

2056
B.Sc. (Hons) Bio-Informatics
Sixth Semester
BIN-6001: Introduction to Perl Programming

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) What is the use of *chomp()* function?
- b) Differentiate between *unless()* and *until()* construct?
- c) Explain *split()* function with example.
- d) What is ARGV in PERL?
- e) Write a command to open a file in read mode?
- f) Write use of escape character in Perl? (6x2)

UNIT - I

- II. (a) Explain the features of PERL with programming languages like JAVA and C.
(b) Describe different types of operators in PERL with examples. (6,6)

- III. (a) Explain the conditional and iterative constructs with example.
(b) Write Perl script to demonstrate the use of array functions. (6,6)

- IV. (a) What are user-defined functions (subroutines) in Perl? Explain with syntax and example.
(b) Write a PERL program to create an associative array of student names and marks and display students scoring above 75. (6,6)

UNIT - II

- V. (a) Demonstrate the use of pattern matching operators with examples.
(b) Explain quantifiers and boundary characters in regular expressions. (6,6)

P.T.O.

(2)

- VI. (a) Describe string functions: index, rindex, substr, length, reverse.
- (b) Write a program to create an array consisting of 5 elements i.e. ATG, CTA, AGT, ATGC, and TCA. Perform the following tasks:
- i) Print all elements of the array which starts with alphabet A
 - ii) Replace all the array elements which contains the letters ATG with UAC.
- (6,6)
- VII. (a) Write a Perl script to read a file containing DNA sequence and count the frequency of each character.
- (b) Explain CGI and how PERL is used to process HTML forms. (6,6)

x-x-x