Notations

x	Space Variable
t	Time Variable
n	Natural number
α	Fractional order
$u(t)$	u is function of t
$u(x,t)$	u is function of x and t
u_x	Differentiation of u wrt x
${}_0^C D_t^\alpha$	Caputo fractional derivative operator
${}_0^{ABC} D_t^\alpha$	Atangana-Baleanu fractional derivative in Caputo sense
$\Gamma(\cdot)$	Gamma fuction
$E_\alpha(z)$	Mittag-Leffler function
$\mathcal{L}\{u(t)\}$	Laplace transform of $u(t)$
$S\{u(t)\}$	Sawi transform of $u(t)$
$S_h\{u(t)\}$	Shehu transform of $u(t)$
$G\{u(t)\}$	General transform of $u(t)$
$\operatorname{Res} u(x,t)$	Residual function of $u(x,t)$
u_{exact}	Exact value of function u
u_{rpsm}	The value of function u by RPSM method
u_{adm}	The value of function u by ADM method
u_{hpm}	The value of function u by HPM method
u_{vim}	The value of function u by VIM method
u_{ham}	The value of function u by HAM method
N	Set of Natural numbers
R	Set of Real numbers
C	Set of Complex numbers
B	Banach Space
$\mathbb{S}(t)$	Susceptable population in COVID-19 model

Abbreviations

ODE	Ordinary differential equation
PDE	Partial differential equation
FC	Fractional calculus
FDE	Fractional differential equation
FODE	Fractional ordinary differential equation
FPDE	Fractional partial differential equation
RPSM	Residual power series method
FRPSM	Fractional residual power series method
ADM	Adomian decomposition method
HPM	Homotopy perturbation method
VIM	Variational iteration method
HAM	Homotopy analysis method
q-HAM	q – homotopy analysis method
LT	Laplace transform
ST	Sawi transform
ShT	Shehu transform
GT	General transform
ADTM	Adomian decomposition transform method
HPTM	Homotopy perturbation transform method
ADLTM	Adomian decomposition Laplace transform method
HPLTM	Homotopy perturbation Laplace transform method
ADShTM	Adomian decomposition Shehu transform method
HPSTM	Homotopy perturbation Sawi transform method
HPGTM	Homotopy perturbation general transform method
FRDTM	Fractional Reduced Differential Transform Method
MHATM	Modified homotopy analysis transform method
ABC	Atangana-Baleanu fractional derivative in Caputo sense