

**The University of Burdwan
B.Sc. (General) Semester 6
Examination (CBCS): 2020**

Subject: Nutrition

Course Code: SEC-4

Course Title: Immunology, Toxicology and Public Health

F.M. – 40

Time: 2 hrs

The figures in the right hand margin indicate full mark

Candidates are required to give their answers in their own words as far as practicable.

Examinees are instructed to submit the scanned copies/photographs of their answerscripts within 30 minutes after the completion of examination

1. Answer any eight questions from the following:

8×5=40

- a. Write the symptom and complications of organophosphate poisoning.
- b. Append a short note on 'Biological Oxygen Demand'.
- c. Schematically represent the 'cell mediated immunity'.
- d. Briefly discuss the effect of arsenic on human health.
- e. Write a comprehensive note on 'biomagnification' and define the term 'bioaccumulation'.
- f. Define 'innate' 'acquired', 'active' and 'passive' immunity.
- g. What is 'immunoglobulin' and briefly describe the structure of 'immunoglobulin'.
- h. Illustrate your concept on 'complement system' in immunology.
- i. How are we exposed to mercury - explain and briefly state the health effects of BPA.
- j. List the advantages and disadvantages of monoclonal antibody

The University of Burdwan
B.Sc. (General) Semester 6
Examination (CBCS): 2020
Subject: Nutrition
Course Code: SEC 4 (OR)
Course Title: Biostatistics and Bioinformatics

F.M. – 40

Time: 2 hrs

The figures in the right hand margin indicate full mark

Candidates are required to give their answers in their own words as far as practicable.

*Examinees are instructed to submit the scanned copies/photographs of their
answerscripts within 30 minutes after the completion of examination*

1. Answer any eight questions from the following:

5×8=40

- a) Define 'Primary data' and 'Secondary data' and give example.
- b) Compute the mean, median and mode of the following data set:
31, 22, 23, 24, 25, 25, 25, 28, 29, 29, 20.
- c) Differentiate between 'flat file database' and 'relational database'.
- d) Write the important characteristics of a hypothesis.
- e) Give a brief account on applications of 'bioinformatics'.
- f) Write the full forms of: PDB, FASTA, FNDDS, NCBI, and BLAST.
- g) Mention one non-parametric test used for hypothesis testing and write its principle.
- h) Write short note on the different types of variable used in statistics.
- i) What is meant by 'statistics of location' and 'statistics of dispersion'- discuss with suitable example.
- j) Illustrate your concept on 'un-rooted' and 'rooted' phylogenetic tree?
