

SUVARANI MEMORIAL COLLEGE

ಸುವರಣಿ ಸ್ಮಾರಕ ಕಾಲೇಜು - 2021 (Internal Assessment - 2021)

Subject - Chemistry

Class - Sem - I (G)

F.M - 10

Time - 30 mins

Answer any ten (10) questions

Each question carry one mark

1. State Pauli's exclusion principle
2. With the help of Hund's rule write down the electronic configuration of the atom having atomic no. 24.
3. Define Lewis acid and Lewis base
4. Write down the formula of the conjugate acids of the following bases: CN^- , OH^-
5. In which way NH_4Cl is used (acid/base) in liquid NH_3 ?
6. Write down the Vander Waal's equation for 'n' mole of a gas.
7. Write down the unit of 'a' of Vander Waal's equation in CGS unit.
8. What do you mean by 'root mean square' velocity of any gas?
9. What is the unit of the rate constant of a second order reaction?
10. Write down the equation of half life period ($t_{1/2}$) of a first-order reaction.
11. Give an example of a second order reaction.
12. Write down the Arrhenius equation relating the effect of temperature on the rate of a chemical reaction.
13. Give an example of an optically active compound.
14. Give an example of an $\text{S}_\text{N}2$ reaction.
15. What type of isomerism is present between Maleic acid and Fumaric acid?

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