

Royal University of Bhutan  
Paro College of Education  
Autumn Semester Examination – 2013

**B.Ed(S) II - Introduction to Java Scripting (ICT205)**

**Full mark: 100**

**Time: 3 hrs**

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**Direction 1:** *Do not write for the first ten minutes. This time is to be spent in reading the questions. This question paper consists of three sections-A, B and C. You must read the questions carefully and ensure how many questions are required to answer from each section. Also must note time duration for writing each answer, and follow the instruction for each section.*

**Direction 2:**

- *Create a folder on the desktop with your student ID Number as folder name and save all your files inside this folder.*
  - *Save all the section A answers in a doc file.*
    - *E.g. Section \_A\_1: Answer*
  - *Save all the section B answers in a doc file.*
    - *E.g. Section \_B\_1: Answer*
  - *Save all your Section C answer as an html file with the file name as shown below:*
    - *E.g. Section\_C\_1.html*
  - *If you gave an external JS or CSS file, then it should be linked to html file and save as shown below:*
    - *Section\_C\_1.js or Section\_C\_1.css*
  - *Make sure to save your document after every 5 minutes.*
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**Section-A (15 × 1 = 15 marks)**

**There are 15 questions in this section. Each question carries 1 mark each.**

- a. What does `5 + 4 + "3"` evaluate to?  
i. 543      ii. 12      iii. 93      iv. 57
- b. How do `substring()` and `substr()` differ?  
i. one is not a method of a string object.  
ii. `substr()` takes three arguments, `substring()` only two.  
iii. only one accepts a desired string length as an argument.  
iv. besides spelling, nothing.
- c. Which of the following are capabilities of functions in JavaScript?  
i. returns a value  
ii. accept parameters and Return a value  
iii. accept parameters  
iv. throws error object
- d. How does JavaScript store dates in a date object?  
i. The number of milliseconds since January 1st, 1970  
ii. The number of days since January 1st, 1900  
iii. The number of seconds since Netscape's public stock offering.  
iv. None of the above
- e. If `par` is the DOM object for a paragraph, what is the correct syntax to change the text within the paragraph?  
i. `par.firstChild.nodeValue= "New Text";`  
ii. `"New Text"?`  
iii. `par.value="New Text";`  
iv. `par.nodeValue="New Text";`



l. How do you find the number with the highest value of x, y and z?

- i. `ceil(x,y,z)`
- ii. `top(x,y,z)`
- iii. `Math.ceil(x,y,z)`
- iv. `Math.max(x,y,z)`

m. How do you put a message in the browser's status bar?

- i. `status("put your message here")`
- ii. `window.status = "put your message here"`
- iii. `statusbar = "put your message here"`
- iv. `window.status("put your message here")`

n. If `x=103` & `y=9` then `x%=y`, what is the value of x after executing `x%=y`?

- i. 4
- ii. 3
- iii. 2
- iv. 5

o. What is the correct JavaScript syntax for opening a new window called "w3c"?

- i. `W3c=window.new("http://www.w3schools.com");`
- ii. `W3c=window.open("http://www.w3schools.com");`
- iii. `W3c=window("http://www.w3schools.com");`
- iv. `W3c=open.new("http://www.w3schools.com");`

### **Section-B (5 × 1 = 5 marks)**

**Answer all 5 questions from this section**

1. Why does the statement `5 * 1.015` not return 5.075?
2. What do the `parseInt("010")` statement return and why?
3. How do we reference computer memory in JavaScript?
4. What must be created before your customized objects' properties and method can be used?
5. Within a loop statement what does continue statement do?

### Section-C (80 marks)

**Answer all the questions from this section:**

1. Write JavaScript code that accepts five numbers from the user. Find out how many are divisible by 3 and display the count. [10]
2. Write HTML and JavaScript code that prompts user for their choice of recipe and accordingly display those recipe in a text box. (Restrict recipe to any three of your choice)[15]
3. Write JavaScript code that changes the font color of your name, which is inside Div element of your HTML code after every one second. [10]
4. Write JavaScript code that displays today's date in the format given below. [10]

**28<sup>th</sup>, November, 2013.**

5. Complete the following HTML and JavaScript code so that options values are filled as per the users choice. [15]

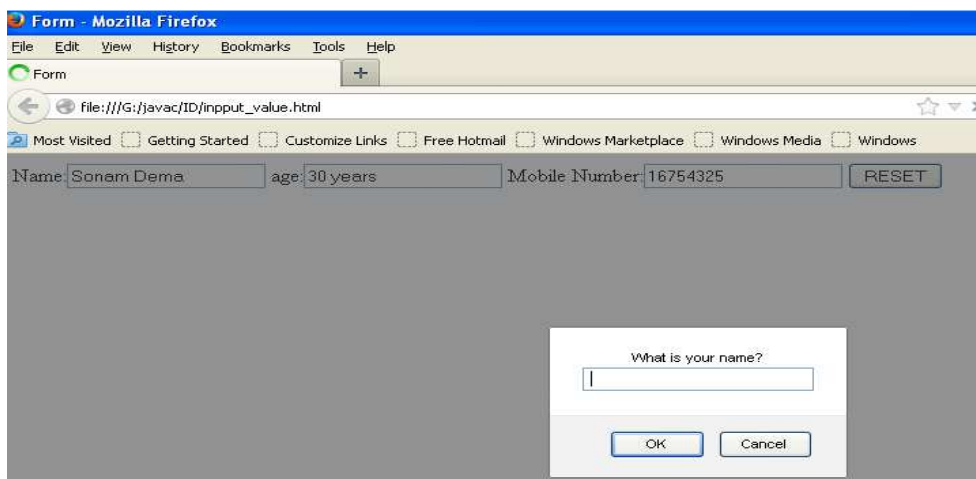
```
<html>
<head>
    <title>Select_example</title>
    <script type="text/JavaScript">
function display(){
var opt=parseInt(prompt("Key in the how many do you need"));
for(var i=0;i<.....;i++){
    var txt=prompt("key in your choices?");
    document.form_1.select_1.options[.....].text=.....;
}
}
    </script>
</head>
<body onLoad=.....>
    <form name=form_1>
        <h1> Choose one of them to Check the identity</h1>
        <select name=.....>
            <option></option>
            <option></option>
            <option></option>
            <option></option>
            <option></option>
        </select>
    </form>
</body>
</html>
```

```

        </select>
        <input type="text" name="output" size=20>
    </form>
</body>
</html>

```

6. This code is supposed to display Name, Age and Mobile Number in the text box, on user input as shown below: [10]



Identify errors in the following code and suggest ways to correct them.

```

<html>
    <head>
        <script type="text/JavaScript">
            function write(){
                var nem=prompt("What is your name?");
                var age=parseInt(prompt("what is your age?"));
                document.getElementById("ming").value=;
                document.getElementById().value=age+" years";
                document.getElementById("num").value=number;
            }
        </script>
        <title>Form</title>
    </head>
    <body onLoad="writeValue()">
        <form action="">
            Name:<input type="text" size="20">
            age:<input type="text" id="lo" size="20">
            Mobile Number:<input type="text" id="num" size="20">
            <input type="reset" value="RESET">
        </form>
    </body>
</html>

```

7. Create an object called **Circle** with two properties **radius** and **PI**. Set the value of **PI** to 3.14159. Next add two methods to this object. [10]
- a. A method called **area** which returns the area of a circle.
  - b. Another method called **circum** which calculates the circumference of a circle.