**Van der Waals equation of state (11 points)**

|  |  |  |
| --- | --- | --- |
| **Part** | **Answer** | **Marks** |
| **Part A. Non-ideal gas equation of state (2 points)** | | |
| A1.  0.3pts |  |  |
| A2.  1.3 pts |  |  |
| A3.  0.2 pts |  |  |
| A4.  0.2 pts |  |  |
| **Part B. Properties of gas and liquid (6 points)** | | |
| B1.  0.8 pts |  |  |
| B2.  0.3 pts |  |  |
| B3.  0.7 pts |  |  |
| B4.  1.0 pts |  |  |
| B5.  0.3 pts |  |  |
| B6.  0.6 pts |  |  |
| B7.  1.1 pts |  |  |
| B8.  1.2 pts |  |  |
| **Part C. Liquid-gas system (3 points)** | | |
| C1.  1.3 pts |  |  |
| C2.  1.7 pts | The minimum radius of droplets that can grow |  |