Question 1

Complete

Mark 5.00 out of 5.00

$F = \sin x + \cos y + xy^2$ and $x = \sin t, y = \cos t$. Find dF/dt at $t = \pi$

Select one:

- a. -2
- b. 2
- c. 1
- d. 0

The correct answer is: -2

Question 2

Complete

Mark 4.00 out of 4.00

Find $\partial z/\partial y$ if $z = 3x^4y - 7xy^3$

Select one:

a. $12x^3 - 21y^2$

b. $12x^3y - 7y^3$

c. $3x^4 - 21xy^2$

d. $3y - 7y^3$

The correct answer is:
$3x^4 - 21xy^2$

Question 3

Complete

Mark 6.00 out of 6.00

The Jacobian $\partial(u,v)/(\partial(x,y)$ for the functions $u = e^x \sin y$, $v = x + \log(\sin y)$ is

Select one:

a. 0

b. $\sin x \sin y - xy \cos x \cos y$

c. e^x/x

d. 1

The correct answer is: 0

Question 4

Complete

Mark 5.00 out of 5.00

For the function $F = x^3 + 3xy^2 - 3x^2 - 3y^2 + 4$ *, the point* $(1, -1)$ *is a*

Select one:

- a. saddle point
- b. minimum point
- c. none of the given options
- d. maximum point

The correct answer is: saddle point

Question 5

Complete

Mark 5.00 out of 5.00

Mark Your attendance.

Select one:

- a. Present
- b. Absent

The correct answers are: Present, Absent