**Manure, fertilizer and soil fertility management ASAC 2202**

B.Sc Agriculture 4th Semester

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | MCQ | Instructions (Choose the correct answer) |  |  |
|  |  | Bitter pit diseases in apple is due to deficiency |  |  |
| a) |  Ca |  |  |
| b) | Boron | YES |  |
| c) | Zn |  |  |
| d) | Sulphur |  |  |
|  |  | Which one is Secondary plant nutrients ?  |  |  |
| a) | N |  |  |
| b) | C |  |  |
| c) | Mg | YES |  |
| d) | None |  |  |
|  |  | Which one are beneficial plant nutrients?  |  |  |
| a) | P |  |  |
| b) | Si | YES |  |
| c) | Zn |  |  |
| d) | Ni |  |  |
|  |  | Crop logging is due to toxicity of……. |  |  |
| a) | N | YES |  |
| b) | P |  |  |
| c) | Fe |  |  |
| d) | K |  |  |
|  |  | Which nitrogenous fertilizer will you recommend for potato crop? |  |  |
| a) | MOP |  |  |
| b) | Amide fertilizer  |  |  |
| c) | SOP | YES |  |
| d) | All |  |  |
|  |  | Which microbes fix soil available nitrogen |  |  |
| a) |  Azatobactor | YES |  |
| b) | VAM |  |  |
| c) | Trichoderma |  |  |
| d) | Penicillium |  |  |
|  |  | Best earthworm for vermicomposting |  |  |
| a) | Eisenia fetida | YES |  |
| b) | Pheretima posthuman |  |  |
| c) | Black worm |  |  |
| d) | All |  |  |
|  |  | Fertilizers which are contain two or three primary plant nutrients, known as |  |  |
| a) | Mixed fertilizer |  |  |
| b) | Straight  |  |  |
| c) | Micronutrient fertilizer |  |  |
| d) | Complex fertilzer | YES |  |
|  |  | Nitrate and Nitrite are results of |  |  |
| a) | Nitrosomonas, Nitrobacter | YES |  |
| b) | Nitrobacter, Nitrococcus |  |  |
| c) | Bacillus, Pseudomonas |  |  |
| d) | Rhizobium, Bacillus |  |  |
|  |  | Rock phosphate is best suitable for the……………. |  |  |
| a) | Neutral soil |  |  |
| b) | Saline soil |  |  |
| c) | Acidic Soil | YES |  |
| d) | Alkaline Soil |  |  |
|  |  | Na, Co, Va & Si are the example of  |  |  |
| a) |  Secondary nutrients  |  |  |
| b) | Macronutrients |  |  |
| c) | Micronutrients |  |  |
| d) | Beneficial nutrients | YES |  |
|  |  | Which of the following is not a primary major nutrient? |  |  |
| a) | N |  |  |
| b) | P |  |  |
| c) | K |  |  |
| d) | S | YES |  |
|  |  | What is the nitrogen content(%) in CAN? |  |  |
| a) | 33  |  |  |
| b) | 46  |  |  |
| c) | 21  |  |  |
| d) | 26 | YES |  |
|  |  | Which of the following organism is responsible for decomposition of organic matter? |  |  |
| a) | Algae  |  |  |
| b) | Fungi |  |  |
| c) | Bacteria | YES |  |
| d) | Microorganism |  |  |
|  |  | Which of the following is not a secondary major nutrient? |  |  |
| a) | Ca |  |  |
| b) | N  | YES |  |
| c) | Mg |  |  |
| d) | S |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Which of the following methods is most useful to increase the availability of soil applied phosphorus? |  |  |
| a) |  Broadcast |  |  |
| b) | Placement | YES |  |
| c) | Broadcast and soil incorporation |  |  |
| d) | None of these |  |  |
|  |  | Urea is mineralized in the presence of enzyme |  |  |
| a) | Urease | YES |  |
| b) | Peptase |  |  |
| c) | Co-enzyme |  |  |
| d) | All |  |  |
|  |  | The zinc deficiency in rice causes disease  |  |  |
| a) | Bacterial leaf blight  |  |  |
| b) | Khaira | YES |  |
| c) |  Sheath blight |  |  |
| d) | Bacterial leaf streak |  |  |
|  |  | The residual effect of ammonical nitrogenous fertilizer in soil is |  |  |
| a) | Acidic | YES |  |
| b) | Neutral |  |  |
| c) | Alkaline |  |  |
| d) | All |  |  |
|  |  | The saline soil can be managed by |  |  |
| a) | Addition of pyrite |  |  |
| b) | Addition of Gypsum  |  |  |
| c) | Leaching of salts | YES |  |
| d) | Addition of Lime |  |  |
|  |  | The plant nutrient when supplied in excess prolongs the growing period and delay crop maturity is |  |  |
| a) |  N | YES |  |
| b) | P |  |  |
| c) | K |  |  |
| d) | Ca |  |  |
|  |  | The maximum phosphorus availability in most of the soils in the pH range |  |  |
| a) | 5.0-5.5 |  |  |
| b) | 4.0-4.5  |  |  |
| c) | 7.0-7.5 |  |  |
| d) | 6.0-6.5 | YES |  |
|  |  | The inherent capacity of a soil to supply nutrients to plants in available and balanced proportion can be represented by |  |  |
| a) | Soil productivity |  |  |
| b) | Soil fertility | YES |  |
| c) | Pedology |  |  |
| d) | Edaphology |  |  |
|  |  | Gypsum has chemical composition |  |  |
| a) | CaSO4 |  |  |
| b) | CaSO43H2O |  |  |
| c) | CaSO4 2H2O | YES |  |
| d) | CaSO4 5H2O |  |  |
|  |  | Which of the following is considered as hot manure |  |  |
| a) | FYM |  |  |
| b) | Compost |  |  |
| c) | Sheep manure | YES |  |
| d) | BGA |  |  |
|  |  | The example of amide group nitrogenous fertilizer |  |  |
| a) |  Urea  | YES |  |
| b) | Ammonium Sulphate |  |  |
| c) | CAN |  |  |
| d) | All of the above |  |  |
|  |  | The fertilizers which have two or more than two major plant nutrient in their chemical composition are called |  |  |
| a) | Mixed fertilizer |  |  |
| b) | Organic fertilier |  |  |
| c) | Straight fertilizer |  |  |
| d) | Complex fertilizer | YES |  |
|  |  | The conversion of amount into nitrate by microorganisms is known as |  |  |
| a) | Nitrogen fixation  |  |  |
| b) | Loss of nitrogen  |  |  |
| c) | Denitrification  |  |  |
| d) | Nitrification | YES |  |
|  |  | Soils are acidic for one of the reason |  |  |
| a) | Low rain fall |  |  |
| b) | Basic slag |  |  |
| c) | Acidic parent material | YES |  |
| d) | None of these |  |  |
|  |  | Single super phosphate (SSP) contains |  |  |
| a) | 20% P2O5 |  |  |
| b) | 16 to 18% P2O5 | YES |  |
| c) | 10-46% P2O5 |  |  |
| d) | 20-25% P2O5  |  |  |
|  |  | Olsen method of P determination is more effective in |  |  |
| a) |  Acidic soil  |  |  |
| b) | Alkaline soil | YES |  |
| c) | Neutral soil |  |  |
| d) | All of the above |  |  |
|  |  | Nutrient index is used to prepare the |  |  |
| a) | Soil fertility map | YES |  |
| b) | Soil productivity map |  |  |
| c) | Both a & b |  |  |
| d) | None of these |  |  |
|  |  | Whiptail disease of cauliflower is due to deficiency of |  |  |
| a) | Phosphorous  |  |  |
| b) | Boron  |  |  |
| c) | Nitrogen  |  |  |
| d) | Molybdenom | YES |  |
|  |  | The law of minimum was proposed by |  |  |
| a) | Russel |  |  |
| b) | Arnon |  |  |
| c) | Liebig | YES |  |
| d) | Nicholas |  |  |
|  |  | Bitter pit in apple is due to deficiency of |  |  |
| a) | Ca | YES |  |
| b) | N  |  |  |
| c) | Mg |  |  |
| d) | S |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl. No. | TXT | Instructions (Fill in the Blanks) |  |  |
| 1 |  | Pahala blight of sugarcane is due to deficiency of ……… | **Mn** element. |  |
|  | **Blank** |  |  |
| 2 |  | Criteria of essentiality nutrient was given by ……………………… | **Arnon and strout.** |  |
|  | **Blank** |  |  |
| 3 |  | The main form of Boron absorbed by plants is **……..** | **Boric acid.** |  |
|  | **Blank** |  |  |
| 4 |  | Luxury consumption is commonly associated with……… | **Potassium** |  |
|  |  |  |  |
| 5 |  | Grass tetany is a nutritional disorder common in cattle grazing due to deficiency of ……………. | **Mg element** |  |
|  | **Blank** |  |  |
| 6 |  | Central fertilizer testing laboratory in India situated at …………………. | **Faridabad.** |  |
|  | **Blank** |  |  |
| 7 |  | The fertilizer control order came into force in the year of …………….. | **1955** |  |
|  | **Blank** |  |  |
| 8 |  | The unit of EC is………………. | **dS/m** |  |
|  | **Blank** |  |  |
| 9 |  | The process of conversion of organic compound into inorganic compound is known as …………………. | **mineralization.** |  |
|  | **Blank** |  |  |
| 10 |  | The process of transformation of amino acid into ammonia is known as …………………. | **ammonification.** |  |
|  | **Blank** |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SL .No. | MATCH | Left side | Right side |  |
| 1 |  |  **Cause** | **Nutrient deficiency** |  |
| 1 | Dieback of citrus  | Cu deficiency |  |
| 2 | Whip tail in cauliflower  | Mo deficiency |  |
| 3 | Grey speck in oat  | Mn deficiency |  |
| 4 | Khaira in rice | Zn deficiency |  |
| 5 |  Fruit cracking  | B deficiency |  |