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 $\int e^x(\tan x+1)\sec x\, dx = e^x f(x)+c$. $F \quad f(x)$. (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 $\int (x)$. (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: $\int (a+b)^5\, dx$ (board 2011)	1
15	Evaluate: $\int \frac{1}{\sqrt{1-x^2}} dx$ (board 2011)	1
16	Evaluate: $\int \frac{(\ln x)^2}{x}\ dx$ (board 2011)	1
17	Evaluate: $\int \frac{6x+7}{\sqrt{(x-5)(x-4)}}\ dx$ (board 2011)	6

18	Find $\int \frac{(3s \quad -2)c}{5-c \quad ^2\theta-4s} \, d$	(Delhi2016)	4
19	Evaluate $\int_0^{\pi} e^{2x} . s \left(\frac{\pi}{4}+x\right) d$.	(Delhi2016)	4
20	Find $\int \frac{\sqrt{x}}{\sqrt{a^3-x^3}} \, d$.	(Delhi2016)	4
21	Evaluate $\int_{-1}^{2} \lvert x^3 - x \rvert \, d$.	(Delhi2016)	4
22	Evaluate $\int_0^{\frac{\pi}{2}} \frac{s \quad ^2x}{s \quad +c} d$.	(Central Region 2016)	4
23	Evaluate $\int_0^{\frac{3}{2}} \lvert x \cos \pi \rvert \, d$.	(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 $\int_1^5 \{\lvert x-1 \rvert + \lvert x-2 \rvert + \lvert x-3 \rvert\} \, d$.	(CBSC 2016)	4
28	Evaluate $\int_0^{\pi} \frac{x \, s}{1+3 \, c \quad ^2 x} d$.	(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 $\int \frac{1-s}{(s \quad (1+s \quad)} \, d$	(South Region 2016)	4
34	Evaluate $\int_0^1 c \quad ^{-1}(1-x+x^2) d$.	(South Region 2016)	4
35	Evaluate $\int_0^{\pi} \frac{x}{1+s} d$.	(Foreign 2016)	4

Dear Children,

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