GANPAT UNIVERSITY
B. TECH SEMESTER - IV (COMPUTER ENGINEERING/INFORMATION TECHNOLOGY)
REGULAR EXAMINATION APRIL – JUNE 2017
2CE405/2IT405: APPLICATION DEVELOPMENT TOOLS

Time: 3 hours

Total Marks: 60

Instructions: 1. Write each section in separate answer sheet.
2. Figure to the right indicates full marks.
3. Assume suitable data wherever necessary.

SECTION – I

Q – 1 (a)	Define following: Assembly, GAC, GC	[3]
(b)	List out strong programming features of C#.	[3]
(c)	Write a console application to check whether the given number is perfect or not. [Note: A number is perfect if its sum of all digits is same as multiplication of all digits.]	[4]

OR

Q – 1 (a)	What are the main components of .NET Framework? Explain any two.	[3]
(b)	Differentiate value type and reference type in C#.Net.	[3]
(c)	Write a console application to find GCD of two numbers using user defined function.	[4]

Q – 2 (a)	Explain Jagged Array with an example.	[3]
(b)	Differentiate callbyvalue, callbyreference and callbyoutput with an example.	[3]
(c)	Write a console application to check if string is palindrome or not. [Note: Do not use inbuilt string function]	[4]

OR

Q – 2 (a)	Differentiate String and StringBuilder with an example.	[3]
(b)	Explain foreach loop with an example.	[3]
(c)	Write a console application to find frequency of each element in an array.	[4]

Q – 3 (a)	What is scope of "protected internal" variable of C# class?	[2]
(b)	Give difference between is and as operator in C#.	[2]
(c)	What is boxing and unboxing?	[2]
(d)	Write a console application to convert a binary number into a decimal number using command Line Arguments.	[4]

SECTION – II

Q – 4 (a) Explain important properties and events of Windows Form. [3

(b) Explain MessageBox control. Write a code to display selected item from the ComboBox control to MessegeBox on click event of Button. [3

(c) Create one Form which has two TextBoxes to enter two numbers (range). Take one ListBox. Now find all the leap years between given range and display all leap years in ListBox. [4

OR

Q – 4 (a) Differentiate ShowDialog() and Show() method of Windows Form. [2

(b) Explain CheckBox with an example. [3

(c) Create one Form and take three TextBoxes for mobile number, password and confirm password. Write a C# code for following:(Use TextBox as your input) [5

    1. To validate mobile number.

    2. To check whether password & confirm password are same or not.

    3. To check each and every TextBox should not be blank.

Q – 5 (a) What is partial class? [2

(b) How will you display image in PictureBox on click of Button? [3

(c) Develop Windows Application for Text Editor using file handling concepts. Application should be able to create, edit the existing and save the text documents. [5

OR

Q – 5 (a) Differentiate between a TextBox control and RichTextBox control. [2

(b) How will you change Label's color by picking a color from the ColorDialogBox on click of Button? [3

(c) Develop Windows Application for Product Menu using ListView. Add items and price of product in ListView1. When user selects any item from ListView1 with its quantity, it should be displayed in ListView2. Now Total Price of existing items of ListView2 should be displayed in Label1. [5

[Note: Use required controls]

Q – 6 (a) What is the difference between ExecuteScalar(), ExecuteReader() and ExecuteNonQuery()? [2]

(b) Consider Book table with fields BookId, BookName, Author, Publisher and Description. Write Windows Form Application which insert all these data from TextBoxs to database table on click event of Button and display all table data in DataGridView. [4]

(c) Explain Life Cycle of ASP.NET Application. [4]

END OF PAPER