**Part 2 - Theory Questions**

1. What is the difference between the post and get methods in XHTML Forms?

**When using GET method to submit a form, all information you input will be concatenated in name/value pairs and will be separated by a character ‘&’(username=admin&password=123456). Also, all these information can be seen from the address bar on the internet browser. Therefore, it is not safe enough to send sensitive information in this way. Besides, there is a maximum length for a request in HTTP GET method, but it varies from different web servers and clients.**

**POST is a relatively secure way of sending sensitive or important information to a web server. All the information you send will be packed in a Form object and will not be displayed on the address bar, which is transparent to users. Compared with GET method, theoretically, it has no limited length for a request.**

2. Develop a basic test plan to test the Arabic to Roman numeral conversion form.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Step#** | **Step** | **Expected Result** | **Running Result** | **Comment** |
| **1** | **Input number 32** | **XXXII** | **XXXII** | **Correct** |
| **2** | **Input number 88** | **LXXXVIII** | **LXXXVIII** | **Correct** |
| **3** | **Input number 927** | **CMXXXVII** | **CMXXXVII** | **Correct** |
| **4** | **Input number 2420** | **MMCDXX** | **MMCDXX** | **Correct** |

3. Name and describe the functionality of 7 input “types” that can be used in XHTML forms

**<input type=”text” … />: Defines a single-line of text field to input information;**

**<input type=”radio” … />: Defines a radio button to allow users to choose only one option;**

**<input type=”checkbox” … />: Defines a checkbox to allow users to choose one or more options;**

**<input type=”button” … />: Defines a button to respond an event;**

**<input type=”image” … />: Defines an image to show a picture;**

**<input type=”password” … />: Defines a single-line of text field to input password;**

**<input type=”reset” … />: Defines a reset button to reset all form values to their default values;**

**<input type=”submit” … />: Defines a submit button to submit a form;**

**Part 3- Practical Questions**

4. Create a single form that contains XHTML and PHP to provide the following functionality that might be used by a teacher to allocate a grade to a students work. The web page should include a form that:

a. Has Labels and associated text input elements to collect students’ Id, First Name and Last Name.

b. A list that includes the following subject names “Java 1”, “Database Development”, Web design”, and Mobile Apps” that the teacher can select before allocating a mark”

c. A text input to allow entry of the mark (allowable values are 0 to 100)

d. A submit button to indicate that data entry is complete.

The Web page should then provide the following validation:

a. The PHP should validate the data entry to ensure a value is provided in each input.

b. That the mark is between 0 and 100

c. Display a message indicating any problems but retain the values in the page when the form is run a second time.

d. Once all validation has been passed the following processing should take place.

Processing:

e. Under the form items the script should output the following test to confirm the details. The students ID, Name, Subject, Mark, and Grade Where the Grades follow the rules set out below.

HD = 80 to 100, D = 70 to 79, C = 60 to 69, P = 50 to 59, N = 0 to 49