BALABHADRA SKILL DEVELOPMENT ACADEMY
SCIENCE QUESTION BANK – 37
UNITS OF PHYSICAL QUANTITIES AND SCIENTIFIC CONSTANTS

Time: 1 Hour Full marks: 37 Pass marks: 30

1. Write symbol of following physical quantities with unit of measurement and its symbol.

Sl. No.	Physical quantity	Symbol	Unit	Symbol
1.	distance	-------	-------	------
2.	Mass	-------	--------	----------
3.	Time	----------	----------	----------
4.	electric charge	---------	----------	---------
5.	temperature	----------	----------	------
6.	amount of substance	----------	----------	---------
7.	luminous intensity	----------	----------	----------
8.	acceleration	---------	---------	---------
9.	area	----------	----------	--------
10.	capacitance	----------	--------	----------
11.	concentration	--------	----------	----------
12.	density	----------	----------	----------
13.	electric current	----------	----------	--------
14.	electric field intensity	----------	----------	--------
15.	electric resistance	----------	----------	--------
16.	emf	-------	----------	----------
17.	energy	---------	--------	----------
18.	force	----------	----------	----------
19.	frequency	----------	----------	---------
20.	heat	----------	----------	----------
21.	illumination	----------	----------	----------
22.	inductance	--------	----------	----------
23.	magnetic flux	---	----------	----------
24.	potential difference	----------	----------	----------
25.	power	----------	----------	----------
26.	pressure	----------	---------	----------
27.	velocity	--------	----------	--------
28	volume	--------	----------	----------
29.	work	----------	----------	----------

2. Write value of following scientific constants.

Sl. No.	Name	Value
1.	Speed of the light in vacuum	----------
2.	Planck's constant	---------
3.	Gravitational constant	----------
4.	Acceleration due to gravity of earth	----------
5.	Elementary charge	----------
6.	Electron rest mass	----------
7.	Proton rest mass	----------
8.	Neutron rest mass	----------

BALABHADRA SKILL DEVELOPMENT ACADEMY
SCIENCE QUESTION BANK – 37 (ANSWERS)
UNITS OF PHYSICAL QUANTITIES AND SCIENTIFIC CONSTANTS

1. Symbol of physical quantities with unit of measurement and its symbol.

Sl. No.	Physical quantity	Symbol	Unit	Symbol
1.	distance	d	meter	m
2.	Mass	m	Kilogram	Kg
3.	Time	t	Second	s
4.	electric charge	Q	coulomb	C
5.	temperature	T	Kelvin	K
6.	amount of substance	n	mole	mol
7.	luminous intensity	*I*	candela	cd
8.	acceleration	a	meter per second square	m/s^2
9.	area	A	square meter	m^2
10.	capacitance	C	farad	F
11.	concentration	*[C]*	molar	M
12.	density	*D*	kilogram per cubic meter	kg/m^3
13.	electric current	*I*	ampere	A
14.	electric field intensity	*E*	newton per coulomb	N/C
15.	electric resistance	*R*	ohm	--
16.	emf	*e*	volt	V
17.	energy	*E*	joule	J
18.	force	*F*	newton	N
19.	frequency	*f*	hertz	Hz (1/s)
20.	heat	*Q*	joule	J
21.	illumination	*E*	lux (lumen per square meter)	lx
22.	inductance	*L*	henry	H
23.	magnetic flux	---	weber	Wb
24.	potential difference	*V*	volt	V
25.	power	*P*	watt	W
26.	pressure	*p*	pascal (newton per square meter)	Pa
27.	velocity	*v*	meter per second	m/s
28	volume	*V*	cubic meter	m^3
29.	work	*W*	joule	J

2. Value of scientific constants.

Sl. No.	Name	Value
1.	Speed of the light in vacuum	3×10^{8} m/s
2.	Planck's constant	$6.62607015 \times 10^{-34}$ J.s
3.	Gravitational constant	6.673×10^{-11} Nm^2/kg^2
4.	Acceleration due to gravity of earth	$9.8 m/s^2$
5.	Elementary charge	$1.602176634 \times 10^{-19}$ C
6.	Electron rest mass	$9.10938356 \times 10^{-31}$ kilogram
7.	Proton rest mass	$1.672621898 \times 10^{-27}$ kilogram
8.	Neutron rest mass	$1.674927471 \times 10^{-27}$ kilogram