

- The weight of this test is 8% of the total course mark.
- This is a closed book, 40 minutes test.
- No questions are allowed during the test. If in doubt, write down your doubts and assumptions and proceed with your answer

LAST NAME	SOLUTIONS
FIRST NAME	SOLUTIONS
YORK ID#	SOLUTIONS
PRISM LOGIN	SOLUTIONS

		Max points	Awarded points
(I)	1	20	
	2	30	
	3	20	
(II)	1	10	
	2	10	
	3	10	
	4	10	
	5	10	
	6	10	
	7	10	
(III)	1	10	
	2	10	
	3	10	
	4	20	
	5	10	
Total		200	

(I) write code

Assume that we have a Button b1 declared and created.

- (a) write the code required to make b1 responsive to clicks. (i.e., hook up b1 to the event mechanism of C#). Make it so that a method b1_click is invoked upon clicking on b1.

Answer:

```
this.b1.Click += new System.EventHandler(this.b1_click);
```

- (b) Write the code for the method b1_click, including its header. Make the method to display “b1 clicked” in a message box.

Answer:

```
private void b1_click(object sender, System.EventArgs e)
{
    MessageBox.Show("b1 clicked");
}
```

- (c) Write the code required to create and start a thread that will execute a method MyMethod. You do not need to include the code for the “using” statements for the required namespaces, neither the code for method MyMethod. However, you do need to write the code that creates and starts the thread.

Answer:

```
Thread t = new Thread( new ThreadStart ( MyMethod) );
t.Start();
```

(II) – circle one of ‘true’ or ‘false’

1. [true, false] From a delegate declaration we can tell what is the related method’s signature. [A delegate declaration specifies name, params, return value].
2. [true, false] From a delegate declaration, we can tell what the underlying method’s implementation is. [see previous question]
3. [true, false] The `ListBOX` control allows only single selection, whereas the `CheckedListBOX` control allows multiple selection. [They both allow multiple selection.]
4. [true, false]. Deleting a parent node in a `TreeView` control deletes its child nodes as well.
5. [true, false]. The user can select only one item in the `ListView` control. [The user can select one or more items.]
6. [true, false]. An MDI child window cannot be maximized (enlarged) inside their parent [MDI child windows cannot be moved outside their parent window (but can be maximized inside it)]
7. [true, false]. An MDI child window can have MDI children. [Only an MDI parent window can have MDI children. An MDI parent window cannot be an MDI child.]

(III) – fill in the blank(s) in each statement

1. _____ **LinkLabels** _____ are typically used to display hyperlinks to other objects, files, or Web pages.
2. The _____ **Cascade** _____ window layout option makes all windows the same size and layers them so every title bar is visible (if possible).
3. Method _____ **Start** _____ of class **PROCESS** can open files and Web pages, much as can the **RUN** menu/dialog in Windows.

4. Class _____ **GroupBox**, _____ and class _____ **Panel** _____ help arrange components in a GUI and also provide logical group for radio buttons.
5. A _____ **Multicast** _____ event or delegate can call multiple methods.