**Q1 / Answer the following:**

**1-** Why the Seed moisture content is one of the most important factors **?**

**2-** Why it is important to know seed moisture in trade **?**

**3-** Why in seed testing recommended to following ISTA rule **?**

**Q2 / Differentiate** betweenThe **blue** seed sample certificate **&**  the **orange** seed lot certificate**?**

**Q3/ What's the objective :**

1 – Seed sampling. 2- Moisture Test

**Q 4/ Enumerate** and **Write** about the methods of seed sampling that you have done in laboratory ?

 **Q5/ Draw** schematic for seed sampling process?

**Q 6 / Write** the **Objective** and **Procedure** of Phenol color reactionTest**?**

**Q 7 / Enumerate** the **evaluation of germination** test and **write** about **one** of them?

**Q 8/ Write** the chemical **reaction** of Tetrazolium Test ?

 **Q9/ Write** the equation of **Test Weight** and **Absolute weight on dry matter basis**?

 **Q10/ Draw** the steps of Germination then mention the parts**?**

**Q 11 / Differentiate** betweenThe blue seed lot certificate **&**  the orange seed lot certificate**?**

**Q12 / What** are the effects of moisture content on seeds ?

**Q 13 / What's the objective of these tests:**

 **1**- Purity test **2**- Seed sampling **3**- Weight Test  **4**- Moisture Test

**Q 14 / Define the following:**

 ISTA, Pure Seed , Seed Technology, Bulk Density

**Q 15/ Write** the procedure of **Purity test** with **Sample** ?

**Q 16 / Define the following:**

 Sealed, Wet weight, Working sample, Seed index

**Q 17 /**  **Why** it is important to know seed moisture content in trade **?**

**Q 18 / What** is the Seed testing **and** write their objectives **?**

**Q 19/ Write** about the methodsof reduction of seed samples **?**

**Q20/ Define the following:**

1. Blending **2.** Working sample **3.** ISTA **4.** Germination

**Q21/** Write about the three international ISTA certificates?

**Q22/**

What is objectives for minimizing the risk of planting low quality seeds?

**Q23/ What's the objective of these tests:**

 1 - Seed sampling.

 2 - Phenol test.

 3 - Purity test.

 4 - Weight test.

 5- Moisture test.

 **Q24/** Enumerate the major abnormal seedling? And define one of them?

**Q25/ Define the following:**

1. Working sample **2.** Viability **3.** ISTA **4.** Lot **5.** Purity

**Q26/** What is thethree general stages that can be characterized during seed formation? Then describe in figure the changes in seed dry weight and moisture content ?

**Q27/** **Fill in the blanks:**

**1-** The technical work of a seed testing laboratory could be divided into three sections, ……………… , …………… , and ………….**.**

**2-** After the oven drying of the seed, the containers must covered and allowed to be cool for …….… minutes in the ……... Then the seed will weighted again to determination moisture content**.**

**3-** Good seed should not have a high percentage of …….. **,** ………, ……… and ……….

**4-** Purity test procedure separates the samples particles into three groups which are: …………, …………., and ……………..

**Q28/ A- Write Methods** **( procedure ) to determination of the:**

1 – Tetrazolium test

2 – Phenol test

**Q29/ Define the following**

 **1.** Bulk Density **2.** Sealed **3.** Phenol Test **4.** Blending **5.** Wet weight basis

**Q30/ Enumerate** and write about the evaluation of germination test **?**

**Q31/ What** is the purpose of Purity test?Then write about each component?

**Q32/ Answer** the following?

**1-** Why it is important to know seed moisture in trade **?**

**2-** Why in seed testing recommended to following ISTA rule **?**

**3-** What is the effects of moisture content on seed **?**

**Q33/ Fill in the blanks**

**1.** There are three kind of hand methods to take sample at laboratory ………….. , …………. , and …………..

**2.** The size of the lot must not exceed ....…..... kg, but for large seed species ................ kg.

**3.** The technical work of a seed testing laboratory could be divided into sections, which ……………… , …………… , and ……....…….**.**

**4.** Good seed should not have a high percentage of …….. **,** ………, ……… and ……….

**5.**  …………… a reduced sample taken from the submitted sample in the laboratory, used in a given quality test.

**Q34/ Define the following:**

1. Bulk Density **2.** Sealed **3.** Seed Index **4.** Blending **5.** Germination

**Q35/ What's the objective of these tests:**

1 - Seed Testing.

 2 - Purity Test.

 3 - Moisture determination.

 4 - Weight Test.

 5 - Tetrazolium Test.

**Q36/ Write Methods** **( procedure ) to determination of the:**

1 – Purity Test

2 – Phenol test

**Q37/** Write about the three international ISTA certificates?

**Q38/ Numerate** all the test **then Explain** and **Write** about one of the procedure of the test that you done in Laboratory in details.

**Q 39/ What** are the criteria of seed quality?

**Q 40/**  **Explain**, **why** the seed moisture test should be performed as quickly as possible upon delivery the seed lot or sample?

 **Q41/**  **Why** do we sample the seed lot?

**Q 42/** **List** the methods of seed moisture determination? **And** **Write** about one ?

**Q43/** Draw the diagram of the seed lot when arrives to the silo ?

**Q 44 /** Define seed blending **and** state when it is required?

**Q 45 /** What are the causes of seedlings abnormalities?

**Q 46 / Write** the **Objective** of Phenol Test**?** with writing the scales of test?

**Q 47/ What** is the **Objective** and **Principle** of Tetrazolium test in seed viability test? Then write the reaction ?

**Q 48/ Write** the equation of **Germination Test** and **Absolute weight**?

**Q49 / What** is the purpose of seed purity test? **What** are the components of physical purity test?

 **Q50/** What is objectives for minimizing the risk of planting low quality seeds?