The following are primitive polynomials that can be used to design LFSRs:

degree	polynomial
3	$X^3 + X + 1$
4	$X^4 + X + 1$
5	$X^5 + X^2 + 1$
6	$X^6 + X + 1$
7	$X^7 + X^3 + 1$
8	$X^8 + X^4 + X^3 + X^2 + 1$
9	$X^9 + X^4 + 1$
10	$X^{10} + X^3 + 1$
11	$X^{11} + X^2 + 1$
12	$X^{12} + X^6 + X^4 + X + 1$
13	$X^{13} + X^4 + X^3 + X + 1$
14	$X^{14} + X^{10} + X^6 + X + 1$
15	$X^{15} + X + 1$
16	$X^{16} + X^{12} + X^3 + X + 1$
17	$X^{17} + X^3 + 1$
18	$X^{18} + X^7 + 1$
19	$X^{19} + X^5 + X^2 + X + 1$
20	$X^{20} + X^3 + 1$