CHAPTER 3, TEST A

1. TTTT

2. Both have the truth values TFTFTTF for the order p, q, r in the truth tables.

3. The statement is true if the day is warm, or if it is summer, or if the day is warm and it is summer.

4. False, because the premise is true and the conclusion is false.

5. If I do not stay indoors, then the weather is not rainy.

6. If I stay indoors, then the weather is rainy.

7. If the weather is not rainy, then I do not stay indoors.

8. \( s \Rightarrow r \)

9. \((p \rightarrow q) \leftrightarrow (\neg p \lor q)\)

10. \( q \leftrightarrow \neg q \)

11. \( s \rightarrow t \)

12. \( p \land \neg s \)

13. It is not the case that the test is hard or I shall pass it.

14. The test is not hard or I shall pass it.

15. I shall not drive and I shall not walk.

16. No science fiction stories are interesting.

17. Some ripe peaches do not taste good.

18. FFTF

19. FTTT

20. FTTF

21. Valid

22. (c) is not valid.

23. Patsy reads comics.

24. \( b \rightarrow \neg g \)

25. \[ \begin{array}{c} g \\
\therefore \neg b \end{array} \]

CHAPTER 3, TEST B

1. (c) 2. (b) 3. (d) 4. (a) 5. (c) 6. (a)
7. (b)  8. (b)  9. (c)  10. (e)  11. (a)  12. (b)
13. (c)  14. (a)  15. (c)  16. (d)  17. (d)  18. (b)
19. (c)  20. (a)  21. (e)  22. (a)  23. (c)  24. (d)
25. (a)