Code No: R05012301

R05

I B.Tech Examinations,May/June 2012
COMPUTER PROGRAMMING FOR BIOTECHNOLOGISTS
Bio-Technology

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
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1. (a) Distinguish between structure and constructs in C.

   (b) Write a program using structure to read and write employee details of an organization. The field of the structure are: [4+12]

Field Name	Data Type
name	string
designation	string
salary	float
dept	string

2. Write a brief notes on the following:

   (a) Multi-processing operating system

   (b) Time sharing system

   (c) Multi tasking OS

   (d) Batch Processing.   [4+4+4+4]

3. Write a SBML program to count the no. of nucleotides in a sequences.   [16]

4. What is a data structure? Explain the various types of data structures with suitable example.   [4+12]

5. (a) What are the different types of memories? Describe their capabilities.

   (b) Compare and contrast the differences between ROM and RAM and give their applications.   [8+8]

6. (a) Write about hierarchical databases and network databases.

   (b) Write about relational databases and object oriented databases.   [8+8]

7. (a) Summarize the syntactic rules associated with the do-while statement. Compare it with the while statement.

   (b) Write a C program that will read a positive integer, determine and print its binary equivalent.

   (c) Write a program to generate 10 Fibonacci numbers using do....While loop.
                                                                       [4+6+6]

8. (a) Write in detail about different storage classes with an example.

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(b) Write a function that will round a floating-point number to an indicated decimal place. For example the number 17.457 would yield the value 17.46 when it is rounded off to two decimal places. [8+8]

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