

MTH-101 Final Term Exams Preparation Virtual University

Sr	Questions	Answers Choice
1	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. $cd/dx\{h(x)\}$
2	$d(\sec x)/dx=?$	A. $\sec x \tan x$ B. $\sec x \tan y$ C. $\operatorname{cosec} x \cot x$
3	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
4	_____ is the special case for the Taylor's theorem	A. Roll's Theorem B. Picard's Method C. Integration D. Maclaurin Theorem
5	If the partial sum of series is finite then the series will be:	A. Convergent B. Give no information C. Not Sure
6	For a sequence $\{a_n\}$ if the ration 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
7	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
8	$\{1/2^n\}_{n=1}^\infty$ represent the sequence	A. $-1/2, -1/4, -1/8$ B. $1/2, 1/4, 1/7=8$ C. $0, 1, 1/2, 1/4$
9	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. $4/n$
10	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