

**Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore – 641 043**

Bachelor's Degree Examination – November 2017

V Semester

**Class : III UG
Major : Chemistry**

**Time : 3 Hours
Max. Marks : 100**

15BCHC15 Chemical Kinetics and Phase Rule

Part – A

10 x 1 = 10

Choose the Correct Answer

1. The substance which is held on the surface of the solid is
 - a. Adsorbate
 - b. Absorption
 - c. Sorption
 - d. Isotherm
2. Adsorption of oxygen on charcoal is an example of
 - a. Chemisorption
 - b. Physisorption
 - c. Catalysis reaction
 - d. Hydrogenation
3. Reduced phase rule is
 - a. $F = C - P$
 - b. $F = C - P + 1$
 - c. $F = C - P + 1$
 - d. $D = C - P + 3$
4. Sodium hydroxide exposed to atmosphere absorbs water from air and get dissolved in it. It is
 - a. Efflorescence
 - b. luminescence
 - c. Fluorescence
 - d. Deliquescence
5. Phenol – water system is used to determine
 - a. Transition temperature
 - b. critical solution temperature
 - c. Partition coefficient
 - d. Eutectic temperature
6. Which one of the following is an azeotropic mixture?
 - a. Sodium hydroxide - water
 - b. Ethanol - water
 - c. Calcium chloride - water
 - d. all of the above
7. The unit of zero order reaction is
 - a. mol litre⁻¹ sec⁻¹
 - b. mol litre⁻¹ sec
 - c. mol litre sec⁻¹
 - d. mol litre⁻¹
8. Sum of the powers of the concentration terms in chemical reaction is
 - a. Molecularity
 - b. order
 - c. rate
 - d. rate constant
9. The term A in Arrhenius equation is
 - a. Probability factor
 - b. activation energy
 - c. collision factor
 - d. frequency factor
10. The excess energy which a molecule must possess to become active is known as
 - a. kinetic energy
 - b. threshold energy
 - c. potential energy
 - d. activation energy.