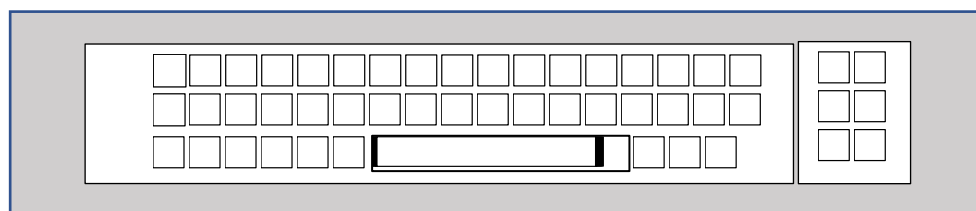




NEW YORK
STATE OF
OPPORTUNITY™

**Department of
Civil Service**

SCIENTIFIC CALCULATOR MANUAL



Excelsoft Technologies Pvt. Ltd.

1-B, Hootagalli Industrial Area, Mysore - 570 018

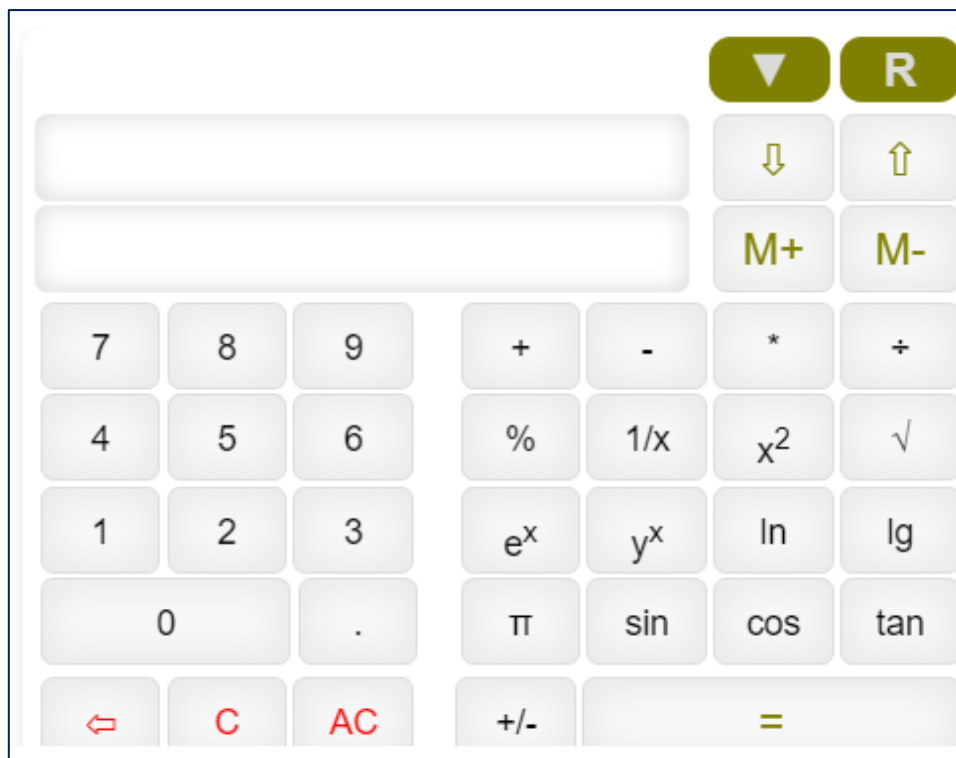
Copyright © 2021 Excelsoft Technologies Pvt. Ltd. All rights reserved.

If this document is distributed with software that includes an end-user agreement, this document, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. Except as permitted by any such license, no part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of Excelsoft Technologies. Please note that the content in this document is protected under copyright law even if it is not distributed with software that includes an end-user license agreement. The content of this document is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Excelsoft Technologies. Excelsoft Technologies assumes no responsibility or liability for any errors or inaccuracies that may appear in the informational content contained in this document. Please remember that existing artwork or images that you may want to include in your project may be protected under copyright law. The unauthorized incorporation of such material into your new work could be a violation of the rights of the copyright owner. Please be sure to obtain any permission required from the copyright owner. Any references to company names in sample templates mentioned in this document are for demonstration purposes only and are not intended to refer to any actual organization.

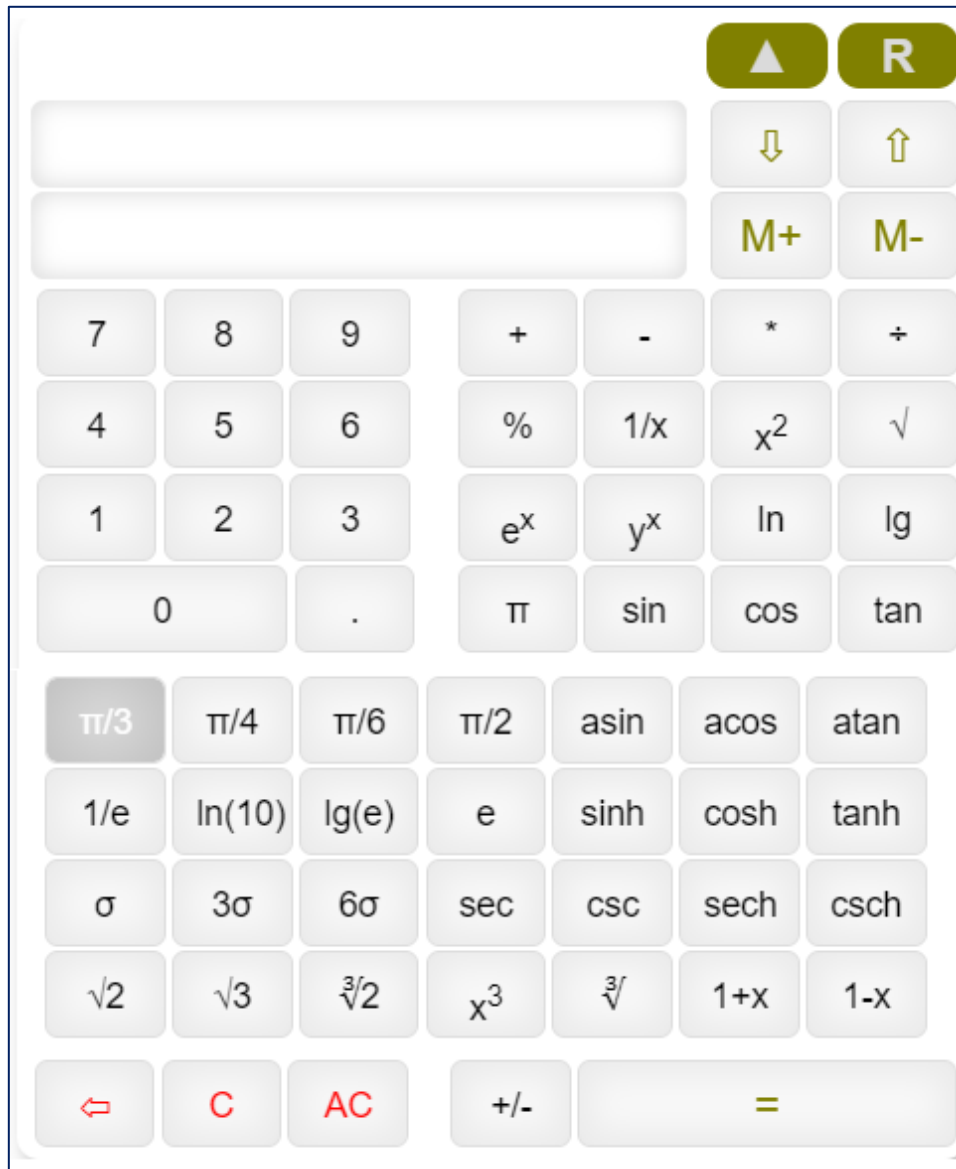
www.excelindia.com

Scientific Calculator

If the scientific calculator is available for your test, you may access it in the Tools tab by clicking on the  icon. To use the scientific calculator, you must press the on-screen buttons.



Click on this  operational key to reveal additional functionality for the scientific calculator.



Operational keys	Description
 (Show)	Used to view operational keys in the scientific calculator.
 (Hide)	Used to hide operational keys in the scientific calculator.
 (Recall)	Used to show the last calculated value. Hover over this button to display the value.
 (Move Down)	Used to move the numerical value downwards to the memory row.
 (Move Up)	Used to move the numerical value upwards to the active calculation row.
 (Memory Addition)	Adds the currently displayed number on your calculator to the number in memory.
 (Memory Subtraction)	Subtracts the currently displayed number from the number in memory.
 (Addition)	Used to calculate addition.
 (Subtraction)	Used to calculate subtraction.
 (Multiplication)	Uses to calculate multiplication.
 (Division)	Used to divide one number from another.
 (Percentage)	Used to calculate percentages. For instance, using the percent button instead of the equal button to solve $15/75$ will result in 20 instead of 0.2
 (One divided by x)	One divided by current entry. For instance, if $x=4$, then $1/4 = 0.25$.
 (To the second power)	Performs the function on the number entered. For Example: $3^2 = 9$.
 (Square root)	To find square of any number. For instance, square root of 16 is 4 or square root of 5 is 2.236068.

e^x (e power x)	Exponential function with a rate of change proportional to the function itself is expressible in terms of the exponential function, x is the power value the exponent e.
y^x (y power x)	Here y is the base and x is the exponential power. For instance, $y = 2$ & $x = 3$, then $y^x = 8$.
$\ln$ (Natural log)	Natural logarithm is also called as logarithm of the base e.
$\lg$ (Log)	Logarithm is the inverse function of exponential, it is also called the logarithm of base 10.
π (Pi)	Used to insert the value of π . For trig functions, π radians = 180 degrees.
$\pi/3$ (Pi by three)	Used to insert the value of $\pi/3$. For trig functions, $\pi/3$ radians = 60 degrees.
$\pi/4$ (Pi by four)	Used to insert the value of $\pi/4$. For trig functions, $\pi/4$ radians = 45 degrees.
$\pi/6$ (Pi by six)	Used to insert the value of $\pi/6$. For trig functions, $\pi/6$ radians = 30 degrees.
$\pi/2$ (Pi by two)	Used to insert the value of $\pi/6$. For trig functions, $\pi/6$ radians = 90 degrees.
$\sin$ (Sine)	A trigonometric function used to calculate the sine of an angles either in gradients, radians, or degrees.
$\cos$ (Cosine)	A trigonometric function used to calculate the cosine of an angles either in gradients, radians, or degrees.
$\tan$ (Tangent)	A trigonometric function used to calculate the tangent of an angles either in gradients, radians, or degrees.
asin (Arcsine)	It is the inverse function of the sine function and calculates the angle for a given sine. For instance, $\text{asin}(x)$ returns the arcsine of x, x must be $[-1...1]$. The result is an angle expressed in radians.

acos (Arccosine)	It is the inverse function of the cosine function and calculates the angle for a given cosine. For instance, $\text{acos}(x)$ returns the arccosine of x , x must be $[-1...1]$. The result is an angle expressed in radians.
atan (Arctangent)	It is the inverse function of the tangent function, and calculates the angle for a given tangent. For instance, $\text{atan}(x)$ returns the arctangent of x , x must be $[-1...1]$. The result is an angle expressed in radians.
sinh (Hyperbolic sine)	The hyperbolic sine function is the hyperbolic analogue of the Sin circular function used throughout trigonometry. Also used when dealing with second-order ordinary differential equations.
cosh (Hyperbolic cosine)	Cosh () function returns the hyperbolic cosine of a number. The function is equal to the expression $(\exp(\text{number}) + \exp(-\text{number}))/2$.
tanh (Hyperbolic tangent)	Tanh () function returns the hyperbolic tangent of a number, which is equal to $\sinh(x)/\cosh(x)$.
sec (Secant)	A trigonometric function used to calculate the secant of an angles either in gradients, radians, or degrees.
csc (Cosecant)	A trigonometric function used to calculate the cosecant of an angles either in gradients, radians, or degrees.
sech (Hyperbolic secant)	The hyperbolic secant function is the hyperbolic analogue of the secant circular function used throughout trigonometry. It is the reciprocal of cosh.
csch (Hyperbolic cosecant)	The hyperbolic cosecant function is the hyperbolic analogue of the cosecant circular function used throughout trigonometry. It is the reciprocal of sinh.
e (Euler's number)	Used to insert the value of Euler's number.
1/e (1 divided by Euler's number)	Used to insert the value of the reciprocal of Euler's number.

$\ln(10)$ (Natural log, argument=10)	Used to insert the value of the natural log if the argument is 10.
$\lg(e)$ (Log, argument=e)	Used to insert the value of the log if the argument is Euler's number.
σ (Sigma)	Used to insert the decimal value of the probability that a result is within one standard deviation of the mean in a set of normally distributed data. Sigma=0.69.
3σ (Three Sigma)	Used to insert the decimal value of the probability that a result is outside of three standard deviations from the mean in a set of normally distributed data. Three Sigma=0.007.
6σ (Six Sigma)	Used to insert the decimal value of the probability that a result is outside of six standard deviations from the mean in a set of normally distributed data. Six Sigma=0.000003399999999999996.
$\sqrt{2}$ (Square root of 2)	Used to insert the value of the square root of two.
$\sqrt{3}$ (Square root of 3)	Used to insert the value of the square root of three.
$\sqrt[3]{2}$ (cube root of 2)	Used to insert the value of the cube root of two.
x^3 (To the third power)	Performs the function on the number entered. For Example: $3^3 = 27$.
$\sqrt[3]{}$ (Cube root)	Performs the function on the number entered. Used to find cube root of any number.
$1+x$ (One plus x)	Used to add one to the number entered. For instance, if $x=5$, then $1+5 = 6$. If you click $1+x$ again, it will calculate $1+6=7$.

 (One minus x)	Used to subtract the number entered from 1. For instance, $x=5$, then $1-5 = -4$. If you click 1-x again, it will calculate $1-(-4) = 5$.
 (Backspace)	Used to clear the last character position on the calculator screen, while keeping the previous entered data.
 (Clear)	Used to clear the last entry on the calculator screen, while keeping the previous entered data.
 (All Clear)	Used to clear the calculator screen completely.
 (Equal)	Used to calculate the final result of an operation.
 (Plus or Minus)	Used to change arithmetic sign. For example, if you enter a value as 5 and click on this key it will become -5.
 (Decimal point)	Used to insert a decimal point.