

reviewer2@nptel.iitm.ac.in ▼

Courses » Basic Calculus for Engineers, Scientists and Economists



Announcements

Course

Ask a Question

Progress

Unit 2 - Week 01 -





1 point

Course outline

How to access the portal

Week 01 -Numbers, Functions, Sequencs and Limits of **Functions**

- Lecture 01 -Numbers
- O Lecture 02 -Functions-1
- Lecture 03-Sequence-1
- Lecture 04-Sequence-2
- Lecture 05-Limits and Continuity-1
- Lecture 06-I imits and Continuity-2
- Ouiz: Assignment-1
- Assignment-1 Solution

Week- 02-Continuity, Derivative, Maxima and Minima and Taylor's expansion

Week 03-Integration Of **Real Functions**

Unit 4 - Week - 04 - Function of Two Variables, Limits, Continuity,

Assignment-1

The due date for submitting this assignment has passed. Due on 2017-02-07, 23:59 IS As per our records you have not submitted this assignment.

1) 1. Solving this inequality,

$$\left| \frac{z}{5} - 1 \right| \le 1$$
.

We get $z \leq b$, then

b = 0.

b = 5.

b = 10.

b = 2.

No, the answer is incorrect.

Score: 0

Accepted Answers:

b = 10.

2) 2. Let a and b are two irrational numbers. Then

1 point

ab is always rational.

ab is always irrational.

ab may be rational.

None of these are true.

No, the answer is incorrect.

Score: 0

Accepted Answers:

ab may be rational.

3) 3. For the function $f(x) = 2e^{-x} - 3$ with dom $f = (-\infty, +\infty)$, then

1 point

range of $f = (-3, +\infty)$.

range of $f = (-1, +\infty)$.

Differentiability, Unconstrained and Constrained minimization

Week - 05 -Infinite Series, Multiple Integrals rangeof $f = (3, +\infty)$.

range of f = (-3, -1).

No, the answer is incorrect.

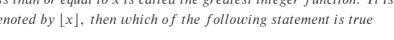
Score: 0

Accepted Answers:

range of $f = (-3, +\infty)$.

4) 4. The function whose value at any number x is the greatest integer less than or equal to x is called the greatest integer function. It is denoted by |x|, then which of the following statement is true







$$[5.9] = 6.$$



$$[2.4] = 3.$$

$$\lfloor -5.9 \rfloor = -5.$$

$$|-2.4| = -3.$$

No, the answer is incorrect.

Score: 0

Accepted Answers:

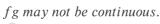
$$[-2.4] = -3.$$

5) 5. If f and g are two continuous function at x = c, then at x = c

1 point

f + g may not be continuous.

 $f \circ g$ is always continuous.



 $\frac{f}{g}$ where $g(c) \neq 0$ is not continuous.

No, the answer is incorrect.

Score: 0

Accepted Answers:

 $f \circ g$ is always continuous.

6) 6. $\lim_{y \to 0} \frac{\sin 3y \cot 5y}{y \cot 4y} =$

1 point





12 5

3.

Can not be determined.

No, the answer is incorrect.

Score: 0

Accepted Answers:

https://onlinecourses-archive.nptel.ac.in/noc17_hs04/unit?unit=6&assessment=25

$$\frac{12}{5}$$
.

7) 7. Let $x_0 = 1$, $x_{n+1} = 3x_n - 2$, then $\{x_n\}$ converges to

1 point

0.

-1.

1.

No, the answer is incorrect.

Score: 0



Accepted Answers:



8) 8. Let $f(x) = \begin{cases} \frac{x^2}{4}, & \text{if } x < 2 \\ e^{ax}, & \text{if } x \ge 2. \end{cases}$, then f(x) is continuous at x = 2 for









$$a=0.$$

$$a = \log \frac{1}{4}.$$



No, the answer is incorrect.

Score: 0

Accepted Answers:

9) 9. Every Cauchy sequence has a convergent subsequence.

1 point

True.



False.

No, the answer is incorrect.

Score: 0

Accepted Answers:

True.

10) 10. The function $f(x) = \log(\sin x^2)$ is continuous at $x = \frac{\pi}{2}$.

1 point

True.

False.

No, the answer is incorrect.

Score: 0

Accepted Answers:

True.

Previous Page

End

© 2014 NPTEL - Privacy & Terms - Honor Code - FAQs -

A project of



In association with



Funded by

Government of India Ministry of Human Resource Development











