

- a) Develop and demonstrate, using JavaScript script, a XHTML Document that collects the USN (the valid format is: A digit from 1 To 4 followed by two upper-case characters followed by two digits Followed by two upper-case characters followed by three digits; no Embedded spaces allowed) of the user. Event handler must be Included for the form element that collects this information to validate the input. Messages in the alert windows must be produced when errors are detected.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<script type="text/javascript">
    function isNumeric(elem)
    {
        var numericExpression = /[1-4][A-Z][A-Z][0-9][0-9][A-Z][A-Z][0-9][0-9][0-9]/;
        var str = elem.value;
        if(str.length > 10)
        {
            alert('please enter a valid usn number');
            elem.focus();
            return false;
        }
        if(elem.value.match(numericExpression))
        {
            document.write("<body bgcolor='CYAN'");
            document.write("<b> It is valid USN number </b>");
            document.write("</body>");
            return true;
        }
        else
        {
            alert('please enter valid usn number');
            elem.focus();
```

```

        return false;
    }
}
</script>
</head>
<body bgcolor="pink">
<center><br /><br />
<form>
    ENTER THE USN NUMBER:
    <input type='text' id='numbers' />
    <input type='button' onclick="isNumeric(document.getElementById('numbers'))"
    value='Check Field' />
</form>
</center>
</body>
</html>

```

- b) Modify the above program to get the current semester also (Restricted to be a number from 1 to 8)

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<script type="text/javascript">
    function isNumeric(elem,sem1)
    {
        var numericExpression = /[1-4][A-Z][A-Z][0-9][0-9][A-Z][A-Z][0-9][0-9][0-9]/;
        var semester = /^[1-8]$/;
        var str = elem.value;
        var str2=sem1.value;
        if(str.length > 10)
        {

```

```

        alert('please enter the valid university seat number');

        elem.focus();

        return false;
    }

    if(elem.value.match(numericExpression))
    {
        if(sem1.value.match(semester))
        {
            document.write("<body bgcolor='CYAN'");

            document.write("<b>You have entered a Valid USN and Semester </b>");

            document.write("</body>");

        }
        else {
            alert('please enter the valid semester number');

        }
    }
    else {
        alert('please enter valid usn number');

        elem.focus();

        return false;

    }
}

</script>

</head>

<body bgcolor="pink">

<center><br /><br />

<form>

    PLEASE ENTER THE USN NUMBER: <input type='text' id='numbers'/><br>

    ENTER THE SEMESTER: <input type='text' id='sem'><br>

    <input type='button'

    onclick="isNumeric(document.getElementById('numbers'),document.getElementById('sem'))"

    value='Check Field' />

</form>

```

</center>

</body>

</html>