Virtual Student

MTH301
Current Mid term paper
Subjective Question

Question no.21
Suppose the surface f (x,y,z) has continuous partial derivatives at the point (a,b,c). Write down the equation of tangent plane at this point

Question no.22
Evaluate the following double integral
$\iint (12xy^2 - 8x^3)\, dy\, dx$

Question no.23
Evaluate the following double integral
$\iint (3 + 2x - 3y^2)\, dx\, dy$

Question no.24
Let $f(x, y, z) = xy^2 e^z$
Find the gradient of f.

Question no.25
Find, Equation of Tangent plane to the surface $f(x, y, z) = x^2 + y^2 + z - 9$ at the point (1, 2, 3)

Question no.26
Use double integral in rectangular co-ordinates to compute area of the region bounded by the curves $y = x^2$ and $y = \sqrt{x}$

