# <u>Programming for the web – A2 9626</u>

1.	Nov/2021/Paper_31/No.10  JavaScript is an interpreted language that can be used on web pages. Runtime errors, called exceptions, can occur during the execution of JavaScript code.
	Explain how exceptions can be handled during the execution of JavaScript code.
	roa
	[6]

Exp	Explain why it is considered good practice when coding in JavaScript to:		
(a)	place all declarations at the start of each script or function		
		[2]	
(b)	initialise variables when first declared		
(c)	avoid using eval () to run a string as code	i-,	
(-)			
	•••		
		[1]	
(d)	always declare local variables.	١٠.	
(ω)	always assials local variables.		
		[1]	
		ι'.	

Nov/2021/Paper\_32/No.3
 JavaScript is a programming language used within HTML on web pages.

3.	Nov/2020/Paper_33/No.10
	JavaScript is an interpreted language that can be used on web pages. Runtime errors, called exceptions, can occur during the execution of JavaScript code.
	Explain how exceptions can be handled during the execution of JavaScript code.

4.	June/2021/Paper_31/No.10  Jasmine is using JavaScript on her web pages to provide interactivity. She has encountered some runtime errors during the testing of her JavaScript code.
	She has written some code including window.onerror = function (msg, url, line)
	The onerror () event handler will trap errors.
	Describe how this can help Jasmine locate the mistakes in the rest of her code.
	<i>7</i> -
	16

Jasmine is using JavaScript on her web pages to provide interactivity. She has encountered some runtime errors during the testing of her JavaScript code.	ne
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Describe how this can help Jasmine locate the mistakes in the rest of her code.	
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5. June/2020/Paper\_33/No.10

(a)	Exp	lain the meanings of these terms when referring to JavaScript objects.	
	(i)	string	
			[1]
	(ii)	global	
			[1]
	(iii)	regular expression	
			[1]
	(iv)	operator	
			[1]
	(v)	statement	
			[1]

**6.** Nov/2020/Paper\_32/No.1

### **7.** Nov/2020/Paper\_33/No.5

(a) The JavaScript code shown in Fig. 5.1 adds together 12 and 6 to produce the result 18. Line numbers are shown only for reference purposes.

```
<html>
1
2
  <head>
3 </head>
4 <body>
5
  <br>
6
  <h1>A Web Page</h1>
7
   A Paragraph
8
   <script>
9
           var x, y;
10
           x=12;
11
           y=6;
12
           window.alert(x + y);
13 </script>
14 </body>
15 </html>
```

X=12;	
y=6;	
<pre>window.alert(x + y);</pre>	<b>,0</b>
N/ ITOMES	
Fig. 5	1
Describe how the script operates to display	the result on the screen.
	<i>?</i>
<b>A</b>	
<b>~</b>	

JavaScript uses the display capabilities of web browsers' windows to output the results of its scripts.

(b)	Explain why JavaScript uses a browser's windows to display results of running scripts.				
	[1]				



Whe	When creating letters by mail merge, mail merge rules can be used to automatically select data from sources for inclusion in the letters.			
Des	cribe the use of the following mail merge rules to select data.			
(a)	IfThenElse			
	rei			
	[3]			
(b)	Next Record If			

......[3]

Skip Record If		

(c)



### **9.** Mar/2020/Paper\_32/No.9

In JavaScript, conditional statements can be used to carry out specific actions based upon different conditions. The value of the variable 'age' is entered into a web page and collected by the HTML code of the page. The function in Fig. 9.1 uses the 'if else' and 'else if' conditional statements to test the value of the variable 'age'. Line numbers are shown only for your convenience when referring to the code.

```
function myFunction() {
1
2
     var statement;
     var age = document.getElementById("age").value;
3
4
   if (age < 10) {
5
     statement = "You are not old enough to go to this school";
6
   } else if (age < 18) {</pre>
7
     statement = "You can go to this school";
8
   } else {
     statement = "You are too old to go to this school";
9
10 }
```

Fig. 9.1

(a)	Explain, with reference to the code in the function, how the 'if else' and 'else if' statements operate to provide the appropriate statement when an age is entered into the web page and collected by the HTML code.
	Co
••••	
	[6]

(b)	The code could have been written using the 'switch' function, e.g. lines 4 to 7 could have been:
	<pre>4  switch(true) { 5   case age &lt; 10: 6    statement = "You are not old enough to go to this school"; 7  break;</pre>
	with additional lines for the other conditions.
	Explain the drawbacks of using the 'switch' function.
	NO.
	69
	[4]

June/	/2020/Paper_31/No.8
_	el is creating a website which uses JavaScript. He uses scripts to manipulate text held in ML elements so that it can be displayed on his pages.
(a)	Explain what is meant by an 'HTML element'.
	[2]
1 2 3 4 5	<html> <body> <h2>Nigel uses this JavaScript to change HTML</h2></body></html>
7 8	<pre>Nigel's original text was here</pre>
9 10 11 12	<pre><script> document.getElementById("a1").innerHTML = "Nigel changed this!"; </script></pre>
13 14 15 16	<pre>The paragraph above was changed by Nigel's script.  </pre>
(b)	Explain, in detail, how this JavaScript would change what is displayed on the web page.

#### **11.** June/2020/Paper\_32/No.10

A teacher is creating a web page for his students to find out their result, Merit, Pass or Fail, by entering their test score. The teacher has chosen to use the JavaScript switch function to examine the test score entered by the student and report the result on the web page.

The code for the web page is shown in Fig. 10.1. The lines are numbered only for your convenience.

```
1
2
   <html>
3
   <body>
4
5
   <input id="myTscore" type="number" value=0>
6
   <button onclick="tscorelookup()">Check Your Result by entering your
   test score 0-100 </button>
7
   8
9
   <script>
10 function tscorelookup(){
11 var report;
12 var result = document.getElementById("myTscore").value;
13
14 switch(true) {
15 case result < 0:
16 report = "You cannot score a mark below
17 break;
18 case result > 100:
19 report = "You cannot score a mark above 100";
20 break;
21 case result >= 40:
22 report = "Your result is
23 break;
24 case result >= 20:
25 report = "Your result
26 break;
27 case result <
28 report = "Your result is a Fail";
29 break;
30 default:
31 report = "Please enter a valid mark";
32 }
33 document.getElementById("myresult").innerHTML = report;
34 }
35 </script>
36
37 </body>
38 </html>
```

Fig. 10.1

The HTML code in lines 5 to 7 collects the test score entered by the student and, when the button is clicked, makes the test score available to the JavaScript code that starts at line 9.			
Describe, in detail, how the JavaScript code works to handle a test score of 18.			
[8]			

## **12.** June/2020/Paper\_33/No.8

Nigel is creating a website which uses JavaScript. He uses scripts to manipulate text held in HTML elements so that it can be displayed on his pages.

(a)	Explain what is meant by an 'HTML element'.
	[2]
	el uses this code to manipulate the text on his page. The line numbers are shown only for prence purposes.
1	
2	<html></html>
3 4	<body></body>
5 6	<h2>Nigel uses this JavaScript to change HTML</h2>
7 8	<pre>Nigel's original text was here</pre>
9	<script></td></tr><tr><th>10</th><th><pre>document.getElementById("al").innerHTML = "Nigel changed this!";</pre></th></tr><tr><td>11</td><td></script>
12	( SELPO
13	The paragraph above was changed by Nigel's script.
14	
15	
16	
(b)	Explain, in detail, how this JavaScript would change what is displayed on the web page.
	(2)