

## PHASE RULE

### SNAP Test-1: Phase Rule (4-8-11)

D.No :.....

*Give Answer for ALL the questions in the **blank** spaces provided there*

1. The number of phases in the system  $\text{Ar} + \text{CO}_2 + \text{N}_2$  -----
2. Enthalpy of vaporization can be obtained from ----- equation
3. The minimum value(s) for  $F =$  ----- ;  $P =$  ----- ;  $C =$  -----
4. The number of phase(s) in the system Ethanol + Water + Methanol is -----
5. The degree of freedom for solid monoclinic sulphur is -----
6. The number of components in the system  $X + Y + Z$  ;  $Y = 30\%$  -----
7. The number of concentration variable(s) for the system  $\text{NH}_3 + \text{H}_2 + \text{N}_2$  at 773 K
8. The system water + benzene +  $\text{CCl}_4$  will have ----- bi nodal curve(s)
9. The system water + Acetic acid +  $\text{CHCl}_3$  will have ----- bi nodal curve(s)
10. The partially miscible pair(s) in the following system is/are  
 $\text{CHCl}_3 + \text{H}_2\text{O} + \text{C}_6\text{H}_6$  -----
11. The degrees of freedom for the following systems are
  - (i)  $\text{Ar} + \text{CO}_2 + \text{N}_2$  -----
  - (ii)  $\text{NH}_3 + \text{H}_2 + \text{N}_2$  at 773K -----
12. The degree of freedom will be maximum if ----- minimum
13. The triple point of water is -----
14. Clausius-Clapeyron equation is applicable to ----- equilibrium
15. Maximum number of phases possible in a four component system will be -----
16. The critical constants for water are -----
17. The variable that is kept constant in the study of a two component system is -----

18. The degree of freedom for the following system is/are

(a) Water  $\rightleftharpoons$  Vapor -----

(b) Vapor -----

19. The most stable form of sulphur is -----

20. The reduced phase rule for a two component system is -----

21. Sulphur at low pressure and high temperature will exist as -----

22. The eutectic point for the Pb & Ag system is -----

23. Molten Pb & Ag system containing 5% on cooling will crystallize -----

24. The mole percentage of water in  $\text{Fe}_2\text{Cl}_6 \cdot 4\text{H}_2\text{O}$  is -----

25. The lowest freezing point of  $\text{Fe}_2\text{Cl}_6$  – water system is -----

26. The term Eutectic means -----

27. Clapeyron equation is -----

28. The phase rule for a three component system is -----

29. The phase diagram for a three component system is drawn by keeping -----  
----- constant.

30. In a three component system A, B, C, the tie lines will be parallel to the base  
line BC if -----