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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- Oct 2019

B.Tech VII Semester

COURSE CODE: 12B1WCI734   MAX. MARKS: 25

COURSE NAME: C# and VB.Net

COURSE CREDITS: 03   MAX. TIME: One Hour Thirty Minutes

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. What are jagged arrays? Write a program in C# to discuss the concept of jagged arrays. Also, discuss how you will perform the binary search using System. Array class? **[5 Marks]**

2. Discuss how you will handle the variable number of parameters in a method with the help of an example. Also, explain the concept of out parameters. **[5 Marks]**

3. Write a C# program to explain the concept of this reference. Also, Differentiate between the static and const member of a C# class. **[5 Marks]**

4. Create a structure in C# called Item having the following data items. **[5 Marks]**
   ID

   Name

   Manufacturer

   DateOfManufacturing

   DateOfExpiry

   Price

   Following is the list of methods in the above structure.
   getdata(), which takes data from the user.

   putdata(), which displays data.

   a. Now, create an array of instances of the above structure.

   b. From the above array display the details of item having minimum price.

   c. Show the details of the items having price above the average price of all the elements.

   d. Show the list of items which have expired.

5. The value of nth item of a sequence is given by the following function $f(n) = f(n/2) + 2 \times f(n-1)$. The value of $f(1) = 1$ and $f(2) = 5$. Ask the user to enter the value of n and find the value of $f(n)$.

   [5 Marks]