

Model Question Paper 2021-22
Agriculture Chemistry
Tenth question Paper
Class - XII

Time - 3:15 Hours

M.M - 50

Note : First 15 minutes are allotted to the examinees to read the question paper.

Instruction :

- (1) All questions are compulsory.
- (2) Question number 1 is multiple choice. Question number 2 to 6 have definite answer type, Question number 7 to 11 are very short answer type. Question number 12 to 14 are short answer type and question number 15 to 17 are long answer type.
- (3) Marks assigned to each question are marked against them.

Multiple Choice Questions –

1. Four options are given in each section of this question. Select the correct answer and write in your answer sheet:-

- (a) The valency of carbon is 1
- (1) 1 (2) 2 (3) 6 (4) 4
- (b) The formula of phosphate of a metal is MPO_4 , then the formula of sulphate of metal will be: 1
- (1) mso_4 (2) m_2so_4 (3) $\text{m}_3(\text{so}_4)_3$ (4) m_3so_4
- (c) Which of the Following is a mixture:- 1
- (1) Urea (2) Carbon dioxide (3) Pepsi (4) Copper sulphate
- (d) The gas obtained on heating a mixture of NH_4Cl and NaNO_2 is 1
- (1) Oxygen (2) Hydrogen (3) Ammonia (4) Nitrogen
- (e) Is formed by the reaction of water on calcium carbide 1
- (1) C_2H_6 (2) C_2H_4 (3) CaCO_3 (4) C_2H_2

Definite Answer Type Questions

2. The formation of water vapor is considered as a fundamental change while formation of water with the action of hydrogen and oxygen gas is considered a chemical change. Why? 1
3. Explain the Law of Multiple Proportions with examples. 1
4. Write the molecular formula of white phosphorus. 1
5. What are saturated and unsaturated hydrocarbons? Give one example of each. 1
6. Write the structure formulas of the following compounds- 1
(1)Glucose (2)Fructose

Very Short Answer Type Questions-

- | | |
|--|---|
| 7. Write the names and formulas of phosphatic fertilizers. | 2 |
| 8. What is hydrolysis? Give an example. | 2 |
| 9. Describe the method of preparation of ethyl alcohol from molasses. | 2 |
| 10. What is soft and hard water Write the reason for hardness of water | 2 |
| 11. Give the main uses of diamond. | 2 |

Short Answer Type Questions-

- | | |
|---|---|
| 12. At 20°C temperature and 780 mm pressure, 2.83 gm of gas occupies 3.895 L of its space. Find the molecular weight. | 4 |
| 13. Write four chemical properties and four uses of glycerol. | 4 |
| 14. Write the names and symbols of any two alkaline earth metals. (Write the chemical equation heating on Lime stone and ammonium nitrite.) | 4 |

Long Answer Type Questions-

15. Illustrate the method of preparation of ammonia by Haber's method. Write the chemical reaction of the following with ammonia 6
- (1) due to excess of chlorine (2) from HCL gas

Or

Illustrate the Ostwald method of preparation of Nitric acid, what happens when hot and concentrated Nitric acid reacts with the following. Give Chemical Reaction.

- (1) Copper (2) Phosphorus

16. Draw and describe the process of preparation of ethane gas Write its two chemical properties and uses. 6

Or

Describe any one method of preparation of phenol giving chemical equations.

How to obtain benzene and picric acid from phenol? Explain it by giving chemical equation.

17. What happens when:- 6

(Give chemical equations only)

1. A fresh precipitate of silver chloride is added to ammonium hydroxide.
2. Carbon dioxide is passed through lime water for a long time.
3. Orthophosphoric acid is heated.

Or

1. Benzene is heated with a mixture of concentrated sulfuric acid and concentrated nitric acid.
2. Glucose is boiled with Fehling's solution.
3. Ethyl alcohol is treated with iodine and caustic soda.