**Purity Practice Questions**

1. When is a seed mixture considered chaffy?
2. What seed kinds use the uniform blowing procedure?
3. Explain what significant figures to use when working with mixtures of different sizes when none of them are over 50%.
4. In a bulk exam, when is it unnecessary to remove certain noxious weeds?
5. How should you calculate multiple seed units when no factor is available?
6. When performing a non-mechanical seed count, if the coefficient of variation exceeds 6.0 for chaffy seeds or 4.0 for other seeds, explain what to do next:
7. On a non-mechanical seed count, how many significant figures do you need for the small-seeded kinds?
8. When performing a non-mechanical seed count for a sample listed in 2A that is less that is 98% pure seed, what do you do?
9. Non-free flowing seed shall be sampled by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. When obtaining a sample with a tier, how big should the holes be? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Where can you find the Uniform Blowing Procedure? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. The equation to determine the number of bags to sample in a lot is \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_% of the total number of bags, not to exceed \_\_\_\_\_\_\_\_\_ bags
13. A particular lot of seed consists of 180 – 60lb. bags. According AOSA rules, how many bags should be sampled?
14. Name five pieces of information that should appear on a ROA

1.

2.

3.

4.

5.

1. You are about to conduct a purity and noticed it is unusually small-seeded. Can you change the working weight of the sample and if so how?
2. An indistinguishable *lactuca* seed was found as a contaminate in your sample. Will it be classified as a crop or weed?
3. For seed kinds not listed in Table 2A, the weight of the working and noxious weed seed sample may be determined by:
4. When do you perform a 800 or 1000 seed separation?
5. Give two examples of when dodder(Cuscuta spp.) is considered inert:

1.

2.

1. The chemicals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ used to perform the test differentiating white and yellow sweetclover.
2. What Lolium species exhibits a “yellowish-green” color on its roots system when subjected to a fluorescence test?
3. What publications govern the classification of weed and crop seeds
4. The Gamet divider is used to divide samples of what crop kinds?
5. A purity exam is based off of approximately \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ seeds and a noxious exam is based off approximately \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ seeds
6. When is ragweed (Ambrosia spp.) inert?
7. **Identify the following acronyms:**

AOSA-

RST-

UGS-

PVPA-

RUSSL-

NGVRB-

AOSCA-

1. **True or false**

\_\_\_\_\_\_\_ The length of the awn shall be disregarded when determining the length of the fertile floret or an attached structure.

\_\_\_\_\_\_\_When doing a noxious weed exam, it is not necessary to determine the individual number of seeds on capsules of dodder, berries of nightshade or fruits of other noxious weed that contain more than one seed.

\_\_\_\_\_\_\_High peroxidase activity is indicated by a colorless solution.

\_\_\_\_\_\_\_In determining mixtures of yellow and white sweetclover, at least 600 seeds should be used.

1. **Definition Matching:**

\_\_\_\_\_\_Achene

\_\_\_\_\_\_Basal

\_\_\_\_\_\_Bract

\_\_\_\_\_\_Dorsal

\_\_\_\_\_\_Elliptic

\_\_\_\_\_\_Ergot

\_\_\_\_\_\_Fascicle

\_\_\_\_\_\_Floret

\_\_\_\_\_\_Formazan

\_\_\_\_\_\_Funiculus

\_\_\_\_\_\_Glabrous

\_\_\_\_\_\_Hirsute

\_\_\_\_\_\_Integument

\_\_\_\_\_\_Oblique

\_\_\_\_\_\_Oblong

\_\_\_\_\_\_Obtuse

\_\_\_\_\_\_Ovate

\_\_\_\_\_\_Peduncle

\_\_\_\_\_\_Scabrous

\_\_\_\_\_\_Strawmineous

\_\_\_\_\_\_Subspheroid

\_\_\_\_\_\_Turgid

\_\_\_\_\_\_Villous

1. The water -insoluble red compound produced with dehydrogenase enzymes in seeds are exposed to tetrazolium solution
2. Swollen
3. Having moderately coarse and stiff hairs
4. Slanted or with asymmetrical sides
5. Blunt or rounded at the apex
6. In grasses: A group of spikelet’s subtended by bristles
7. In angiosperms: A small or rudimentary leaf or leaf-life structure near the base of a flower or inflorescence
8. Dark spur-shaped fungal body that develops in place of a healthy seed in a diseased inflorescence
9. The stalk of a solitary flower or an inflorescence
10. Having a surface covered with short stiff hairs
11. Egg-shaped, with the point of attachment at the broad end.
12. Nearly sphere-shaped
13. Much longer than wide, with nearly parallel sides
14. In grasses: a flower usually enclosed by two bracts
15. Straw colored
16. Back or outward facing surface of a part in relation to the central axis
17. The outer layer(s) of tissue surrounding the nucellus or an ovule that becomes the seed coat
18. The stalk that connects the seed(ovule) to the fruit (ovary) wall
19. At the bottom or base
20. Oval-shaped
21. Covered with long, soft, somewhat wavy hairs
22. A dry, hard, one-chambered, one-seeded indehiscent fruit with the seed attached to the fruit wall at a single point
23. Without hairs
24. **Classify the following (pure seed, other crop, weed seeds, or inert matter)**

\_\_\_\_\_\_\_ Seed that has started to germinate

\_\_\_\_\_\_\_An immature, shriveled soybean seed

\_\_\_\_\_\_\_ A weevil infested vetch seed larger than one-half the original size of the seed

\_\_\_\_\_\_\_ Bulblet of wild garlic that has part of the husk remaining and is not damaged at the basal end

\_\_\_\_\_\_\_Buckhorn (Plantago lanceolate) seeds with a slight brown color visible seeds

\_\_\_\_\_\_\_ In Fabacea: Cotyledons that are split a part but held together by the seed coat.

\_\_\_\_\_\_\_Fruiting structure of a weed seed (capsules, pods or seed heads with attached seeds)

\_\_\_\_\_\_\_Seeds of cucumber (cucurbitacea) or tomato (solanacea) whether or not they are filled.

\_\_\_\_\_\_\_ Damaged weedy grass caryopses with over half the root-shoot axis missing

\_\_\_\_\_\_\_A soybean split between cotyledons

\_\_\_\_\_\_\_A seed of silverleaf nightshade devoid of embryo endosperm

\_\_\_\_\_\_\_Chalcid fly damaged fabaceae seed

\_\_\_\_\_\_\_Free Caryopsis of Quackgrass 1 mm in length