Code No: R05012301 **R05** **Set No. 2**

I B.Tech Examinations,December 2010
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. Write a biojava program to construct codon table of amino acids. [16]

2. (a) How are initial values written in a one-dimensional array definition? Is the entire array be initialized? What value is automatically assigned to those array elements not explicitly initialized?

   (b) Write a program to calculate mean, variance and standard deviation of n numbers.
   S=$\sqrt{variance}$,
   where
   Variance = 1/n sum $(x_i - m)^2$
   m= mean of n numbers. [10+6]

3. Write short notes on:

   (a) Windows

   (b) Windows-NT

   (c) UNIX

   (d) DOS. [4+4+4+4]

4. What is a Circular Queue? Explain the various operations on Circular Queues with suitable algorithms. [4+12]

5. (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]

6. Distinguish between the following:

   (a) Actual and formal arguments.

   (b) Global and local variables.

   (c) Automatic and static variables. [5+5+6]

7. (a) What is a computer? With the help of a block diagram explain the parts of a computer.

(b) Describe the role of a CPU in computers. [8+8]

8. (a) Explain the different ways of passing structure as arguments in functions.

(b) Write a C program to illustrate the method of sending an entire structure as a parameter to a function. [6+10]

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Code No: R05012301 **R05** **Set No. 4**

I B.Tech Examinations,December 2010
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. Write short notes on:
   (a) Windows
   (b) Windows-NT
   (c) UNIX
   (d) DOS. [4+4+4+4]
2. (a) What is a computer? With the help of a block diagram explain the parts of a computer.
   (b) Describe the role of a CPU in computers. [8+8]
3. (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]
4. Distinguish between the following:
   (a) Actual and formal arguments.
   (b) Global and local variables.
   (c) Automatic and static variables. [5+5+6]
5. Write a biojava program to construct codon table of amino acids. [16]
6. What is a Circular Queue? Explain the various operations on Circular Queues with suitable algorithms. [4+12]
7. (a) Explain the different ways of passing structure as arguments in functions.
   (b) Write a C program to illustrate the method of sending an entire structure as a parameter to a function. [6+10]
8. (a) How are initial values written in a one-dimensional array definition? Is the entire array be initialized? What value is automatically assigned to those array elements not explicitly initialized?

(b) Write a program to calculate mean, variance and standard deviation of n numbers.
S=$\sqrt{variance}$,
where
Variance = 1/n sum $(x_i - m)^2$
m= mean of n numbers. [10+6]

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Code No: R05012301 **R05** **Set No. 1**

I B.Tech Examinations,December 2010
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. Write a biojava program to construct codon table of amino acids. [16]

2. (a) What is a computer? With the help of a block diagram explain the parts of a computer.
   (b) Describe the role of a CPU in computers. [8+8]

3. (a) Explain the different ways of passing structure as arguments in functions.
   (b) Write a C program to illustrate the method of sending an entire structure as a parameter to a function. [6+10]

4. (a) How are initial values written in a one-dimensional array definition? Is the entire array be initialized? What value is automatically assigned to those array elements not explicitly initialized?
   (b) Write a program to calculate mean, variance and standard deviation of n numbers.
   S=$\sqrt{variance}$,
   where
   Variance = 1/n sum $(x_i - m)^2$
   m= mean of n numbers. [10+6]

5. What is a Circular Queue? Explain the various operations on Circular Queues with suitable algorithms. [4+12]

6. Distinguish between the following:
   (a) Actual and formal arguments.
   (b) Global and local variables.
   (c) Automatic and static variables. [5+5+6]

7. Write short notes on:
   (a) Windows
   (b) Windows-NT
   (c) UNIX
   (d) DOS. [4+4+4+4]

8. (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]

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Code No: R05012301 **R05** **Set No. 3**

I B.Tech Examinations,December 2010
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. What is a Circular Queue? Explain the various operations on Circular Queues with suitable algorithms. [4+12]

2. (a) What is a computer? With the help of a block diagram explain the parts of a computer.
   (b) Describe the role of a CPU in computers. [8+8]

3. (a) How are initial values written in a one-dimensional array definition? Is the entire array be initialized? What value is automatically assigned to those array elements not explicitly initialized?
   (b) Write a program to calculate mean, variance and standard deviation of n numbers.
   S=$\sqrt{variance}$,
   where
   Variance = 1/n sum $(x_i - m)^2$
   m= mean of n numbers. [10+6]

4. Write a biojava program to construct codon table of amino acids. [16]

5. (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]

6. Write short notes on:
   (a) Windows
   (b) Windows-NT
   (c) UNIX
   (d) DOS. [4+4+4+4]

7. Distinguish between the following:
   (a) Actual and formal arguments.
   (b) Global and local variables.

(c) Automatic and static variables. [5+5+6]

8. (a) Explain the different ways of passing structure as arguments in functions.

(b) Write a C program to illustrate the method of sending an entire structure as a parameter to a function. [6+10]

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