

系所組別： 資源工程學系乙組

考試科目： 熱力學

考試日期：0307，節次：1

※ 考生請注意：本試題 可 不可 使用計算機

Please describe the following thermodynamics terms (5 points for each)

- (1) Isolated system
- (2) State function
- (3) Path function
- (4) Exact differential
- (5) Reversible transformation
- (6) Hess's law
- (7) Kirchhoff's law
- (8) Joule-Thomson coefficient
- (9) The Clausius inequality
- (10) Trouton's rule
- (11) The Helmholtz energy
- (12) Fugacity
- (13) Clapeyron equation
- (14) Contact angle for a liquid droplet on a solid surface. (plot it)
- (15) Gibbs-Duhem equation
- (16) Ideal dilute solution
- (17) Regular solution
- (18) Henry's law
- (19) Van't Hoff equation
- (20) Nernst equation