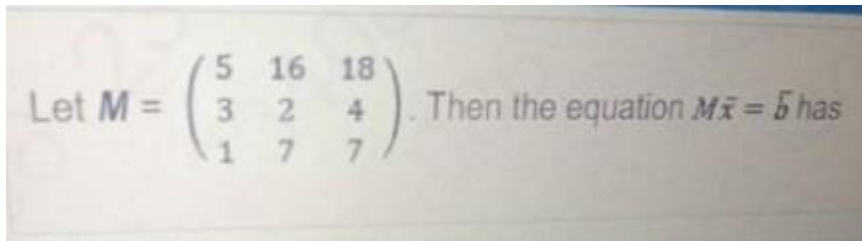


VITEEE 2021 Memory Based Questions and Answers for 29 May Slot 1

Ques. Area bounded by curve $y=x^2$ and $y=5x$

Ans. $125/6$ sq units



Ques.

Ques. If $|z - i| \leq z_1 = 4 + i4$, then the maximum value of $|iz + z_1|$ is

Ques. $a + 2b + 3c = 0$

$(a \times b) + (b \times c^{-1}) + (c \times a^{-1}) = ?$

Ques. $a((b \times c) \times (a+b+c))$ is equal to

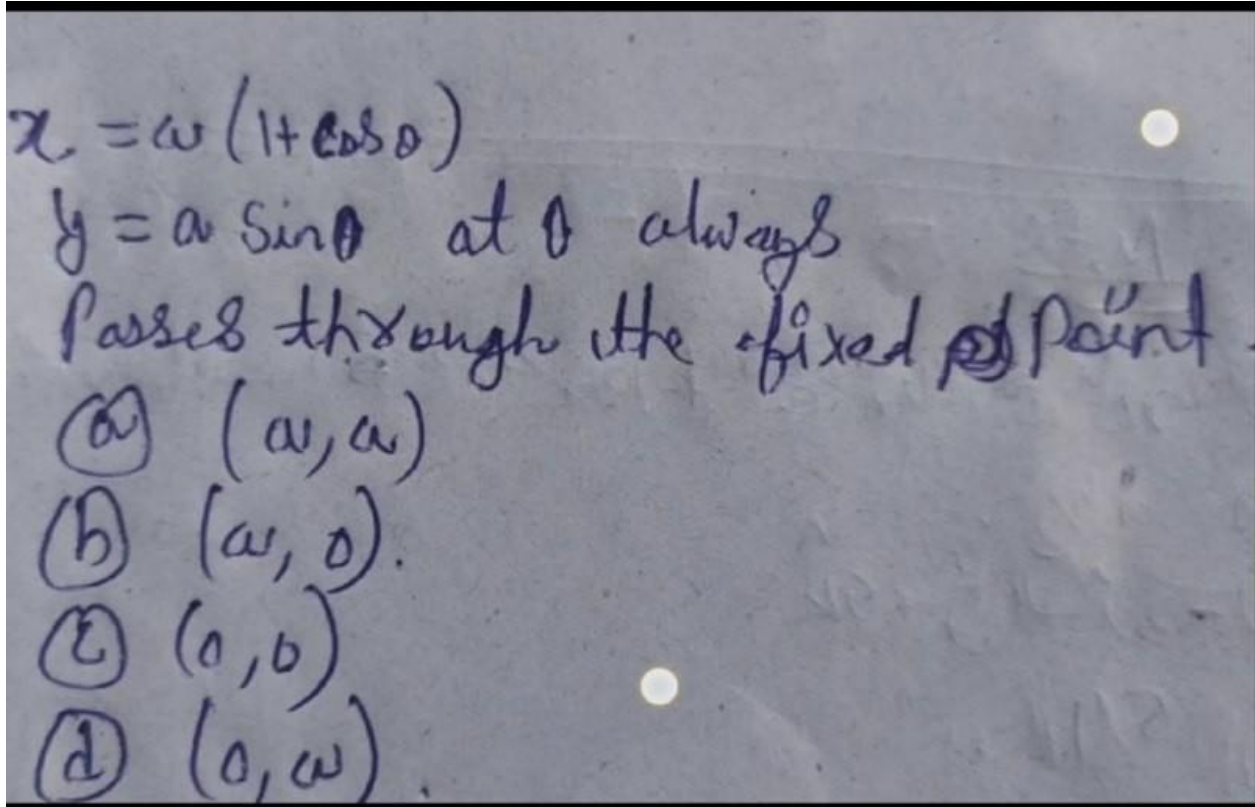
Ques. The angle between the line $x-5/10 = y-1/2 = z=2/11$ and the plane $2x + 3y - 6z = 7$ is equal to

Ques. Direction cosine of a line is $(1/z, 1/x, n)$ then the value of n is

Ques. $\int x^4 e^x dx =$

Ans. $e^x(x^4 - 4x^3 + 12x^2 - 24x + 24) + C$

Ques.



Ques. Three points $(a, 2, 3)$, $(0, b, 5)$, and $(6, 7, c)$ are collinear. The a, b, c should strictly.

Ques. If $a + 2b + 3c = 0$, then $(a \times b) = (b \times c) + (c \times d)$ is equal to

Ques. $y+z = 1$; $x+y+z = 1$; $x+2y+2z = a$ is consistent. What is the value of a ?

Ques. The integrating factor of the differential equation $dy/dx + P(x)y = Q(x)$ is x then $P(x) =$

Ques. Consider a random variable x with $E(x) = 1$ and $E(x^2) = 1$, then

Ques. The conic $3x^2 + 6xy + 3y^2 - 4x + 5y = 12$ represents

Ques. The value of $\tan [\sin^{-1}(5/13) + \cot^{-1}(5/4)]$ is equal to

Ques. Let $z = \sqrt{3}/2 - i/2$ Then the smallest positive integer n such that $(z^{95} + i^{67}) = z^n$ is

Ques. The function $f(x) = \tan^{-1}(\sin x - \cos x)$ is an increasing function in

Ques. The function $f(x) = |x| + |x|/x$ is

Ans. discontinuous at the origin because $|x|/x$ discontinuous there