan^{-1} x + C$$

$$21) \int \frac{dx}{\sqrt{1-x^2}} = \cot^{-1} x + C$$

$$22) \int \frac{dx}{\sqrt{x^2-1}} = \sec^{-1} x + C$$

$$23) \int \frac{dx}{\sqrt{x^2-1}} = \csc^{-1} x + C$$

$$24) \int \frac{1}{\sqrt{a^2+x^2}} dx = \log|x + \sqrt{a^2+x^2}| + C$$

$$25) \int \frac{1}{\sqrt{a^2-x^2}} dx = \log|x + \sqrt{a^2-x^2}| + C$$

$$26) \int x^n dx = \frac{x^{n+1}}{n+1} + C$$

$$27) \int \frac{dx}{x} = \ln|x| + C$$

$$28) \int e^x dx = \frac{e^x}{a} + C$$

$$29) \int a dx =$$

$$30) \int (u+v) dx =$$

$$31) \int a f(x) dx =$$

$$32) \int u^n dx =$$

$$33) \int \frac{du}{u} =$$

$$34) \int a^n du =$$

$$35) \int e^u du =$$

$$36) \int f(u) du =$$

$$37) \int \frac{dx}{\sqrt{a^2-x^2}} =$$

$$38) \int \frac{dx}{\sqrt{x^2-a^2}} =$$

$$39) \int \frac{dx}{\sqrt{a^2+x^2}} =$$

$$40) \int \frac{dx}{\sqrt{x^2-a^2}} =$$

$$41) \int \frac{dx}{\sqrt{a^2-x^2}} =$$

$$42) \int \frac{dx}{\sqrt{x^2-a^2}} =$$

$$43) \int \frac{dx}{\sqrt{a^2+x^2}} =$$

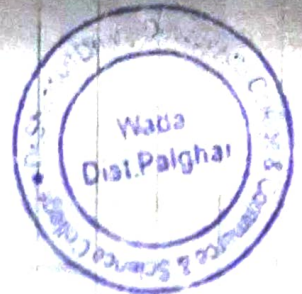
$$44) \int \frac{dx}{\sqrt{x^2-a^2}} =$$

$$45) \int \frac{dx}{\sqrt{a^2-x^2}} =$$

$$46) \int \frac{dx}{\sqrt{x^2-a^2}} =$$

$$47) \int \frac{dx}{\sqrt{a^2+x^2}} =$$

$$48) \int \frac{dx}{\sqrt{x^2-a^2}} =$$



NATIONAL SCIENCE DAY (28/02/2021)

Celebrated on Saturday, 27/02/2021

Sr. No.	Roll No.	Name of the Student	Class	Subject	Topic Name
1	2254	Manisha Shaohidhar Th	Ty Bsc	Botany	Bentham's hooker classification
2	2253	Anchana Vilas Bhushara	T.Y. BSc	Botany	Bentham & hooker merits
3	2456	Sujala Sandip Raut	T.Y. BSc	Botany	Hutchinson system merits
4	2451	Monali Rajendra Bhaware	T.Y. BSc	Botany	Hutchinson's system & classification in Botany
5	2452	Divya Balaram Bhene	T.Y. BSc	Botany	Hutchinson's Demerits
6	2455	Nitin Tanuja Patil	T.Y. B.Sc	Botany	Demerits
7	2437	Aditya Ravindra Churkunde	T.Y. BSc	Physics	Difference bet ⁿ Analog & Digital signal
8	2451	Saurabh Nareesh Mokashi	T.Y. BSc	Physics	Black Holes
9	2260	Sanket Santosh Mekashi	S.Y. BSc	Maths	Field Model list
10	2265	Vikrant Pankaj Shale	S.Y. BSc	Maths	Field model list
11	2264	Nilambari Vinayak Patil	S.Y. BSc	Maths	Riemann's integral
12	2262	Pirshit Sanjay Patil	S.Y. BSc	Maths	Riemann's integral
13	2503	harshada	T.Y. BSc	Maths	Integration formulae
14	2383	Randhir Kashinath Kande	T.Y. BSc	chemistry	Catalysed, Nobel prize
15	2370	Sunil Manoj Gupta	T.Y. BSc	Chemistry	Ammonia

16 2401

Vedika Subhash Patil

T.Y. BSc Chemistry

Catalysis

17 2408

Paaron Bagesh Sule

T.Y. BSc Chemistry

Catalysis

18 2406

Vidyaak Sanjay Gupta

T.Y. BSc Chemistry

Catalysis