

## STA-301 Quiz OnlineTest

Sr	Questions	Answers Choice
1	If $a_1 > a_2 > \dots > a_n > \dots$ then a sequence $\{a_n\}$ is ....	A. increasing B. non decreasing C. decreasing D. non increasing
2	For a function $f$ , let $f'(x_n) = 0$ for some $n$ . Does the newton method for work for approximating the solution of $f(x) = 0$	A. yes B. no C. not sure
3	$2/3$ is known as	A. even number B. irrational number C. natural number D. rational number
4	$\lim_{x \rightarrow 0} \sin x / x$	A. 1 B. -1 C. 0 D. 2
5	$\tan x$ is continuous everywhere except at points	A. $+\infty$ B. $-\infty$ C. $\pi/2$ ( $k=1,3,5,\dots$ ) D. $\pi/2$ ( $k=2,4,6,\dots$ )
6	If a quantity $y$ depends on another quantity $x$ in such a way that each value of $x$ determines exactly one value of $y$ , we say that $y$ is _____ of $x$	A. relation B. Function C. Nota function D. Not a Relation
7	The graph $x=y^2$ is symmetric about ____ axis	A. X-axis B. Y-axis C. origin
8	For a graph to be symmetric about $y$ axis mean ,for each point $(x,y)$ on the graph the point _____ is also on the graph	A. $(x,-y)$ B. $(-x,y)$ C. $(-x,-y)$
9	At which points two curves $y=x^2$ and $y=x+6$ intersect?	A. $x=0$ and $x=2$ B. $x=0$ and $x=3$ C. $x=2$ and $x=3$ D. $x=-2$ and $x=3$
10	Sigma notation which is represent which of the following greek letter?	A. $\chi$ B. $\eta$ C. $\Sigma$ D. $\psi$
11	Consider the following function $h(x)$ and a constant $c$ then $d/dx(c) \{h(x)\} =$	A. 0 B. $d/dx \{h(x)\}$ C. $d/dx \{h(cx)\}$ D. $cd/dx \{h(x)\}$
12	$d(\sec x)/dx = ?$	A. $\sec x \tan x$ B. $\sec x \tan y$ C. $\csc x \cot x$
13	Let $f(x)$ is the function such that as $x$ approaches a real number ,either from left or right hand side ,the function value increase or decrease unboundedly then $\lim f(x)$	A. Exist B. Does not exist C. Not Sure
14	_____ is the special case for the Taylor's theorem	A. Roll's Theorem B. Picard's Method C. Integration D. Maclaurin Theorem
15	If the partial sum of series is finite then the series will be:	A. Convergent B. Glve no information C. Not Sure

16	For a sequence $\{a_n\}$ if the ratio of successive terms $a_{n+1}/a_n > 1$ then the sequence is known as	A. Increasing B. Decreasing C. Non Increasing D. Non decreasing
17	For a sequence $\{a_n\}$ if the difference between successive terms $a_{n+1} - a_n \leq 0$ then the sequence is known as	A. increasing B. decreasing C. non decreasing D. non increasing
18	$\{1/2^n\}_{n=1}^{\infty}$ represent the sequence	A. $-1/2, -1/4, -1/8$ B. $1/2, 1/4, 1/7=8$ C. $0, 1, 1/2, 1/4$
19	What is the length of each sub interval ,if the interval $[1,3]$ is divided into $n$ sub interval of equal length?	A. $1/n$ B. $2/n$ C. $3/n$ D. $4/n$
20	If $f$ and $g$ are continuous function on an interval $[a,b]$ $f(x) \geq g(x)$ for $a \leq x \leq b$ and ,then area is bounded by the lines parallel to :	A. X-axis B. Y axis C. Both x and y axis