

## PRACTICAL EXAMINATION PCS

**Date:**  
**Set: 00**

**Duration: 60 phút**  
**Total Mark: 100**

Create an application to manage information about **Pupil**. The application consists 4 file:  
**Person.cs, Pupils.cs, PupilsManagement.cs, Application.cs**

Or.No	Description	Marks
1	<b>Person.cs:</b> In this file, creating abstract class named <b>Person</b> . It is used to store the abstract method named <b>personalReport</b> .	20
2	<b>Pupils.cs:</b> Creating class named <b>Pupils</b> that is subclass of <b>Person</b> class. This class has some information: <ul style="list-style-type: none"><li>- Use Properties with read and write on:<ul style="list-style-type: none"><li>o private string <b>name</b>.</li><li>o private int <b>age</b>. (Accept value &gt; 0 and &lt;=18 only)</li><li>o private string <b>nationality</b>.</li></ul></li><li>- Override methods <b>personalReport</b>.</li></ul>	20
3	<b>PupilsManagement.cs:</b> <ul style="list-style-type: none"><li>- Declaring a delegate <b>Display</b> without any parameters.</li><li>- Declaring class named <b>PupilsManagement</b>. This class has some information:<ul style="list-style-type: none"><li>o Declaring a generic <b>List&lt;Pupils&gt;</b>.</li><li>o Methods:<ul style="list-style-type: none"><li>. <b>addPupils()</b>: Add new into list. (Hint: Input information and use use C# properties).</li><li>. <b>showPupils()</b>: Display information of all of Pupils in list. An error message is raised if no any pupils in list.</li></ul></li></ul></li></ul>	30
	<b>Application.cs:</b> <ul style="list-style-type: none"><li>- Main in class has a user interface and execute program.</li><li>- <b>Menu</b> show user's choice (call all PupilsManagement method by Display delegate) :<ul style="list-style-type: none"><li>o Add new pupils.</li><li>o Display all information.</li><li>o Quit.</li></ul></li><li>- Interact and display result.</li></ul>	30

*Note: All the marks are evaluated in the main method*