Chapter Thermodynamic

Key

1.B

2.B

3.E

4.C

5.D

6.B

7.B

8.A

9.C

10.C

11.A

12.E

13.B

14.D

15.A

16.E

17.D

18.E

19.B

20.E

21.D

22.E

23.E

24.C

25.B

26.B

27.A

28.D

29.C

30.D

31.A

32.A

33.B

34.C

35.E

36.C

37.A

38.B

39.E

40.D

41.A

42.C

43.D

44.B

45.E

46.A

47. No

48. 3.11×10^{-4}

49. -1.02 kJ/mol

50. 1.17

51. No

52. 1.58×10^{-6}

53. -46.66 kJ/mol

54. 1.11×10^{3}

55. 710°C

56.71.9 J/K·mol

57.$K_p = 7.1 \times 10^{-9}$

58.Positive

59.Positive

60.Negative

61. 639 kJ/mol

62. No

63.2,100 K

64.110. J/K·mol

65. -349 kJ/mol

66. 2160 K

67.3.4 × 10^{-3}

68.29.4 kJ/mol

69.right to left

70.-35.2 kJ/mol

71.left to right

72. -29.0 kJ/mol

73. 1.21 × 10^{5}

74. 131 J/K·mol

75.-123 kJ/mol

76.No

77.increases

78.increases

79.increases

80.decreases

81.$O_2(g)$ at 0.5 atm

82.$Br_2(g)$

83.1 mole of $N_2(g)$ in a 22.4 L container

84.$CO_2(g)$

85.-110 J/K·mol

86. 115°C

87.-9.48 kJ/mol

88.FALSE

89.FALSE

90.FALSE