



B.Sc. III Semester (NEP) Degree Examination, March/April - 2023

CHEMISTRY

OEC-3 : Agro Chemistry (O.E.C.)

Time : 2 Hours

Maximum Marks : 60

Note : Answer *all* Sections.

SECTION - A

1. Answer the following sub-questions, each sub-question carries **one** mark. **1x10=10**
- (a) Mention the importance of Crop rotation. **1**
- (b) Define Rancidity. **1**
- (c) Give an example for Nitrogen based fertilizer. **1**
- (d) What are Weedicides ? **1**
- (e) Name the Common food adulterant present in butter. **1**
- (f) Mention the deficiency of which nutritious component lead, to cause the disease Goitre. **1**
- (g) Give an example of preservative. **1**
- (h) Write the structure of Gammexene. **1**
- (i) Name the bacteria which helps in nitrogen fixation. **1**
- (j) Mention the types of Vermi-compost fertilizers. **1**



P.T.O.

SECTION - B

Answer **any four** of the following questions, each question carries **five** marks.

4x5=20

2. What are pesticides ? Discuss the benefits and adverse effects of pesticides. **5**
3. Give a comparison between nutritious food and balance food. **5**
4. What are the benefits of macronutrients and micronutrients in soil ? **5**
5. Name any two chemicals with its composition used for ripening and mention its side effects. **5**
6. Write a note on vermicompost and mention its applications. **5**
7. Mention the functions and importance of Vitamins, Proteins and Carbohydrates. **5**

SECTION - C

Answer **any three** of the following questions, each question carries **ten** marks.

3x10=30

8. (a) Why does the human body need nutritious food ? Name some of the essential nutrients for the human body and mention the diseases which are caused as a result of deficiency of nutritious components like Vitamins, Proteins and Fats. **6**
(b) What are the reasons and measures to overcome malnutrition ? **4**
9. (a) What is nitrogen fixation. Mention its types and why it is so important ? **6**
(b) How do leguminous plants help in maintaining soil fertility ? **4**
10. (a) What are fertilizers ? Mention its types, composition and its applications. **6**
(b) Mention the harmful effects of using excess of fertilizers. **4**
11. (a) In detail explain about preservative chemicals with its composition-any 3. **6**
(b) Mention the side effects of using preservative chemicals. **4**
12. (a) What are the consumer laws in India against food adulteration ? **6**
(b) Differentiate between food adulterants and contaminants with an example. **4**

