B.Sc. 4th Semester (Honours) Examination, 2019 (CBCS)

Subject: Nutrition

(Rural Technology and Public Welfare)

Paper: SEC-2

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words

as far as practicable.

1. Answer any five questions: 2×5=10 (a) What do you mean by Biodiversity? (b) Write down the name of two edible and two poisonous mushrooms. (c) State the medicinal importance of Sarpagandha. (d) Write the importances of Brahmi on human health. (e) Write the composition of spawn. (f) What is Royal Jelly? What is its role? (g) What do you mean by PBR? (h) Write two characters of rural society. 2. Answer any two of the following questions: $5 \times 2 = 10$ (a) Briefly illustrate the physical and chemical properties of honey. 2+3=5(b) Write down a comprehensive note on health benefits of mushroom. (c) Describe the major objectives of the project "Lab to Land Programme". (d) Differentiate between National Park and Sanctuary with examples. What is a Biosphere Reserve. Cite an example. 3+2=53. Answer any two of the following questions: $10 \times 2 = 20$ (a) Define community. Describe the characteristics of the rural community. 2+8=10 (b) Write down a comprehensive note on KVK in terms of objectives, activities and strategies. 4+4+2=10 (c) What are the types of biodiversity? Mention the role of biodiversity in various aspects with a special reference of ecological, economical and medicinal importance. 4+6=10 (d) Briefly discuss the medicinal importance of the following: (i) Amla (ii) Ginger 5+5=10

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B.Sc. 4th Semester (Honours) Examination, 2019 (CBCS)

Subject: Nutrition

(Immunology, Toxicology and Public Health)

Paper: SEC-2 (OR)

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words

as far as practicable.

1. Answer any five of the following questions:

 $2 \times 5 = 10$

- (a) What do you mean by contaminant? Give an example.
- (b) Write down the differences between BOD and COD.
- (c) Illustrate your concept on 'forensic toxicology'.
- (d) State the possible causes of higher level of drug toxicity in infants.
- (e) Mention the differences between epitope and paratope.
- (f) Write down the names of various cells related with immune system.
- (g) Distinguish between active and passive immunity.
- (h) What do you mean by cytokines?

2. Answer any two of the following questions:

 $5 \times 2 = 10$

(a) What is xenobiotics? Write a short note on 'lead poisoning'.

1+4=5

- (b) Furnish a brief account on the management of arsenic poisoning.
- (c) Briefly describe the different classes of organopesticides with example of each.
- (d) Write down a comprehensive note on structure of immunoglobulin.
- 3. Answer any two of the following questions:

 $10 \times 2 = 20$

(a) What is immunoglobulin? What do you mean by monoclonal and polyclonal antibody? Highlight the advantages and disadvantages of monoclonal and polyclonal antibodies.

2+(1+1)+3+3=10

- (b) What is biomagnification? State the different causes of biomagnification. Furnish a compact account of process of biomagnification. 2+4+4=10
- (c) What is humoral immunity? Schematically represent the humoral immunity. Enlist the differences between humoral and cell medicated immunity. 2+4+4=10
- (d) Elaborate your concept on following branches of toxicology:
 - (i) Food Toxicology
 - (ii) Drug Toxicology

5+5=10