

KEY

Directions: Please write your name on the top of this page. Answer all of the questions on the answer sheet provided. If an answer will not fit on the blank provided, place your answer on one of the several blank pages.

- | | | | |
|-----|---------------------------------|-----|---|
| 1. | C | 26. | $\neg Q$ |
| 2. | B | 27. | $\neg(\neg P \leftrightarrow S)$ |
| 3. | A, B | 28. | A |
| 4. | A | 29. | CONJUNCTION |
| 5. | A | 30. | DISJUNCTION |
| 6. | E | 31. | BICONDITIONAL |
| 7. | E | 32. | E |
| 8. | B | 33. | A |
| 9. | B | 34. | T |
| 10. | A(\exists), D(\uparrow) | 35. | F |
| 11. | NOT | 36. | F |
| 12. | WFF | 37. | T |
| 13. | WFF | 38. | F |
| 14. | WFF | 39. | F |
| 15. | NOT | 40. | Tek is not tall. |
| 16. | WFF | 41. | IF Tek is tall, Hikaru is tall. |
| 17. | P, Q, $\neg Q$ | 42. | IF HIKARU is tall THEN TEK IS TALL. |
| 18. | P, Q, $P \wedge Q$ | 43. | TEK IS TALL AND HIKARU IS TALL AND OLGA IS HAPPY. |
| 19. | FALSE | 44. | Tek is tall iff Hikaru is tall. |
| 20. | D | 45. | $T \wedge O$ |
| 21. | \wedge | 46. | $T \rightarrow R$ |
| 22. | \neg | 47. | $\neg K \wedge \neg A$ |
| 23. | \wedge | 48. | $\neg(K \wedge A)$ |
| 24. | \wedge | 49. | $H \rightarrow T$ or $\neg T \rightarrow \neg H$ |
| 25. | \leftrightarrow | 50. | T |