

BCM SCHOOL BASANT AVENUE DUGRI ROAD LUDHIANA
ASSIGNMENT OF INTEGRALS
XIISC

1	$\int dx \sin 2x \cos^2 x$ is equal to (a) $\sin^2 x - \cos^2 x + C$ (b) -1 (c) $\tan x + \cot x + C$ (d) $\tan x - \cot x + C$
2	$\int \frac{\sin x + \cos x}{\sqrt{1 + \sin 2x}} dx, \frac{3\pi}{4} < x < \frac{7\pi}{4}$ is equal to (a) $\log \sin x + \cos x $ (b) x (c) $\log x $ (d) $-x$
3	$\int x^4 + 1 x^2 + 1 dx$ is equal to (a) $x^{33} + x + \tan^{-1} x + C$ (b) $x^{33} - x + \tan x + C$ (c) $x^{33} + x + 2\tan^{-1} x + C$ (d) $x^{33} - x + 2\tan^{-1} x + C$
4	Evaluate: $\int (2\tan x - 3\cot x)^2 dx$ (a) $-4\tan x - 9\cot x - 25x + C$ (b) $4\tan x - 9\cot x - 25x + C$ (c) $-4\tan x + 9\cot x + 25x + C$ (d) $4\tan x + 9\cot x + 25x + C$
5	Find $\int \sin^6 x / \cos^8 x dx$
6	Evaluate $\int \tan^3 x \tan^2 x \tan x dx$
7	Find $\int \frac{x-5}{(x-3)^3} e^x dx$.
8	Find $\int \frac{2 \cos x}{(1-\sin x)(2-\cos^2 x)} dx$
9	Find $\int \frac{\sqrt{x}}{\sqrt{x^3 - x^3}} dx$.
10	Question no. Find $\int \frac{dx}{\sin x + \sin 2x}$

