Centre for Computational Biology and Bioinformatics
CENTRAL UNIVERSITY OF HIMACHAL PRADESH
(Established under Central Universities Act 2009, Accredited with NAAC A+)
Shahpur, District: Kangra, Himachal Pradesh-176206
MID-TERM EXAMINATIONS, APRIL-2024 (SPRING SESSION)
M.SC. BIOINFORMATICS

Name of the Course: Computational Genomics & Proteomics **Course Code: BIN466**
Credit: 2 **Semester: II**
Time Duration: 1 Hour **Maximum Marks: 20**
Date of Exam: 16-4-2024 **Roll No:**

SECTION-A:

Q1). ANSWER ALL THE FOLLOWING QUESTIONS **5 X 1 = 5 M**

i). Which of the following is true about the Z-DNA helix ?

a) It has more base pairs per turn than B-DNA

b) It tends to be found at the 3' end of the genes

c) It has alternating GC sequences d) It is a permanent conformation of DNA

ii). Ubiquitin has _____ of amino acids.

a) 70 b) 75 c) 76 d) 72

iii). Glycosylation is the addition of _____ to the protein.

a) Carbohydrate b) Lipid c) Fat d) Minerals

iv). Which of the following has unusual bases ?

a) m-RNA b) t-RNA c) r-RNA d) hn_RNA

v). The Human Genome Approximately Contains 3 billion base pairs True (or) False ?

SECTION-B:

ANSWER ANY TWO OF THE FOLLOWING QUESTIONS **2 X 2.5= 5 M**

Q2). Differences between the Prokaryotic and Eukaryotic Transcription?

Q3). Write short notes on OMIM Database.

Q4). Write a short notes on process of Proteome.

Q5). Write short notes on role of t-RNA in Protein Synthesis.

SECTION-C:

ANSWER ANY TWO OF THE FOLLOWING QUESTIONS **2 X 5= 10 M**

Q6). What is Transcription and discuss Eukaryotic Transcription with Figures?

Q7). What are integrated genomic maps and write a short notes on different types.

Q8). Discuss the SNP Database.

Q9). Write about the Prokaryotic Transcription with figures.