**Ministry of Education**

**Sector፡ Agriculture**

**Sub Sector፡ Crop production**

**Occupation: Field Crops Production Level- III**

**Consumable materials to be used for projects**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Item description | Quantity | Unit | Specification |
|  | Pen | 1 | Number | Standard |
|  | Paper | 1 | Number | Standard |
|  | Plastic bag | 1 | Number | Standard |
|  | Pail | 1 | Number | Standard |
|  | Water | 1 | Number | Standard |
|  | Paper | 4 | Number | Standard |
|  | Fertilizer DAP/NPS | 1 | Kg | Recommended |
|  | Fertilizer Urea | 1 | Kg | Recommended |
|  | Chemical | 20 | Gram | Recommended |
|  | Water | 2 | Litter | Pure |

**Tools & Equipment/instruments to be used for projects**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Item description | Quantity | | | Unit | Specification | |
|  | Hammer | 1 | | | Number | | Standard |
|  | Shovel | 1 | | | Number | | Standard |
|  | Pickaxe | 1 | | | Number | | Standard |
|  | Meter | 1 | | | Number | | Standard |
|  | Auger | 1 | | | Number | | Standard |
|  | Rake | 1 | | | Number | | Standard |
|  | Line level | 1 | | | Number | Standard | |
|  | Water pump | | 1 | Number | | | Standard |
|  | Family drip irrigation | | 2 | Number | | | Standard |
|  | Cylindrical tube | | 1 | Number | | | Standard |
|  | Knapsack | | 1 | Number | | | Standard |
|  | PPE | | 1 | Number | | | Standard |
|  | Pail | | 1 | Number | | | Standard |

Note: Materials and tools may be modified by the assessor, depending on the actual job performed, and location & the standard installation practices of the country.

**Materials and supplies (Consumable)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Items** | **Qty** | **Unit** | **Specification** |
| 1 | String | 50 | m |  |
| 2 | Pegs | 12 | pcs |  |
| 3 | Tef seed | 0.5 | Kg |  |
| 4 | kg NPS, | 0.5 | Kg |  |
| `5 | kg urea | 0.5 | Kg |  |
| 6 | 5 white papers, | 5 | pcs |  |
| 7 | Fuel | 1 | Liter |  |
| 8 | Engine oil | 1 | Liter |  |
| 11 | Cypermetrin 1% granule or diaznon 10%, | 1 | Kg or liter |  |
| 12 | PPE | 01 | complete |  |
| 13 | Aromatic and non aromatic soap. | 1 | NO |  |
| 14 | Maize seeds | 1 | kg |  |
| 15 | TTC | 1 | Liter |  |
| 16 | Water | 5 | Liter |  |

**Tools & Equipment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Items** | **Qty** | **Unit** | **Specification** |
|  | Meter | 1 | pc |  |
|  | shovel | 1 | pc |  |
|  | spade | 1 | pc |  |
|  | digging hoe | 1 | pc |  |
|  | Tractor | 1 | pc |  |
|  | Engine driven water pump | 1 | pc |  |
|  | disc plough/disc harrow | 1 | pc |  |
|  | stop watch | 1 | pc |  |
|  | bucket or barrel with known volume | 1 | pc |  |
| 11 | functional motor | 1 | pc |  |
| 12 | Petridish, | 3 | pcs |  |
| 13 | Purity work board | 1 | NO |  |
| 15 | Soft paper | 1 | pc |  |
| 16 | Dissecting needles | 1 | NO |  |
| 17 | Beakers | 1 | NO |  |
| 18 | Forceps | 1 | NO |  |
| 19 | Drying glass | 1 | NO |  |
| 20 | Aluminium dishes | 1 | NO |  |
| 21 | Sensitive balance | 1 | NO |  |

Note: Materials and tools may be modified by the assessor, depending on the actual job performed, and location & the standard installation practices of the country.

**Consumable materials to be used:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Item description | Quantity | Unit | Specification |
| 1. | Hammer | 5 | no |  |
| 2 | String | 50 | m |  |
| 3 | Pegs | 6 | pcs |  |
| 4 | Marker | 1 | Pc |  |
| 5 | Paper | 10 | sheet |  |
| 6 | Three soil textures (sand, clay and silt) | 200 | g |  |
| 7 | Maize seed | 1 | kg |  |
| 8 | Water | 20 | l |  |
| 9 | Dust chemical | 1 | kg |  |
| 10 | Wettable powder | 1 | kg |  |
| 11 | Emulsifiable concentrate | 1 | L |  |
| 12 | ULV chemicals | 1 | L |  |
| 13 | calculator | 10 | no |  |
| 14 | pen | 10 | no |  |
| 15 | DAP fertilizer | 10 | kg |  |

**Tools & equipment/ Instruments**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Item description | Quantity | Unit | Specification |
| 1 | Auger | 1 | pc |  |
| 2 | Meter | 1 | pc |  |
| 3 | Sensitive balance | 1 | pc |  |
| 4 | measuring cylinder | 1 | pc |  |
| 5 | dusters | 1 | pc |  |
| 6 | ultra low volume (ULV) sprayer | 1 | pc |  |
| 7 | Knapsack sprayer | 1 | pc |  |
| 8 | Drip irrigation system | 1 | pc |  |
| 9 | Personal protective equipments | 10 | pc |  |

Note: Materials and tools may be modified by the Assessor, depending on the actual job performed, and location & the standard installation practices of the country.

**Materials and supplies (Consumable)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Items** | **Qty** | **Unit** | **Specification** |
| 1 | Plastic bag | 1 | pcs |  |
| 2 | String | 50 | m |  |
| 3 | Pegs | 6 | pcs |  |
| 4 | Marker | 1 | Pc |  |
| `5 | Paper | 10 | sheet |  |
| 6 | Three soil textures (sand, clay and silt) | 200 | g |  |
| 7 | Dry grass/straw | 5 | kg |  |
| 8 | Green plants and crop residues | 10 | kg |  |
| 9 | Animal waste | 10 | kg |  |
| 10 | Forest soil | 5 | kg |  |
| 11 | Ash | 3 | kg |  |
| 12 | Maize seed | 1 | kg |  |
| 13 | Water | 20 | l |  |
| 14 | Tissue paper \ soft paper | 1 | roll |  |
| 15 | Dust chemical | 1 | kg |  |
| 16 | Wettable powder | 1 | kg |  |
| 17 | Emulsifiable concentrate | 1 | L |  |
| 18 | ULV chemicals | 1 | L |  |

**Tools & Equipment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Items** | **Qty** | **Unit** | **Specification** |
|  | Auger | 1 | pc |  |
|  | Meter | 1 | pc |  |
|  | Tractor | 1 | pc |  |
|  | Engine driven water pump | 1 | pc |  |
|  | *disc plough* | 1 | pc |  |
|  | *Chisel plough* | 1 | pc |  |
| 11 | *mouldboard plough* | 1 | pc |  |
| 12 | Petridish, | 3 | pcs |  |
| 13 | forceps | 1 | pc |  |
| 14 | *Sensitive balance* | 1 | pc |  |
| 15 | measuring cylinder | 1 | pc |  |
| 16 | dusters | 1 | pc |  |
| 17 | ultra low volume (ULV) sprayer | 1 | pc |  |
| 18 | Knapsack sprayer | 1 | pc |  |

Note: Materials and tools may be modified by the Assessor, depending on the actual job performed, and location & the standard installation practices of the country.