For each sentence, produce its syntax tree (the simple version with only the connectives for nodes other than the leaf nodes).

1.
$$\neg (R \land P)$$

2.
$$[(T \supset T) \lor \neg \neg P] \supset [(Q \lor S) \lor (Q \lor S)]$$

3.
$$\neg[(R \land P) \land (R \lor R)] \lor \{[(P \supset T) \lor Q] \supset P\}$$

4.
$$\neg \{ \lceil (R \supset Q) \land \neg T \rceil \land R \} \lor \lceil (P \land R) \land Q \rceil$$

5.
$$\neg [(S \land R) \supset (R \land P)] \supset (\neg S \land \neg P)$$

6.
$$[(\neg Q \supset \neg S) \land (P \land R)] \supset [(S \lor Q) \lor S]$$

7.
$$\neg (R \lor Q) \supset \{ [S \supset (S \land T)] \lor \neg (T \lor R) \}$$

8.
$$\neg[(P \land P) \land P] \supset \{[(R \land Q) \land P] \lor (Q \lor T)\}$$

9.
$$\lceil \neg (Q \lor S) \supset (S \supset T) \rceil \supset \lceil (T \land Q) \lor (T \supset P) \rceil$$

10.
$$\neg \neg (\neg P \lor S) \lor \neg (\neg Q \lor S)$$

11.
$$\lceil (P \lor T) \lor P \rceil \lor \{\lceil (T \land P) \supset S \rceil \lor \lceil (Q \lor P) \land R \rceil \}$$

12.
$$(P \land \neg R) \land \{ [P \land (S \supset P)] \land \neg (P \lor R) \}$$

13.
$$\lceil \neg (T \supset P) \land \neg Q \rceil \supset \lceil \neg Q \supset (R \lor Q) \rceil$$

14.
$$\{ [(P \supset Q) \lor T] \supset (P \land R) \} \lor [\neg S \lor (S \lor S)]$$

15.
$$\{(P \supset T) \lor [(P \supset P) \supset Q]\} \lor [(R \land R) \land (T \supset P)]$$

16.
$$\{[(P \land S) \supset (P \land S)] \supset [(R \lor R) \land \neg P]\} \land S$$

17.
$$\{ [\neg (T \lor P) \supset (R \lor Q)] \lor (Q \supset R) \} \lor (Q \lor Q)$$

18.
$$(\{[S \lor (R \supset P)] \land (Q \land R)\} \supset R) \supset (\neg Q \lor Q)$$

19.
$$\{[S \lor (S \supset P)] \land [(T \lor S) \lor \neg R]\} \lor \neg R$$

20.
$$\neg \{ [(S \land Q) \land \neg P] \supset \neg Q \} \supset (R \land S)$$

21.
$$\neg [R \lor (Q \land R)] \land [(S \supset \neg S) \land (P \lor T)]$$

22.
$$\neg [(S \land Q) \lor (T \lor \neg Q)] \lor \neg \neg T$$

23.
$$[\neg T \land (R \land Q)] \land \{[(Q \lor P) \lor (R \land Q)] \lor P\}$$

24.
$$\neg R \lor \neg [\neg (T \supset Q) \lor \neg (T \supset T)]$$

25.
$$\{ [R \land (T \supset S)] \land (Q \supset R) \} \supset [(R \lor T) \land \neg R]$$

26.
$$\neg R \supset \{ [(Q \lor Q) \land Q] \lor [(Q \supset T) \land (S \supset S)] \}$$

27.
$$\neg \neg [(R \lor T) \supset R] \land \neg [(P \lor P) \lor P]$$

28.
$$[(\neg R \supset T) \land (T \lor R)] \land [(S \land Q) \land \neg S]$$

29.
$$\{[(S \lor R) \supset (T \land Q)] \supset (\neg T \lor Q)\} \land (R \land R)$$

30.
$$\{[(R \land R) \supset (T \supset S)] \land (\neg T \land P)\} \supset (P \land T)$$

31.
$$\{[S \lor (P \lor S)] \land (P \supset S)\} \supset [(Q \lor T) \lor (S \lor R)]$$

32.
$$\neg (\{[P \lor (P \lor S)] \supset (P \land T)\} \land \neg \neg S)$$

33.
$$[(R \land T) \land (Q \supset \neg Q)] \lor [(P \land P) \supset (S \supset R)]$$

34.
$$[(S \supset R) \land (P \lor T)] \land \{[(S \lor T) \lor Q] \lor \neg S\}$$

35.
$$\neg (\{(T \land T) \land [(Q \land R) \supset Q]\} \lor [(S \supset R) \supset P])$$

36.
$$\neg (T \supset \neg Q) \supset [P \supset \neg \neg (P \land Q)]$$

37.
$$[(\neg S \land T) \supset R] \lor \neg [(Q \lor T) \lor \neg R]$$

38.
$$\{[(P \land R) \land \neg P] \lor S\} \lor [(S \lor R) \lor (T \supset T)]$$

39.
$$\lceil \neg (R \lor P) \supset (T \lor T) \rceil \land \lceil (Q \land S) \supset \neg Q \rceil$$

40.
$$\{[(S \lor S) \lor Q] \supset \neg(T \lor P)\} \supset \neg\neg P$$

41.
$$[\neg(Q \land S) \lor (Q \land P)] \supset [(S \supset R) \lor (S \land Q)]$$

42.
$$\{\neg R \supset [\neg R \land (T \lor S)]\} \lor (\neg P \land P)$$

43.
$$\{ [(P \supset Q) \lor \neg P] \land \neg R \} \lor [(P \supset R) \supset S]$$

44.
$$[(R \lor T) \lor P] \supset \{(S \land S) \supset [(P \land T) \supset (R \supset T)]\}$$

45.
$$\neg\neg\{\neg(P\wedge R)\vee[(R\wedge Q)\supset(T\supset Q)]\}$$

46.
$$\neg [\neg (P \land T) \land \neg (\neg S \supset \neg Q)]$$

47.
$$[\neg (P \land R) \supset (R \supset S)] \supset [(S \lor Q) \lor \neg P]$$

48.
$$\{\neg T \lor [(P \supset P) \lor Q]\} \supset [\neg S \lor (Q \supset S)]$$

49.
$$[(R \supset R) \lor \neg (P \land Q)] \lor [\neg T \land (R \lor Q)]$$

50.
$$\neg \{ [(T \land T) \supset (Q \lor T)] \lor [(T \supset T) \lor \neg T] \}$$

51.
$$\{ [\neg T \supset (R \supset S)] \lor (S \land T) \} \supset \neg (R \supset R)$$

52.
$$\{\neg Q \lor [\neg R \supset (P \supset R)]\} \land [(S \lor T) \lor S]$$

53.
$$\left(\left\{\left[\left(Q\vee Q\right)\vee R\right]\supset\left(P\vee Q\right)\right\}\supset P\right)\supset\left[\left(P\wedge P\right)\wedge S\right]$$

54.
$$\{P \supset [(Q \supset P) \supset (Q \lor S)]\} \lor \neg [(P \land P) \lor S]$$

55.
$$\{[P \supset (Q \land T)] \supset (\neg R \lor Q)\} \land (\neg T \lor T)$$

56.
$$\{ [\neg T \land (Q \land P)] \lor \neg (S \lor S) \} \supset (R \lor S)$$

57.
$$[(R \land Q) \lor P] \lor \{[P \lor (R \lor R)] \supset [S \lor (S \land Q)]\}$$

58.
$$\{ [T \supset (S \supset T)] \land [\neg R \lor (T \lor Q)] \} \land \neg T$$

59.
$$\{ [\neg S \lor (Q \lor P)] \land [(Q \land T) \land R] \} \land (Q \supset P)$$

60.
$$(\neg Q \land \neg Q) \supset \{(P \land T) \land [(P \supset S) \supset S]\}$$

61.
$$\{\neg\neg P \supset [(S \lor S) \lor T]\} \supset [Q \land (Q \supset Q)]$$

62.
$$\{ [(R \lor P) \land \neg T] \supset [(Q \supset S) \supset T] \} \supset (S \land R)$$

63.
$$\lceil \neg (R \supset Q) \land (Q \supset T) \rceil \lor \lceil \neg P \supset (P \lor S) \rceil$$

64.
$$\neg \{ [\neg (P \lor T) \lor T] \lor [(Q \land R) \lor \neg R] \}$$

65.
$$[(\neg R \supset \neg T) \land (R \land R)] \lor [(P \land R) \land Q]$$

66.
$$\neg \{ \neg \neg S \lor [\neg \neg S \supset (S \lor T)] \}$$

67.
$$\neg \neg P \land \neg \{(T \supset S) \lor [(S \lor R) \supset R]\}$$

68.
$$\neg \{ [(T \land Q) \lor (Q \lor Q)] \land [\neg P \supset (T \supset R)] \}$$

69.
$$[(R \vee \neg R) \supset \neg (R \supset R)] \supset [(R \supset T) \vee T]$$

70.
$$\neg[(R \supset S) \lor \neg R] \lor \{[(T \land T) \lor Q] \supset T\}$$

71.
$$[\neg T \supset (Q \supset S)] \supset \{T \supset [(T \land S) \supset (S \land R)]\}$$

72.
$$\neg[(S \supset Q) \land T] \lor [(P \supset S) \land (\neg P \lor R)]$$

73.
$$\neg [(Q \land S) \land (T \lor T)] \land [(S \land S) \land (P \supset T)]$$

74.
$$\{(Q \lor Q) \land [(R \lor Q) \supset P]\} \land [(R \lor T) \supset (P \lor P)]$$

75.
$$\neg ((T \lor T) \supset {\neg P \land [(S \supset S) \supset (S \supset S)]})$$

76.
$$\{[\neg R \land (T \supset P)] \land (S \land Q)\} \lor [(S \supset T) \supset R]$$

77.
$$\{[(Q \lor S) \land (R \lor R)] \supset (Q \lor S)\} \lor [(Q \supset S) \lor P]$$

78.
$$\neg[(Q \lor T) \lor S] \lor \{[(T \lor P) \land Q] \lor (Q \lor P)\}$$

79.
$$[(R \supset Q) \lor (R \lor S)] \supset [\neg \neg P \land (S \supset Q)]$$

80.
$$\left(\left\{\left[\left(Q\wedge Q\right)\supset P\right]\wedge\left(P\wedge P\right)\right\}\wedge\left(S\vee P\right)\right)\vee\neg Q$$

81.
$$\neg \{ [(P \lor T) \lor \neg Q] \supset [\neg R \lor (Q \land Q)] \}$$

82.
$$\{[(P \lor P) \supset (P \land S)] \supset (P \lor S)\} \land \neg(T \supset T)$$

83.
$$\neg (\{\neg (P \land R) \land [(Q \supset R) \land R]\} \land (Q \supset S))$$

84.
$$\lceil \neg R \lor (Q \land \neg P) \rceil \land \neg \lceil (S \lor Q) \supset T \rceil$$

85.
$$[(R \land P) \lor (T \lor T)] \lor \neg [(T \land S) \supset (R \land R)]$$

86.
$$\{[(R \supset T) \lor (R \supset T)] \supset (S \land R)\} \land (S \lor \neg R)$$

87.
$$\neg [(Q \lor S) \land (S \land S)] \supset \neg (\neg P \lor Q)$$

88.
$$\neg [\neg (\neg Q \lor \neg P) \supset \neg (R \land T)]$$

89.
$$[(\neg T \land \neg T) \supset (R \lor P)] \land \neg (P \supset Q)$$

90.
$$\neg \{[Q \lor (T \supset T)] \lor \neg \neg R\} \lor (P \land Q)$$

91.
$$\neg (\neg (T \lor Q) \supset \{[R \land (S \land T)] \lor (S \lor R)\})$$

92.
$$\{\neg (R \land R) \land [(P \lor S) \lor (Q \land S)]\} \supset (Q \lor T)$$

93.
$$[(\neg Q \land Q) \lor (P \supset T)] \land [(T \supset R) \lor \neg T]$$

94.
$$\{(T \lor T) \land [(R \land P) \supset R]\} \lor [(S \supset S) \land (P \lor P)]$$

95.
$$\neg \{ [(P \lor T) \lor (T \lor S)] \land [(P \supset S) \land (Q \land Q)] \}$$

96.
$$[(R \land Q) \land \neg \neg S] \lor \neg (\neg T \land Q)$$

97.
$$\neg (T \supset \neg T) \lor \{ [(P \lor P) \land P] \lor \neg Q \}$$

98.
$$\neg ([T \lor (T \lor T)] \land \{[(T \lor R) \land (R \lor R)] \lor P\})$$

99.
$$[\neg P \supset (R \supset T)] \supset \{(T \supset T) \supset [(R \land S) \lor S]\}$$

100.
$$[(Q \supset P) \lor P] \supset \{[(P \supset R) \supset T] \land \neg \neg S\}$$