List of symbols

$\mathbb{F}_q$	finite field with q elements
$\mathbb{Z}$	ring of integers
$\mathbb{Z}_{>0}$	set of positive integers
$\mathbb{Z}_{\geq 0}$	set of non-negative integers
$\lvert S\rvert$	cardinality of a set S
$\mathcal{M}_n(R)$	ring of $n \times n$ matrices with entries in the ring R
$\mathcal{M}_{n\times m}(R)$	set of $n \times m$ matrices with entries in the ring R
R^{e}	the enveloping algebra of R (page 76)
R^{o}	the opposite ring of the ring R
$R[G]$	the group ring of G over R
$\mathrm{Max}(R)$	set of maximal ideals of a commutative ring R
$\mathrm{Spec}(R)$	set of prime ideals of a commutative ring R
$\mathrm{J}(R)$	Jacobson radical of a ring R
$\mathrm{Z}(R)$	centre of a ring R
$\mathrm{char}(R)$	characteristic of a ring R
$\mathrm{rad}(n)$	the product of all primes dividing an integer n
$\hookrightarrow$	injective map
$\twoheadrightarrow$	surjective map
$M \otimes_R N$	tensor product of M with N over R
$\mathrm{End}_R(M)$	ring of R-endomorphisms of M
$\mathrm{Hom}_R(M, N)$	group of R-homomorphisms from M to N
$\mathfrak{M}_R^{\mathrm{fg}}$	category of finitely generated right R-modules
$\mathfrak{M}_R$	category of right R-modules

${}^{\mathrm{fg}}_{R}\mathfrak{M}$	category of finitely generated left R-modules
${}_{R}\mathfrak{M}$	category of left R-modules
${}_{R}M_{S}$	R-S-bimodule M