

LALBABA COLLEGE
CHEMISTRY – GENERAL
INTERNAL ASSESSMENT
SEM (III) SEC A – 2021
FULL MARKS – 10
TIME – HALF HRS

ANSWER ANY TEN QUESTIONS WITH TICK (✓) MARK

NAME:

ROLL NO.

REGISTRATION NO.

1. Which fertilizer produce acidity in soil?

- (a) Ammonium sulfate
- (b) Sodium nitrate
- (c) Calcium ammonium nitrate
- (d) Calcium nitrate

2. Available water held between

- (a) Saturation to wilting point
- (b) Field capacity to hygroscopic coefficient
- (c) Only field capacity
- (d) Field capacity to wilting point

3. Soil colloidal particle shows the phenomena

- (a) Plasticity
- (b) Adhesion and cohesion
- (c) Flocculation
- (d) All of the above

4. In which type of chromatography, the stationary phase is held in a narrow tube and the mobile phase is forced through it under pressure?

- (a) Column chromatography
- (b) Planar chromatography
- (c) Liquid chromatography
- (d) Gas chromatography

5. Which of the following multicomponent analysis technique involves estimation of components that show change in spectra in different pH medium

- (a) Simultaneous equation
- (b) Derivative spectroscopy
- (c) Q Absorbance ratio
- (d) Difference spectroscopy

6. In which of the following type of paper chromatography does the mobile phase move horizontally over a circular sheet of paper?

- (a) Ascending paper chromatography
- (b) Descending paper chromatography
- (c) Radial paper chromatography
- (d) Ascending – descending chromatography

7. In size exclusion chromatography, solute molecules are separated based on

- (a) Molecular geometry and size
- (b) Molecular composition
- (c) Molecular phase
- (d) Molecular formula

8. Ion exchange chromatography is based on?

- (a) Electrostatic attraction
- (b) Electrical mobility of ionic species
- (c) Partition chromatography
- (d) Adsorption chromatography

9. Which of the following is an example of bulk property or general detector in HPLC

- (a) Fluorescence detector
- (b) Refractive index detector
- (c) Electrochemical detector
- (d) UV-Visible detector

10. Which of the following is used as a carrier gas in gas chromatography

- (a) Carbon dioxide
- (b) Oxygen
- (c) Helium
- (d) Methane

11. Ion-exchange chromatography is used for the separation of

- (a) polar molecules
- (b) non polar molecules
- (c) both of above
- (d) none of above

12. Which chromatographic technique depends on the highly specific interactions between pairs of biological materials such as enzyme-substrate?

- (a) Adsorption chromatography
- (b) Ion –exchange chromatography
- (c) Affinity chromatography
- (d) Gel-permeation chromatography

13. Protein purification refers to the

- (a) Purification of proteins
- (b) Separation of proteins from other biomolecules
- (c) Separation of a particular protein from other contaminating proteins
- (d) all of these

14. In reverse phase chromatography, the stationary phase is made

- (a) non-polar
- (b) polar
- (c) either non-polar or polar
- (d) none of these

15. Which organic fraction not soluble in both acid and alkali

- (a) Fulvic
- (b) Humic
- (c) Humin
- (d) All of the above

16. Maximum N content found in N fertilizer

- (a) Urea
- (b) Anhydrous ammonia
- (c) Sodium nitrate
- (d) Ammonium sulphate