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Shivaji College
University of Delhi
Department of Chemistry

Class Test (MCQ) (Academic Year 2023-24)

Name of course:- B.Sc. (H) & B.Sc. (Prog) Courses

Semester :- II

Name of Paper:- Basic Analytical Techniques (SEC)

Faculty Name:- Dr Seema

Date of Test:- 20 April 2024

Instructions for students

- 1) Attempt all questions
- 2) All questions carry equal marks
- 3) Maximum marks = 20
- 4) Maximum Time = 30 minutes.

Q1) Chromatography used to separate

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|--------------|-------------|
| a) Solution | (b) mixture |
| c) molecules | d) atoms |

Q2) Which of the following does not affect the formation of soil?

- | | |
|-------------|-----------------|
| a) Rainfall | (b) Temperature |
| c) Humidity | (d) Pressure |

Q3) Soil is moderately alkaline in the pH range

- | | |
|-----------------------------|---------------|
| a) 5.3 - 6.0 | (b) 7.6 - 8.3 |
| c) 7.6 8.3 - 9.0 | d) 7.9 |

4) EDTA coordinates through
a) 2 atoms b) 3 atoms c) 5 atoms d) 6 atoms

5) Which of the following is not used as an indicator in EDTA titrations?
a) EBT b) Murexide c) Calcon d) None

6) The indicator used for the titrations of Ca and Mg are
a) Murexide, EBT b) EBT, Calcon
c) Murexide, Calcon d) Calcon, EBT

7) Chromatography with solid stationary phase is called
a) circular chromatography b) square chromatography
c) solid chromatography d) adsorption chromatography

8) Pattern on paper in chromatography is called
a) chroming b) Chroma
c) chromatograph d) chromatogram

9) Phenolphthalein used in trap cases gives the following color
a) No color b) Pink c) Purple d) Blue

10) Photosynthesis in aquatic plants is reduced due to
a) light b) color c) turbidity d) all of the above

11) The pH of drinking water should be in range
a) 5.2 - 6.0 b) 6.0 - 8.5 c) < 4.5 d) > 9

12) Pesticides present in water increases
a) BOD b) COD c) Both of these
d) None of these

(2)

Name _____

Q13.) Organic matter and nutrients present in water

- a) increases O_2 b) decrease O_2
- c) increase O_2 & decrease CO_2
- d) decrease O_2 and increases CO_2

Q14.) To determine acidity of water, water sample titrated with a base in the presence of indicator

- a) EBT (b) Phenolphthalein c) Murexide
- d) methyl orange.

Q15.) Temporary hardness of water is due to the presence of

- a) bicarbonate of Ca & Mg b) Sulphates of Ca & Mg
- c) hydroxides of Ca & Mg d) Oxides of Ca & Mg

Q16.) The source of O_2 in water include

- a) absorption from air b) photosynthesis of aq plants
- c) diffusion of O_2 from air d) All of these

Q17.) In Winkler's method, $Mg(OH)_2$ reacts with DO to give

- a) Manganese oxide b) Manganese Sulphate
- c) manganese hydroxide d) All of these.

Q18.) pH of carbonated drinks observed in the range of

- a) $pH \leq 4$ b) $pH \geq 4$ c) $pH 6-7$ d) $pH > 9$

Q19.) PPM stands for

- a) parts per million b) parts per metric
- c) parts per meter d) None of the above.

Q20.) Color shown by phenolphthalein in alkaline medium is

- a) colorless b) yellow c) red d) pink.

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