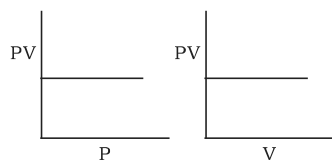


CHEMISTRY PAPER

46. a) Gases
47. b) $9 / 5^{\circ}\text{F}$
48. d) The product of pressure and volume always remains constant
49. a) Boyle's law



50. bc)
51. c) $V \propto T$
52. a) 0.4 liters
53. c) The units of the measurement
54. c) P/RT
55. b) 88.9 cc
56. b) 20000 litres
57. a) Avogadro's law
58. a) $P = P_A + P_B + P_C$
59. d) NH_3 and HCl
60. c) 1 atm
61. a) $r \propto \sqrt{1/d}$
62. c) $(P_A / P_B)(M_B / M_A)^{1/2}$
63. a) 16
64. b) Near the hydrogen chloride bottle
65. c) When $T = 12 \text{ K}$
66. a) 6.2
-

67. b) 11.2 L
68. c) $P/2$
69. d) 1200 mm
70. c) 2 gm/litre
71. c) 15 L of H_2 gas at STP
72. a) 1.4 times to He gas
73. d) 0.437
74. c) CO_2
75. a) $319^\circ C$
76. b) 0.50 atm
77. c) 1.2×10^{23}
78. d) 265 kPa
79. d) $\frac{RM}{RT}$
80. b) 2
81. a) $P_1 > P_3 > P_2$
82. a) Kinetic energy of molecules remains the same
83. c) $M/3$
84. b) Temperature of the gas
85. b) Same as that of a hydrogen molecule
86. a) Have equal average kinetic energies
87. d) All the same
88. d) 14.56
89. c) 0.6 cm^3
90. b) $0^\circ C$, 2 atm