1- (A*(B/C-D)*E) + (E/F/(G+H))

Reserve Polish:

(A*((IBC)-D)E)+ (EIF I (+GH)) (A*(-IBCD)^E)+ (CIEF)/(+GH) (A*(^IBCDE))+ (IIEF)/(+GH)

(*A^-/BCDE) + (11EF+ C7H) +*A^-/BCDE/IEF+ C7H.

Reverse Polish:

(A* ((BCI)-D)E) + (EIFI(GH+)) (A* (BCID-)E) + ((EFI)/(GH+)) (A* (BCID-E^)) + (EF/GH+/)

(ABC/D-En+) + (EF/GH+1)

ABC/D-E" * FF/GHT/+

a- A+B& (((C+D%E) *F)/G)

A+B& (((C+(%DE))*F)/G) A+B& (((+C%DE)*F)/G)

A+B& ((*+C1.DEF)/G)

A+B& (1+C4. DEFG)

(+AB) & (1°+ C+. DEFG)

&+ AB/++ C % DEFG

Reverse Polish

ArB& (((C+(DE+1))*F)/G)

A+B& (((CDF 1/+) F) 1G)

A+B& ((COE%+ F*)IG)

A+B & (CDE 1.+ F*G1)

(AB+)& (CDE % + F4G1)

AB + CDE 1/ + F & G&

Part B

The Infix notation of the above postfix notation is,
= (A+(B*(((C*.D)+E)*F)/G)))

the Infix motation of the above prefix motation is, $= (A + ((B*C) + ((D^*E)/(F*G)))$

Part A:

In order to convert the above expression into reverse polish notation (RPN), we do The following.

- = A+B & (((C+DE).1.) *F)/G)
- = A+B & (((CDE 1/+) * F)1G)
- = A+B& ((CDE " + F*)14)
- = A+B & CDE . 1. + F#G/
- = AB & CDF %. + F*G/+

Partc A+B*c^D^E%F*G

Symb	Postfix string	Opstk	Statement
A	A		add Symb to the postfix string
t	A	+	push Copstk, symb)
В	AB	+	add symb to the postfix string
+	AB	+*	bush (budh the best in
C	ABC	+*/	push (opstk, symb) add symb to the postfix string
٨	ABC	+*1	push Copstk, symb)
D	ABCD	"	add Symb to The postfix String
^	ABCD	+*^^	Push Copstk, Symb)
E	ABCDE *	11	add symb to the postfix sting
%	ABCOE	+*^	top symb = pop (opstk)
	ABCDEA	11	add top symb to the postfix she
	ABCDE?	+*	top symb = pop Copstd
	ABCDEM	+*	add top symb to the postiv shi
	ABCDEAN	1	
	ABCOEMA	+	add topsymb to the postfix String
F	ABCDEMX	+ %	push Copstk, Symb)
	ABCDE MAF	+ %	add symb to post-fix string
	ABCDE MAF	τ	top symb = pop (opstk)
	ABCOE " " FY.	+	add top symb to postfix string
	ABCDE MAFY.	**	Push (opstk, symb)
G	ABCDEMAFYG	**	add symb to post-tix string
	"	4	top Symb = pop (opstk)
	ABCDE MP 1.9	+	add topsymb to partyx string
	//		1 top symb = pop(opstk)
	ABCDEMMFYCH		add top symb to postfix string

Part(d)
A+B*C1(((D*F)+F)*G)

чть	Postfix string	opstk	Stalement.
A	A		
†	A	+	add symb to postfix sting
3	AB	+	push (opstk, symb).
K	AB	to	push (opstk, symb)
C	ABC	+*	add symb to postfix shing.
1	ABC	++1	push (opstk, symb)
	ABC	+*16	push (opstk, symb)
(ABC	+*1((push (opstk, symb)
n -	ABC	HANCE	push (opstk, symb)
D	ABCID	++^(((add symb to postfix ship.
Λ	ABCD	+ +CL(1	push (opstk, symb)
=	ABCDE	+*n(((n	add symb to postfix string
	ABCDE	++0((1)	top Symb = pop (opstk)
	ABCOE1	+*111	pop (opstk)
%	ABCDEA	+*1/6%	add sy.pwh (opstk, symb)
)	ABCDE"	+#0(1%	top symb=pop(opstx)
	ABCDE 1 %.	+#16	pop (opstk)
K	ABCDE 1%.	++0(+	top Symb = pop Copitis
) l	ABCDE ".	TANCE	top sump.
	ABCDETY.+	++1	pop (opstk)
	ABCDE "X+	+*1	top symb=pop (opstk)
	ABCOE 1 %.		add top symbto postix strip
	ABCOC*Y.*A	+	add top Symb to postus string
	ABCDE 11/4/1×		top symb = pop copy+1)
	ABCDE AX ****		add top symbty postfix sting.