Style of Questions 1

These questions are not what I will bring in the exam and are not all the types…..only examples. They do not cover all the lectures entering in the exam. They are only an example and all items in the lectures are important and can come in the exam.

<u>Question I:</u> Answer the following questions

1. Define the horizontal gene transmission.

What are its major and minor ways of transmitting the genetic materials?

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

……

<u>Question II:</u> Put (√) or (X) on the following sentences

1. In horizontal gene transmission, the genetic material is transferred from one generation of to the next one. (……)

2. Transduction is a process used to insert novel genes directly into plant for fungal or salt tolerance. (……)
3. In Conjugation, the donor bacteria always ensure that the recipient bacteria do not already contain a similar element. (……)

<u>Question III:</u> Compare between the following pairs

	Cohesin proteins	Shugoshin proteins

	Cohesin proteins	Synaptonemal proteins

	Pericentric inversion	Paracentric inversion

	Monosomic	Trisomic

	Aberration	Mutation

	Haploid	Monoploid

	Nullisomic	Tetrasomic

	Spontaneous mutation	Induced mutation

	Germinal mutation	Somatic mutation

	Base-pair insertions mutation	Base-pair deletion mutation

<u>Question IV:</u> Give reason for

1. Monoploids plants are sterile

……

2. Triploid and pentaploid plants are sterile while Diploid and Hexaploid plants are fertile

……

3. The formation of Nylon-eating bacteria

……

4. The formation of *readthrough protein*

……

5. Sickle-cell anemia is a type of Missense Mutation

……

<u>Question V:</u> Define the followings

1. Aberration

……

……

……

……

……

……

……

2. Mutation

……

……

……

……

……

……

……

3. Aneuploid

……

……

……

……

……

……

4. Deletion

……

……

……

……

……

……

5. Shift form of chromosome

……

……

……

……

……

……

6. Disomics

……

……

……

……

……

……

7. Base-pair substitution mutations

……

……

……

……

……

……

8. frameshift mutation

……

……

……

……

……

……

9. Cyclins and Cyclin-dependent kinases

……

……

……

……

……

……

<u>Question VI</u>: Draw with labels only

1. How monoploid plant is created

2. Cell cycle with all the checkpoints in places

3. Types of transductions

4. Types of Translocation

5. Duplication

6. Inhibition of the regulation process

<u>Question VII</u>: Importance of the followings

1. Cyclins and Cyclin-Dependent Kinases

……

……

……

……

……

……

2. Checkpoints

……

……

……

……

……

……

3. Aberrations

……

……

……

……

……

……

4. Mutation

……

……

……

……

……

……

<u>Question VIII</u>: Give one example for each of the followings

1. Disomic organism

……

2. physical mutagen

……

3. Chemical mutagen

……

4. Missense Mutation

……

5. Frameshift mutations

……

6. Trisomic plant

……

7. Reciprocal translocation

……

8. Organism can form shift form of chromosome

……

9. Transformation

……