



INDIAN SCHOOL DARSAIT DEPARTMENT OF MATHEMATICS



Subject :MATHEMATICS Topic : INTEGRATION (WK-7)

Date 21-10-2017

Resource Person: Premela Isac

Date of submission :31-10-2017

Name of the Student: _____

Class & Division:

Roll. Number:

Sl.No.	Questions	Marks
1	Write the anti – derivative of $\left(3\sqrt{x} + \frac{1}{\sqrt{x}}\right)$. (board 2014)	1
2	Evaluate: $\int (x - 3)\sqrt{x^2 + 3x - 18} dx$ (board 2014)	4
3	Evaluate: $\int \frac{x+2}{\sqrt{x^2+5x+6}} dx$ (board 2014)	4
4	Evaluate: $\int (3x - 2)\sqrt{x^2 + x + 1} dx$ (board 2014)	4
5	Evaluate: $\int \frac{5x-2}{1+2x+3x^2} dx$ (board 2013)	4
6	Evaluate: $\int \frac{x+2}{\sqrt{x^2+2x+3}} dx$ (board 2013)	4
7	Evaluate: $\int x^2 \log(1 + x) dx$ (board 2013)	4
8	Evaluate: $\int (1 - x)\sqrt{x} dx$ (board 2012)	1
9	Given $\int e^x(\tan x + 1) \sec x dx = e^x f(x) + c$. Find $f(x)$. (board 2012)	1
10	If $\int \left(\frac{x-1}{x^2}\right) e^x dx = f(x)e^x + c$, then write the value of $f(x)$. (board 2012)	1
11	Evaluate: $\int \sec x (\sec x + \tan x) dx$ (board 2011)	1
12	Evaluate: $\int \frac{1}{x^2+1} dx$ (board 2011)	1
13	Evaluate: $\int \frac{5x+3}{\sqrt{x^2+4x+1}} dx$ (board 2011)	4
14	Evaluate: $\int (a + b)^3 dx$ (board 2011)	1
15	Evaluate: $\int \frac{1}{\sqrt{1-x^2}} dx$ (board 2011)	1
16	Evaluate: $\int \frac{(1-x)^2}{x} dx$ (board 2011)	1
17	Evaluate: $\int \frac{6x+7}{\sqrt{(x-5)(x-4)}} dx$ (board 2011)	6

18	Find $\int \frac{(3s-2)c}{5-c^2\theta-4s} d$	(Delhi2016)	4
19	Evaluate $\int_0^{\pi} e^{2x} \cdot s \cdot \left(\frac{\pi}{4} + x\right) d$	(Delhi2016)	4
20	Find $\int \frac{\sqrt{x}}{\sqrt{u^3-x^3}} d$	(Delhi2016)	4
21	Evaluate $\int_{-1}^2 x^3 - x d$	(Delhi2016)	4
22	Evaluate $\int_0^{\frac{\pi}{2}} \frac{s^2x}{s+c} d$	(Central Region 2016)	4
23	Evaluate $\int_0^{\frac{3}{2}} x \cos \pi d$	(Central Region 2016)	4
24	Find $\int \frac{x^2}{x^4+x^2-2} d$	(Central Region 2016)	4
25	Find $\int (3x+1)\sqrt{4-3x-2x^2} d$	(Central Region 2016)	4
26	Find $\int \frac{2x+1}{(x^2+1)(x^2+4)} d$	(CBSC 2016)	4
27	Evaluate $\int_1^5 \{ x-1 + x-2 + x-3 \} d$	(CBSC 2016)	4
28	Evaluate $\int_0^{\pi} \frac{xs}{1+3c^2x} d$	(CBSC 2016)	4
29	Find $\int (3x+5)\sqrt{5+4x-2x^2} d$	(CBSC 2016)	4
30	Find $\int \frac{(2x-5)e^{2x}}{(2x-3)^3} d$	(North Region 2016)	4
31	Find $\int \frac{x^2+x+1}{(x^2+1)(x+2)} d$	(North Region 2016)	4
32	Evaluate $\int_{-2}^2 \frac{x^2}{1+5^x} d$	(North Region 2016)	4
33	Find $\int \frac{1-si}{(si(1+si))} d$	(South Region 2016)	4
34	Evaluate $\int_0^1 c_i^{-1}(1-x+x^2)d$	(South Region 2016)	4
35	Evaluate $\int_0^{\pi} \frac{x}{1+si} d$	(Foreign 2016)	4

Dear Children,

There is no substitute for hard work.
All the best. God Bless.