



Sri Lanka Institute of Information Technology

B. Sc. Special Honours Degree/ Diploma  
in  
Information Technology

Final Examination  
Year 1, Semester II (2016)

IT104 - Internet Technology and Applications

Duration: 02 Hours

Instruction to Candidates:

- This paper has 03 questions. Answer all questions.
- Provide answers on the answer booklet given.
- Total marks 100.
- This paper contains 05 pages including the Cover page.

**Question 1****(20 Marks)**

- a) "You cannot trust the internet" Do you agree with the statement? Justify using at least three examples. (4 marks)
- b) What is IP address? List one advantage of having IP address over domain name? (3 marks)
- c) Illustrate how DNS resolution works with the aid of a diagram. (4 marks)
- d) Briefly explain 3-Tier Architecture? (3 marks)
- e) Name two different types of Top Level Domains. (2 marks)
- f) State the most suitable type of network (intranet or extranet) to achieve the following tasks. (4 marks)
- i) KAT Engineering & Constructions is a famous construction company which is need to expand their network so that all authorized suppliers across the country can see the stock inventory of the company.
  - ii) Mr. Edward Norton, who is going to open his own software development company, wants to give the access to all junior staff so that they will be able to access all of company financial reports and forecasts for the year.
  - iii) As a stress relief method of the employees, CEO of the WapMeta (Pvt.) Ltd has decided to give the permission to play online games.
  - iv) A few employees in CBS solutions which works in the different departments need to working on the same document so that they can avoid the conflicts.

**Question 2****(60 Marks)**

- a) Study the given source code in Appendix A ("myCalculator.html"). Attach Appendix A to the answer booklet given and write codes (HTML.CSS or JavaScript) according to the tasks given in the table below (i – xi).

myCalculator.html Line No.	Task	
38	i) Add "*--- Simple Calculator ---*" as a H3 type header.	3 marks
45	ii) Add a paragraph with an id "result"	3 marks
39,40	iii) Add two text boxes with ids no1 and no2	6 marks
41-44	iv) Add four buttons with ids as add,sub,mul and div.	8 marks
	v) Call the JavaScript function "simple_calculator" in each button click event by passing the individual button ids namely add,sub,mul or div.	8 marks
9	vi) Start a javascript code block	3 marks
10	vii) Declare the javascript function "simple_calculator" to accept the button id.	3 marks
14 - 15	viii) Assign textbox input values (no1 and no2) in to JavaScript variables num1 and num2.	6 marks
16-17	ix) Convert textbox inputs in to integers	4 marks
19-30	x) Perform the relevant calculation addition, subtraction, multiplication or division and generate the result.	12 marks
33	xi) Display the calculated result in the paragraph (result) as an " inner HTML".	4 marks

Hint;

The parseInt() function parses a string and returns an integer.

**Question 3****(20 Marks)**

- a) What is **Multichannel Marketing**?  
(2 marks)
- b) Select the most suitable e-commerce type for the following
- i) Mark buying a pendrive from Tom on eBay
  - ii) Kingston selling memory cards to Dell
  - iii) Dell selling me a laptop
  - iv) Government can use e-commerce to provide different welfare schemes, different application forms to the citizens.
- (4 marks)
- c) Differentiate **cryptography** vs. **Cryptanalysis**?  
(6 marks)
- d) Draw the architecture of cryptosystem.  
(8 marks)

**End of the Question Paper**

**Appendix A** – Source code of myCalculator.html

1.	<html>
2.	<head>
3.	<style>
4.	p{
5.	color:white;
6.	background-color:black;
7.	}
8.	</style>
9.	
10.	
11.	var num1=0;
12.	var num2=0;
13.	var result=0;
14.	
15.	
16.	
17.	
18.	switch(op) {
19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	
31.	default:
32.	}
33.	
34.	}
35.	</script>
36.	</head>
37.	<body>
38.	
39.	
40.	
41.	
42.	
43.	
44.	
45.	
46.	</body>
47.	</html>