SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

PASSAGE

Suppose $\boxed{\lim_{x\to 0}\frac{x(1-a\cos x)+b\sin x}{x^3}=\frac{1}{3}}$, then

Read the following Satement and Choose the correct option. (1 Marks)

The Value of constant " b " is

OPTIONS

0

infinity

-0.5

1

None of mentioned

SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

PASSAGE

Suppose $\boxed{\lim_{x\to 0}\frac{x(1-a\cos x)+b\sin x}{x^3}=\frac{1}{3}}$, then

Read the following Satement and Choose the correct option. (1 Marks)

The Value of constant " a " is

OPTIONS

1

0

0.75

0.5

None of mentioned

SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...
CHANDIGARH UNIVERSITY

**PASSAGE**

Suppose $\boxed{\lim_{x\to 0}\frac{x(1-a\cos x)+b\sin x}{x^3}=\frac{1}{3}}$, then

**Read the following Saterment and Choose the correct option. (1 Marks)**

Direct substitution gives the limit of numerator, as x tends to zero

**OPTIONS**

1 - a + b

1 - a - b

0

1 - b

None of mentioned

C

SHL

Apps Google Search Imported From IE YouTube (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

PASSAGE

Suppose $\boxed{\lim_{x\to 0}\frac{x(1-a\cos x)+b\sin x}{x^3}=\frac{1}{3}}$, then

B

**Read the following Satement and Choose the correct option. (1 Marks)**

Direct substitution gives the limit of denominator, as x tends to zero

**OPTIONS**

- Infinity
- 0
- 1
- 2
- None of mentioned

SKIP

Courses | RSML CUSTOMER CARE | SHL
amicatcampus.aspiringminds.com
Apps | Google Search | Imported From IE | YouTube | (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

PASSAGE

Suppose $\boxed{\lim_{x \to 0} \frac{x(1 - a\cos x) + b\sin x}{x^3} = \frac{1}{3}}$, then

Read the following Satement and Choose the correct option. (1 Marks)

Which is true?

OPTIONS

Both are positive integers

Both are negative integers

One positive and One Negative integer

Both are imaginary number

None of mentioned

e

SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

**PASSAGE**

Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity, If ∗ denotes the multiplication operation, the structure (G,∗)

A

**Read the following Satement and Choose the correct option. (1 Mark)**

Is it a Group under the multiplication operation?

**OPTIONS**

Yes

No

Can Not be a group

None

SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...
CHANDIGARH UNIVERSITY

**PASSAGE**

Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity, If • denotes the multiplication operation, the structure (G,•)

**Read the following Satement and Choose the correct option.**

Inverse of ω is

**OPTIONS**

1

ω

ω^2

None

SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

**PASSAGE**

Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity. If * denotes the multiplication operation, the structure (G,*)

**Read the following Satement and Choose the correct option: (1 Marks)**

Inverse of ω^2 is

**OPTIONS**

ω

1

ω^2

None

SHL

amcatcampus.aspiringminds.com

Apps | Google Search | Imported From IE | YouTube | (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

**PASSAGE**

Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity, If • denotes the multiplication operation, the structure (G,•)

**Read the following Satement and Choose the correct option. (1 Marks)**

Is it a Cyclic Group under the multiplication operation?

**OPTIONS**

No

Yes

Can not be a Cyclic group

amcatcampus.aspiringminds.com

Apps | Google Search | Imported From IE | YouTube | (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

**PASSAGE**

Consider the Group G = { 1,ω,ω^2} Where ω is the cube root of unity, If • denotes the multiplication operation, the structure (G,•)

**Read the following Satement and Choose the correct option. [1]**

What is its Identity Element ?

**OPTIONS**

1

ω

ω^2

None

SHL CUSTOMER CARE
SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

**PASSAGE**

Consider (Q,*) is set of rational numbers excluding 1 and * is defined as a*b=a+b-ab, for all a,b belongs Q

A

**Read the following Satement and Choose the correct option. (1 Marks)**

Identity element of Q is

**OPTIONS**

0

1

2

3

CHANDIGARH UNIVERSITY

PASSAGE

Consider (Q,*) is set of rational numbers excluding 1 and * is defined as a*b=a+b-ab. for all a,b belongs Q

B

Read the following Satement and Choose the correct option. (1 Marks)

Inverse element of 3 is

OPTIONS

1

-3/2

0

-3/2

SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

**PASSAGE**

Consider (Q,*) is set of rational numbers excluding 1 and * is defined as a*b=a+b-ab, for all a,b belongs Q

A

**Read the following Satement and Choose the correct option. (1 Marks)**

Inverse element of 4 is

**OPTIONS**

4/3

4/5

5/4

3/4

SHL
amcatcampus.aspiringminds.com
Apps Google Search Imported From IE YouTube (922) C++ Tutorials...
CHANDIGARH UNIVERSITY

**PASSAGE**

Consider (Q,*) is set of rational numbers excluding 1 and * is defined as a*b=a+b-ab, for all a,b belongs Q

B

**Read the following Satement and Choose the correct option. (1 Mar**

Inverse element of 2 is

**OPTIONS**

1

2

3

4

amcatcampus.aspiringminds.com

Apps Google Search Imported From IE YouTube (922) C++ Tutorials...

CHANDIGARH UNIVERSITY

**PASSAGE**

Consider (Q,*) is set of rational numbers excluding 1 and * is defined as a*b=a+b-ab, for all a,b belongs Q

**Read the following Satement and Choose the correct option. (1 Mark**

Q is

**OPTIONS**

Semigroup

Monoid

Group

All of the above

CHANDIGARH UNIVERSITY

**PASSAGE**

*Consider (G,*) where * is defined as a*b=ab/4, and G is the set of all non-zero real numbers*

**Read the following Satement and Choose the correct option. (1**

Identity element of G is

**OPTIONS**

1

2

3

4

CHANDIGARH UNIVERSITY

**PASSAGE**

*Consider (G,*) where * is defined as a*b=ab/4, and G is the set of all non-zero real numbers*

**Read the following Satement and Choose the correct option**

G is abelian or not ?

**OPTIONS**

Yes

No

cannot say

**PASSAGE**

Consider (G,*) where * is defined as a*b=ab/4, and G is the set of all non-zero real numbers

**Read the following Satement and Choose the correct option. (1 Marks)**

Inverse of the 2

**OPTIONS**

16

8

4

2

**PASSAGE**

*Consider (G,*) where * is defined as a*b=ab/4, and G is the set of all non-zero real numbers*

**Read the following Satement and Choose the correct option. (1 Marks)**

Inverse of the a

**OPTIONS**

- a
- 16
- 16/a
- None

**PASSAGE**

*Consider (G,*) where * is defined as a*b=ab/4, and G is the set of all non-zero real numbers*

**Read the following Satement and Choose the correct option. (1 Marks)**

G is

**OPTIONS**

- Semigroup
- Monoid
- Group
- All of the above

If $u = \operatorname{cosec}^{-1}\left(\dfrac{x^{\frac{1}{2}} + y^{\frac{1}{2}}}{x^{\frac{1}{3}} + y^{\frac{1}{3}}}\right)^{1/2}$

Read the following Statement and Choose the correct option. (1 Marks)

cosec u is a homogeneous function of degree

1) $\frac{1}{11}$

2) $-\frac{1}{12}$

3) $-\frac{1}{11}$

4) $\frac{1}{12}$

OPTIONS

1)

If $u = \operatorname{cosec}^{-1}\left(\dfrac{x^{\frac{1}{2}} + y^{\frac{1}{2}}}{x^{\frac{1}{3}} + y^{\frac{1}{3}}}\right)^{1/2}$

Read the following Statement and Choose the correct option. (1 Marks)

$x\dfrac{\partial u}{\partial x} + y\dfrac{\partial u}{\partial y} =$

1) $-\dfrac{1}{12}\tan u$

2) $\dfrac{1}{12}\tan u$

3) $-\dfrac{1}{12}\sin u$

4) $\dfrac{1}{10}\tan u$

If $u = \operatorname{cosec}^{-1}\left(\dfrac{x^{\frac{1}{2}} + y^{\frac{1}{2}}}{x^{\frac{1}{3}} + y^{\frac{1}{3}}}\right)^{1/2}$

Read the following Statement and Choose the correct option. (1 Marks)

$x^2\dfrac{\partial^2 u}{\partial x^2} + 2xy\dfrac{\partial^2 u}{\partial x \partial y} + y^2\dfrac{\partial^2 u}{\partial y^2} =$

1) $\dfrac{13 + \sec^2 u}{144}$

2) $\dfrac{13 + \sin^2 u}{144}$

3) $\dfrac{13 + \tan^2 u}{144}$

4) None of the mentioned.

OPTIONS

SKIP

If $u = \operatorname{cosec}^{-1}\left(\dfrac{x^{\frac{1}{2}} + y^{\frac{1}{2}}}{x^{\frac{1}{3}} + y^{\frac{1}{3}}}\right)^{1/2}$

Read the following Statement and Choose the correct option. (1 Marks)

$x\dfrac{\partial^2 u}{\partial x^2} + \dfrac{\partial u}{\partial x} + y\dfrac{\partial^2 u}{\partial y^2} =$

1) $\dfrac{1}{12}\cos^2 u \dfrac{\partial u}{\partial x}$

2) $-\dfrac{1}{12}\sec^2 u \dfrac{\partial u}{\partial x}$

3) $\dfrac{1}{12}\sec^2 u \dfrac{\partial u}{\partial x}$

4) $-\dfrac{1}{12}\cos^2 u \dfrac{\partial u}{\partial x}$

SKIP

If $u = \operatorname{cosec}^{-1}\left(\dfrac{x^{\frac{1}{2}} + y^{\frac{1}{2}}}{x^{\frac{1}{3}} + y^{\frac{1}{3}}}\right)^{1/2}$

Read the following Statement and Choose the correct option. (1 Marks)

$x\dfrac{\partial^2 u}{\partial y \partial x} + \dfrac{\partial u}{\partial y} + y\dfrac{\partial^2 u}{\partial y^2} =$

1) $-\dfrac{1}{12}\sec^2 u \dfrac{\partial u}{\partial y}$

2) $-\dfrac{1}{12}\sec^2 u \dfrac{\partial u}{\partial x}$

3) $\dfrac{1}{12}\cos^2 u \dfrac{\partial u}{\partial y}$

4) $-\dfrac{1}{19}\cos^2 u \dfrac{\partial u}{\partial x}$

SKIP

amcatcampus.aspiringminds.com
Apps Gmail YouTube Maps
CHANDIGARH UNIVERSITY
60 Timer

PASSAGE

STATEMENT : If $u = \tan^{-1} \frac{x^3+y^3}{x+y}$

Read the following Statement and Choose the correct option. (1 Marks)

(3) $x \frac{\partial^2 u}{\partial x^2} + \frac{\partial u}{\partial x} + y \frac{\partial^2 u}{\partial x \partial y} =$

OPTIONS

1) $\sin 2u \frac{\partial u}{\partial y}$

2) $2\cos 2u \frac{\partial u}{\partial y}$

3) $2\cos 2u \cdot \frac{\partial u}{\partial x}$

4) $2 \sin 2u \frac{\partial u}{\partial x}$

Skipped
SKIP
SUBMIT ANSWER

amcatcampus.aspiringminds.com
Apps Gmail YouTube Maps
CHANDIGARH UNIVERSITY

59
Timer

PASSAGE

STATEMENT : If $u = \tan^{-1} \frac{x^3+y^3}{x+y}$

Read the following Statement and Choose the correct option. (1 Marks)

$$x \frac{\partial^2 u}{\partial y \partial x} + y \frac{\partial^2 u}{\partial y^2} + \frac{\partial u}{\partial y} =$$

1) $2 \sin 2u \frac{\partial u}{\partial y}$

2) $2 \cos 2u \cdot \frac{\partial u}{\partial y}$

3) $-2 \cos 2u \frac{\partial u}{\partial y}$

4) $2 \sin 2u \frac{\partial u}{\partial x}$

OPTIONS

SHL
amcatcampus.aspiringminds.com
Apps Gmail YouTube Maps

CHANDIGARH UNIVERSITY

59 Times

PASSAGE

STATEMENT : If $u = \tan^{-1} \frac{x^3+y^3}{x+y}$

Read the following Statement and Choose the correct option. (1 Marks)

(2) $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} = ?$

1) $\tan 2u$

2) $-\tan 2u$

3) $\sin 2u$

4) $\cos 2u$

OPTIONS

PASSAGE

STATEMENT : If $u = \tan^{-1} \frac{x^3+y^3}{x+y}$

Read the following Statement and Choose the correct option. (1 Marks)

(i) $\tan u$ is homogeneous function of degree

1) 1

2) 2

3) -1

4) -2

OPTIONS

1)

2)

SKIP

SUBMIT

here to search

66%

amcatcampus.aspiringminds.com
Apps Gmail YouTube Maps

CHANDIGARH UNIVERSITY

59
Time

PASSAGE

STATEMENT : If $u = \tan^{-1} \frac{x^3+y^3}{x+y}$

Read the following Statement and Choose the correct option. (1 Marks)

$$x^2 \frac{\partial^2 u}{\partial x^2} + 2xy \frac{\partial^2 u}{\partial x \partial y} + y^2 \frac{\partial^2 u}{\partial y^2} =$$

1) $\sin 4u + \sin 2u$

2) $2\cos 3u \sin u$

3) $2\sin 3u \cos u$

4) $\sin 2u - \sin u$

OPTIONS

1)

SKIP

SUBMIT

amcatcampus.aspiringminds.com
Apps Gmail YouTube Maps

CHANDIGARH UNIVERSITY

PASSAGE

For the integral $\iint_R xy(x+y)\,dy\,dx$, where R is the region bounded by $y=x^2$ and $y=x$

Read the following Statement and Choose the correct option.

find the limits of x if integral is taken as $\iint xy(x+y)\,dx\,dy$

a) $0 \le x \le 1$

b) $y \le x \le \sqrt{y}$

c) $0 \le x \le \sqrt{y}$

d) None of these

OPTIONS

a)

b)

c)

CHANDIGARH UNIVERSITY

PASSAGE

For the integral $\iint_R xy(x+y)\,dy\,dx$, where R is the region bounded by $y=x^2$ and $y=x$

Read the following Statement and Choose the correct option.

Find the limits of 'y' if integral is taken as $\iint xy(x+y)\,dy\,dx$

a) $x \le y \le \sqrt{x}$

b) $0 \le y \le 1$

c) $\sqrt{x} \le y \le x$

d) None of these.

OPTIONS

a)

b)

c)

Apps Gmail YouTube Maps



PASSAGE

For the integral $\iint_R xy(x+y)\,dy\,dx$, where R is the region bounded by $y=x^2$ and $y=x$

Read the following Statement and Choose the correct option.

Find the limits of y if integral is taken as $\iint xy(x+y)\,dx\,dy$

a) $0 \le y \le 1$

b) $0 \le y \le 2$

c) $x \le y \le \sqrt{x}$

d) None of these

OPTIONS

a)

b)

← → C amcatcampus.aspiringminds.com
Apps Gmail YouTube Maps

CHANDIGARH UNIVERSITY

PASSAGE

For the integral $\iint_R xy(x+y)\,dy\,dx$, where R is the region bounded by $y=x^2$ and $y=x$

Read the following Statement and Choose the correct option.

Find the limits of 'x' if integral is taken as $\iint xy(x+y)\,dy\,dx$

a) $0 \le x \le 1$

b) $y \le x \le \sqrt{y}$

c) $0 \le x \le 2$

d) None of there

OPTIONS

a)

b)

c)

Apps Gmail YouTube Maps



PASSAGE

For the integral $\iint_R xy(x+y)\,dy\,dx$, where R is the region bounded by $y=x^2$ and $y=x$

Read the following Statement and Choose the correct option.

The value of integral is

a) $\frac{3}{56}$

b) $\frac{2}{21}$

c) $\frac{1}{8}$

d) None of these

OPTIONS

a)

b)

c)

PASSAGE

For the integral $\iint_R y\,dx\,dy$, where R is the region bounded by the parabolas $y^2=4x$ & $x^2=4y$

Read the following Statement and Choose the correct option.

Find the limits of x if integral is taken as $\iint y\,dy\,dx$

a) $0 \le x \le 4$

b) $\frac{y^2}{4} \le x \le 2\sqrt{y}$

c) $2\sqrt{y} \le x \le \frac{y^2}{4}$

d) $0 \le x \le 2\sqrt{y}$

OPTIONS

a)

b)

PASSAGE

For the integral $\iint_R y\,dx\,dy$, where R is the region bounded by the parabolas $y^2=4x$ & $x^2=4y$

Read the following Statement and Choose the correct option.

Find the limits of 'y' if integral is taken as $\iint y\,dx\,dy$

a) $\frac{x^2}{4} \le y \le 2\sqrt{x}$

b) $0 \le y \le 4$

c) $0 \le y \le 2\sqrt{x}$

d) None of these.

OPTIONS

a)

PASSAGE

For the integral $\iint_R y\,dx\,dy$, where R is the region bounded by the parabolas $y^2=4x$ & $x^2=4y$

Read the following Statement and Choose the correct option.

Find the limits of 'x' if integral is taken as $\iint y\,dx\,dy$

a) $\frac{y^2}{4} \le x \le 2\sqrt{y}$

b) $0 \le x \le 4$

c) $0 \le x \le 2\sqrt{y}$

d) None of there

OPTIONS

a)

b)

SKIP

PASSAGE

For the integral $\iint_R y\,dx\,dy$, where R is the region bounded by the parabolas $y^2=4x$ & $x^2=4y$

Read the following Statement and Choose the correct optio

The value of integral is

a) $\frac{45}{5}$

b) $\frac{24}{3}$

c) 0

d) None of these

OPTIONS

a)

b)

For the integral $\iint_R y\,dx\,dy$, where R is the region bounded by the parabolas $y^2=4x$ & $x^2=4y$

Read the following Statement and Choose the correct option.

Find the limits of y if integral is taken as $\iint y\,dy\,dx$

a) $\frac{x^2}{4} \le y \le 2x$

b) $0 \le y \le 4$

c) $0 \le y \le 2x$

d) None of these

OPTIONS

a)

SKIP

Apps YouTube Gmail Maps VEED - Online Vide... Reading list



**PASSAGE**

*If p(x) and q(x) some functions of x such that*

**Read the following Satement and Choose the correct option. (1 Marks)**

p(x) = 0 and q(x) = infinity as x tends to a point " a " and let L(x) = p(x). q(x), then limt of L(x) as x tends to "a" is of the form

**OPTIONS**

(0/0)

1^ (infinity)

(0. infinity)

(infinity/ infinity)

SKIP

SUBMIT ANSWER

File Explorer

pe here to search

45%

ENG

Apps YouTube Gmail Maps VEED - Online Vide...

CHANDIGARH UNIVERSITY

**PASSAGE**

*If p(x) and q(x) some functions of x such that*

**Read the following Satement and Choose the correct option. (1 Marks)**

p(x) = 0 and q(x) = 0 as x tends to a point " a " and let L(x) = [p(x)]^q(x), then limt of L(x) as x tends to "a" is of the form

**OPTIONS**

(0) ^ (0)

(0/0)

(0. infinity)

(infinity/ infinity)

Apps YouTube Gmail Maps VEED - Online Vide...



**PASSAGE**

*If p(x) and q(x) some functions of x such that*

**Read the following Satement and Choose the correct option. (1 Marks)**

p(x) = infinty and q(x) = infinity as x tends to a point " a " and let L(x) = p(x) / q(x), then limt of L(x) as x tends to "a" is of the form

**OPTIONS**

(0) ^ (0)

(0. infinity)

(0/0)

(infinity/ infinity)

SKIP

SUBMIT

pe here to search

45%

Apps YouTube Gmail Maps VEED - Online Vide...
Reading list

CHANDIGARH UNIVERSITY

56
Time

**PASSAGE**

*If p(x) and q(x) some functions of x such that*

**Read the following Satement and Choose the correct option. (1 Marks)**

p(x) = 1 and q(x) = infinity as x tends to a point " a " and let L(x) = [p(x) ] ^ q(x), then limt of L(x) as x tends to "a" is of the form

**OPTIONS**

(0) ^ (0)

(infinity/ infinity)

(0/0)

1^ (infinity)

SKIP

SUBMIT ANS

Type here to search
45%

CHANDIGARH UNIVERSITY

56

PASSAGE

If p(x) and q(x) some functions of x such that

**Read the following Satement and Choose the correct option. (1 Marks)**

p(x) = 0 and q(x) = 0 as x tends to a point " a " and let L(x) = p(x) / q(x), then limt of L(x) as x tends to "a" is of the form

**OPTIONS**

(infinity/ infinity)

(0/0)

(0) ^ (0)

(0 . infinity)

SKIP

SUBMIT ANSW

Type here to search

45%

Apps YouTube Gmail Maps VEED - Online Vide...

CHANDIGARH UNIVERSITY

57

PASSAGE

Considr Z15, the group of integers under addition modulo 15. let H1 = {0,5,10}, H2 = {0,4,8,12}.

**Read the following Satement and Choose the correct option. (1 Marks)**

Is H2 subgroup of Z15

**OPTIONS**

- No
- yes
- Never

SKIP

CHANDIGARH UNIVERSITY

**PASSAGE**

Considr Z15, the group of integers under addition modulo 15. let H1 = {0,5,10}, H2 = {0,4,8,12}.

**Read the following Satement and Choose the correct option. (1 Marks)**

Is Z15 is a Group with addition Modulo operation.

**OPTIONS**

Yes

No

Not Possible

Type here to search

45%

Apps YouTube Gmail Maps VEED - Online Vide...



PASSAGE

Considr Z15, the group of integers under addition modulo 15, let H1 = {0,5,10}, H2 = {0,4,8,12}.

**Read the following Satement and Choose the correct option. (1 Marks)**

Is H1∩H2 Subgroup of Z15

**OPTIONS**

- Yes
- No
- Not Possible

SKIP

46%

amcatglobalaspiringminds.com
Apps YouTube Gmail Maps VEED - Online Vide...

CHANDIGARH UNIVERSITY

**PASSAGE**

*Considr Z15, the group of integers under addition modulo 15. let H1 = {0,5,10}, H2 = {0,4,8,12}.*

**Read the following Satement and Choose the correct option. (1 Marks)**

Is H1 subgroup of Z15

**OPTIONS**

- Never
- Yes
- Not possible

SKIP

**PASSAGE**

Consider Z15, the group of integers under addition modulo 15, let H1 = {0,5,10}, H2 = {0,4,8,12}.

**Read the following Satement and Choose the correct option. (1 Marks)**

Is H1 is a Cyclic Subgroup with addition Modulo 15 operation.

**OPTIONS**

- Yes
- No
- Not Possible

SKIP SUBMIT

amcatcampus.aspiringminds.com
Apps Gmail YouTube Maps
CHANDIGARH UNIVERSITY

PASSAGE

*Find the first six terms of the expansion of the function $e^x \log($ Taylor's series in the neighbourhood of the point (0, 0).*

Read the following Statement and Choose the correct option. (1 Marks)

Value of $f_{yyy}$ at x=0 and y=0 is

a) 1

b) -1

c) 2

d) -2

OPTIONS

a)

b)

c)

d)

CHANDIGARH UNIVERSITY

SAGE

*Find the first six terms of the expansion of the function $e^x \log($*
*or's series in the neighbourhood of the point (0, 0).*

Read the following Statement and Choose the correct option. (1 Mark

Value of $f_y$ at $x=0$ and $y=0$ ?

a) 1

b) 0

c) 2

d) 3

OPTIONS

a)

b)

c)

PASSAGE

*Find the first six terms of the expansion of the function $e^x \log($ Taylor's series in the neighbourhood of the point (0, 0).*

Read the following Statement and Choose the correct option. (1 Marks)

Value of $f_{xy}$ at x=0 and y=0 ?

a) 1

b) 0

c) 2

d) 3

OPTIONS

a)

b)

c)

d)

SKIP

*six terms of the expansion of the function $e^x \log($*
*ourhood of the point* (0, 0).

56

Timer

Read the following Statement and Choose the correct option. (1 Marks)

In this what is value of $f_{xx}$ at x=0 and y=0?

a) 1

b) 2

c) -1

d) 0

OPTIONS

a)

b)

c)

he first six terms of the expansion of the function $e^x \log($
neighbourhood of the point (0, 0).

Read the following Statement and Choose the correct option. (1 Marks)

Value of $f_{xxy}$ at x=0 and y=0 is

a) 1

b) -1

c) 2

d) -2

OPTIONS

a)

b)

c)

d)

PASSAGE

Evaluate $\lim_{x \to 0} \frac{\log\left(1 + kx^2\right)}{1 - \cos x}$.

Read the following Satement and Choose the correct option. (1 Marks)

To evaluate the indeterminate form, functions should be

OPTIONS

- Continuous
- Derivable
- Both continuos & derivable
- None of mentioned

CHANDIGARH UNIVERSITY

PASSAGE

Evaluate $\lim_{x \to 0} \frac{\log(1+kx^2)}{1-\cos x}$.

Read the following Satement and Choose the correct option. (1 Marks)

Direct substitution gives the limit of fucntion

OPTIONS

(infinity/ infinity) indeterminate form

(0/0) indeterminate form

(0/infinity) indeterminate form

(0 . infinity) indeterminate form

CHANDIGARH UNIVERSITY

ASSAGE

Evaluate $\lim_{x \to 0} \frac{\log\left(1 + kx^2\right)}{1 - \cos x}$.

Read the following Satement and Choose the correct option. (1 Marks)

Limit of the fucntion

OPTIONS

- doesnot exist
- can not be computed
- exist finitly
- None of mentioned

SKIP

CHANDIGARH UNIVERSITY

PASSAGE

Evaluate $\lim_{x \to 0} \frac{\log\left(1 + kx^2\right)}{1 - \cos x}$.

Read the following Satement and Choose the correct option. (1 Marks)

Limit of the fucntion is equal to

OPTIONS

k

2k + 1

2k

2

PASSAGE

$$\text{Evaluate } \lim_{x \to 0} \frac{\log\left(1 + kx^2\right)}{1 - \cos x}.$$

Read the following Satement and Choose the correct option. (1 Marks)

Limit of the fucntion

OPTIONS

- depends on k
- does not depend on k
- can not be computed
- None of mentioned

PASSAGE

If $u = \log(x^3 + y^3 + z^3 - 3xyz)$,

Read the following Statement and Choose the correct option. (1 Marks)

In the above question what is value of $\frac{\partial u}{\partial x} + \frac{\partial u}{\partial y} + \frac{\partial u}{\partial z}$

a) 0

b) $\frac{3}{x+y+z}$

c) $\frac{3x^2 - 3yz}{x^3 + y^3 + z^3 - 3xyz}$

d) 3

OPTIONS

a)

b)

SKIP

SUBMIT

Type here to search

70%

PASSAGE

If $u = \log(x^3 + y^3 + z^3 - 3xyz)$,

Read the following Statement and Choose the correct option. (1 Marks)

$$\left(\frac{\partial}{\partial x}+\frac{\partial}{\partial y}+\frac{\partial}{\partial z}\right)^2 u =$$

a) $-9/(x+y+z)^2$

b) $3/x+y+z$

C) $9/(x+y+z)^2$

D) Not Mentioned

OPTIONS

a)

b)

c)

d)

Apps Gmail YouTube Maps



PASSAGE

If $u = \log(x^3 + y^3 + z^3 - 3xyz)$,

Read the following Statement and Choose the correct option. (1 Marks)

In the above question while proving the question what is value of $\frac{\partial u}{\partial x}$

a) $\frac{3x^2 - 3yz}{x^3 + y^3 + z^3 - 3xyz}$

b) $\frac{3y^2 - 3zx}{x^3 + y^3 + z^3 - 3xyz}$

c) $\frac{3z^2 - 3xy}{x^3 + y^3 + z^3 - 3xyz}$

d) None

OPTIONS

a)

b)

c)

SKIP

Apps Gmail YouTube Maps



PASSAGE

If $u = \log(x^3 + y^3 + z^3 - 3xyz)$,

Read the following Statement and Choose the correct option. (1 Marks)

In the above question while proving the question what is value of $\frac{\partial u}{\partial y}$

a) $\frac{3x^2 - 3yz}{x^3 + y^3 + z^3 - 3xyz}$

b) $\frac{3y^2 - 3zx}{x^3 + y^3 + z^3 - 3xyz}$

c) $\frac{3z^2 - 3xy}{x^3 + y^3 + z^3 - 3xyz}$

d) None

OPTIONS

a)

b)

c)

SKIP

Type here to search

CHANDIGARH UNIVERSITY

55

PASSAGE

If $u = \log(x^3 + y^3 + z^3 - 3xyz)$,

Read the following Statement and Choose the correct option. (1 Marks)

In the above question while proving the question what is value of $\frac{\partial u}{\partial z}$

a) $\frac{3z^2 - 3yz}{x^3 + y^3 + z^3 - 3xyz}$

b) $\frac{3y^2 - 3zx}{x^3 + y^3 + z^3 - 3xyz}$

c) $\frac{3z^2 - 3xy}{x^3 + y^3 + z^3 - 3xyz}$

d) None

OPTIONS

a)

b)

SKIP

SUBMIT

Type here to search

70%

SHL
Imported From IE YouTube (922) C++ Tutorials...

A

Choose the correct option.

$$\lim_{x \to 0} \cot x \log\left(\frac{1+x}{1-x}\right)$$

OPTIONS

2

1

-1

none of the mentioned

Choose the correct option.

$$\lim_{x \to 0} \left(1 + \frac{1}{x}\right)^x$$

OPTIONS

0

1

2

none of the mentioned

SKIP

(922) C++ Tutorials...

Choose the correct option.

$$\lim_{x \to 0} sinx \log (x^2)$$

OPTIONS

2

1

-1

0

SKIP

From IE YouTube (922) C++ Tutorials...

Choose the correct option.

$$\lim_{x \to \pi/2} (secx - tanx)$$

OPTIONS

-1

2

1

0

D

SKIP

Choose the correct option.

$$\lim_{x \to 0} \left(\frac{\tan x}{x}\right)^{\frac{1}{x}}$$

OPTIONS

1

0

-1

none of the mentioned

A

Choose the correct option.

$$\lim_{x \to 0} \frac{\tan x - x}{x - \sin x}$$

OPTIONS

-2

0

1

2

SKIP

Choose the correct option.

$$\lim_{x \to 0} \frac{x\,cosx - sinx}{x^2 sinx}$$

**OPTIONS**

1

1/3

-1/3

-1

SKIP

SU

Choose the correct option.

$$\lim_{x \to 0} \left( \cot^2 x - \frac{1}{x^2} \right)$$

**OPTIONS**

1

3/2

2/3

-2/3

Choose the correct option.

$$\lim_{x \to 0} x^3 (log x)^2$$

OPTIONS

1

0

-1

2

SKIP

Choose the correct option.

$$\lim_{x \to 0} \frac{e^{x} - e^{\sin x}}{x - \sin x}$$

OPTIONS

-1

0

1

none of the mentioned

Choose the correct option.

$$\lim_{x \to 0} \left( \frac{1}{x} - \frac{1}{sinx} \right)$$

OPTIONS

1

0

-1

Review Later

SUBMIT AN

$$\lim_{x \to 0} (\operatorname{cosec} x)^{\frac{1}{\log x}}$$

OPTIONS

1

1/e

-1/e

Review Later

$$\lim_{x \to 0} x^x$$

OPTIONS

0

-1

2

1

Review Later

PASSAGE

Evaluate the limit

Choose the correct option.

$$\lim_{x \to \pi/2} (\sin x)^{\tan x}$$

OPTIONS

0

1

-1

none of the mentioned

Type here to search

Choose the correct option.

$$\lim_{x \to 1} \left( \frac{x}{x-1} - \frac{1}{\log x} \right)$$

OPTIONS

0

1

-1/2

1/2

Choose the correct option

7. Which among the following is the definition of Jacobian of u and v w.r.t x and y?

a) $J(\frac{x,y}{u,v})$

b) $J(\frac{u,v}{x,y})$

c) $\frac{\partial(x,y)}{\partial(u,v)}$

d) $\frac{\partial(u,x)}{\partial(v,y)}$

Choose the correct option

If $u = x^2 + y^2 + z^2$ be such that $x\,u_x + y\,u_y + z\,u_z = \lambda u$, then $\lambda$ is equal to

A. 1

B. 2

C. 0

D. none of above

OPTIONS

b

d

a

c

Choose the correct option

Value of $\int_0^1 \int_0^{x^2} xe^y dydx$ is equal to

(a) $\frac{e}{2}$ b) e-1 c)1-e d)None of these

OPTIONS

b

d

a

c

Choose the correct option

Value of $\int_0^2 \int_0^{y^2} e^{\frac{x}{y}}\, dxdy$ is equal to

a) $\frac{e}{2}$ b) e-1 c) 1-e d) None of these

Choose the correct option

If $u = x^2 f\left(\frac{y}{x}\right)$ then:

A. $x\frac{\partial u}{\partial x} - y\frac{\partial u}{\partial y} = 0.$

B. $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = 0.$

C. $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = 1.$

D. $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = 2u.$

Choose the correct option

9. If $u = x^2 tan^{-1}(\frac{y}{x}) - y^2 tan^{-1}(\frac{x}{y})$ then $\frac{\partial^2 u}{\partial x \partial y}$ is?

a) $\frac{x^2+y^2}{x^2-y^2}$

b) $\frac{x^2-y^2}{x^2+y^2}$

c) $\frac{x^2}{x^2+y^2}$

d) $\frac{y^2}{x^2+y^2}$

OPTIONS

b

d

a

Apps Gmail YouTube Maps

CHANDIGARH UNIVERSITY

Choose the correct option

If $x = r\cos\varphi\sin\theta$ , $y = r\sin\varphi\sin\theta$ , $z = r\cos\theta$ ,then the value of $\frac{\partial(x,y,z)}{\partial(r,\theta,\varphi)}$ is :

A. 0

B. r

C. $r^2\sin\theta$

D. $r^2\cos\theta$

Choose the correct option

$$\int_0^1 \int_0^1 \frac{dxdy}{\sqrt{(1-x^2)(1-y^2)}}$$

a) $\pi^2$ b) $\frac{\pi^2}{2}$ c) $\frac{\pi^2}{4}$ (d) None of these

amcatcampus.aspiringminds.com

Apps Gmail YouTube Maps

CU CHANDIGARH UNIVERSITY

Choose the correct option

OPTION

1. The jacobian of p,q,r w.r.t x,y,z given p=x+y+z, q=y+z, r=z is _____

a) 0

b) 1

c) 2

d) -1

b

d

Choose the correct option

If $u = \sin^{-1}\sqrt{x-y}$ where $x = 3t$, $y = 4t^3$, then $\frac{du}{dt}$ is:

A. $\sqrt{1-t^2}$

B. $\frac{3}{\sqrt[3]{1-t^2}}$

C. $\frac{3}{\sqrt{1-t^2}}$

D. $3\sqrt{1-t^2}$

Choose the correct option

If $u = \sin^{-1}\frac{x+y}{\sqrt{x}+\sqrt{y}}$, then $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y}$ is

A. $\frac{1}{2}\tan u$

B. $-\frac{1}{2}\tan u$

C. $\frac{1}{4}\tan u$

D. $-\frac{1}{4}\tan u$

Choose the correct option

$$\int_0^{\frac{\pi}{2}}\left(\int_0^{a\cos\theta} r\sqrt{a^2-r^2}\,dr\right)d\theta$$

a) $\frac{a^3}{18}(3\pi-4)$

b) $\frac{a^2}{9}(3\pi-4)$

c) $\frac{a^3}{18}(3-4\pi)$

d) None of these

Choose the correct option

OPTIO

Value of $\int_0^a \int_0^{\sqrt{x}} 1 dx dy$ is equal to

a) 6 b) 4 c) 10 d) None of these

Choose the correct option

Evaluate by reversing the order of integration of

$$\int_0^{\infty}\int_0^{x} xe^{\frac{-x^2}{y}}\,dydx$$

a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) 0 d) None of these

OPTIONS

b

d

a

c

Choose the correct option

OPTIONS

Volume bounded by triple integral $x \geq 0$, $y \geq 0$, $z \geq 0$ and $x^2+y^2+z^2=1$ is

a) $\frac{4\pi}{3}$ b) $\frac{4\pi r}{3}$ c) $\frac{4\pi r}{6}$ d) None of these

b

d

a

c

Choose the correct option

$$\int_0^1 \int_0^1 (x+2)\,dy\,dx$$

a) $\frac{15}{2}$ b) $\frac{5}{2}$ c) $\frac{11}{2}$ d) None of these

OPTIONS

b

d

a

c

Choose the correct option

If $u = \log(x^2 + y^2 + z^2)$, then the value of $x\,u_x + y\,u_y + z\,u_z$ is equal to

A. 0

B. 2u

C. 2

D. $2e^u$

Choose the correct option

OPTIONS

Change of order of integration in $\int_0^1 \int_0^{\sqrt{1-x^2}} y^2 dydx$ is

a) $\int_0^1 \int_0^{\sqrt{1-x^2}} y^2 dxdy$

b) $\int_0^1 \int_0^{\sqrt{1-y^2}} y^2 dxdy$

c) $\int_0^1 \int_0^1 y^2 dxdy$

d) None of these

b

d

a

c

Choose the correct option

For this $\int_0^1 \int_0^{1-x} dxdy$ by the change of integration we get

a) $\int_0^1 \int_0^{1-x} dydx$

b) $\int_0^1 \int_0^{1-y} dxdy$

c) $\int_0^1 \int_0^1 dxdy$

d) None of these

Choose the correct option

Value of $\int_0^2 \int_0^x (x+y)dxdy$ is equal to

a) 6 b) 4 c) 10 d) 5