Roll No.

- Please check that this question paper contains **7** printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains **16** questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minute time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

FOUNDATION OF INFORMATION TECHNOLOGY

Time allowed : $2\frac{1}{2}$ hours   *Maximum Marks : 40*

General Instructions : ***All*** *questions are* ***compulsory****; however internal choices have been given in few questions.*

SECTION A

1. Multiple Choice Questions : *1×5=5*

   (a) Which of the following are *not* the attribute of <A> tag ? *1*
      - (i) NAME
      - (ii) TITLE
      - (iii) HREF
      - (iv) SRC

   (b) Heading tags in HTML are *1*
      - (i) H1....H6
      - (ii) H1....H5
      - (iii) H1....H10
      - (iv) H1....H8

   (c) Which of the following is/are a popular Web Browser(s) ? *1*
      - (i) Firefox
      - (ii) Safari
      - (iii) Navigator
      - (iv) All of the above

   (d) Which of the following is *not* true about XML ? *1*
      - (i) Its full form is Extensible Markup Language
      - (ii) New tags can be defined in XML as per the requirement
      - (iii) XML is used for data sharing
      - (iv) XML tags are not case sensitive

   (e) M in HTML stands for *1*
      - (i) MANAGEMENT
      - (ii) MARKUP
      - (iii) MODIFIED
      - (iv) MACHINE

2. Mention the suitable HTML tag and the attribute to insert an image named globe.jpg in the background of a webpage. *1*

3. Write the URL of any one e-Governance website. *1*

4. What is the full form of URL ? *1*

5. Briefly discuss the role of a web browser in Internet surfing. *1*

6. What are e-Groups ? *1*

SECTION B

7. Differentiate between e-Mail Spamming and Computer Worms. *2*

8. Briefly explain the significance of Video Conferencing. *2*

9. Shreya, has just started learning HTML. She has made a list of few HTML tags which she will be using in creating a web page but by mistake she has mentioned wrong attributes in front of the tags. Help her in selecting correct attributes from 'Column B' for the tags given in 'Column A'. *2*

Column A (TAGS)	Column B (ATTRIBUTES)
BODY	NAME
IMG	TEXT
OL	ALT
A	START

OR

Mention any two attributes of <IMG> tag along with their significance.

10. Explain the terms Data and Database briefly.　　　*2*

<div align="center">**OR**</div>

Observe the field names of a database given below in 'Column A' related to train reservation. Write suitable data types for each field in front of the respective field in 'Column B'.

Column A (Field Name)	Column B (Data Type)
PassengerName	
Age	
Gender	
MobileNo	

11. Mr. Ayush, Sports Captain of the school, has to display sequence of events of the upcoming Annual Sports Day on the school website. Help him in writing HTML code to create a table in HTML as shown in the given screenshot :　　　*3*

ANNUAL SPORTS DAY – SEQUENCE OF EVENTS		
8 : 00 AM – 9 : 00 AM	9 : 00 AM – 1 : 00 PM	1 : 00 PM – 2 : 00 PM
CULTURAL EVENTS	TRACK EVENTS	PRIZE DISTRIBUTION

12. Discuss the role of web servers and web clients briefly.　　　*3*

13. Sumit has to create following list through HTML as a part of his social science project. Help him in writing HTML code for the same.　　　*3*

<div align="center">ASIAN COUNTRIES AND THEIR CAPITALS</div>

1. INDIA
    ◦ New Delhi
2. PAKISTAN
    ◦ Islamabad
3. THAILAND
    ◦ Bangkok

14. What do you understand by the term "Computer Virus" ? Mention any two symptoms which may confirm the virus infection. *3*

OR

Suggest any three precautionary measures which one should adopt while being on the social networking websites.

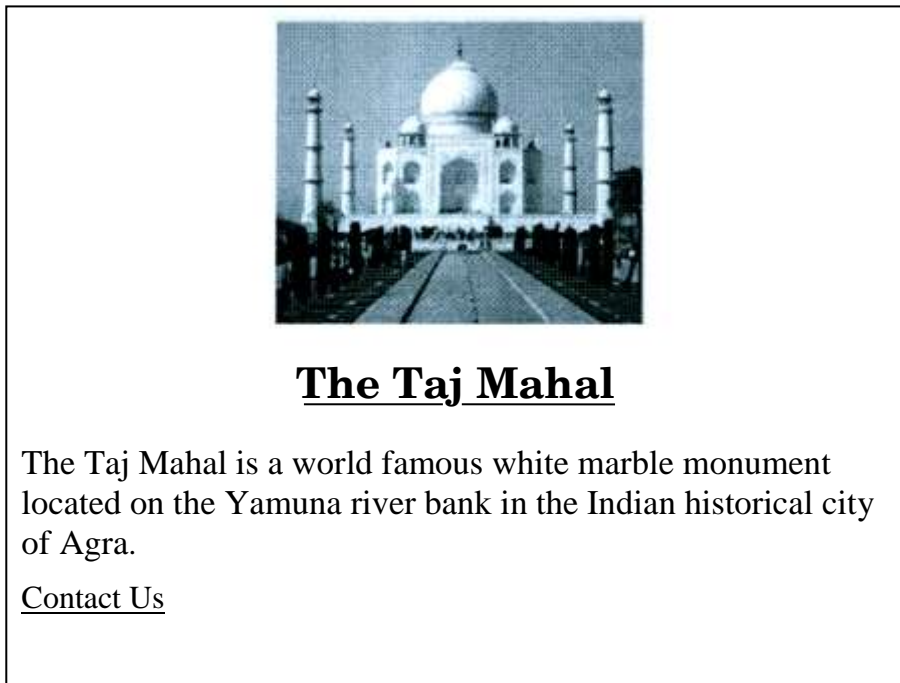**15.** Draw the XML tree for the code given below. Also identify and name the root element. *5*

<LIBRARY>

<BOOKS>

<CLASSICS>

<Author>Albert Phill</Author>

<Name>Beyond the moon</Name>

</CLASSICS>

</BOOKS>

<MAGAZINE>

<SPORTS>

<Name>Sportstar</Name>

<Frequency>Fortnightly</Frequency>

</SPORTS>

</MAGAZINE>

</LIBRARY>

16. Attempt **any one** question out of the given two :   *5*

Sushila, a web designer working with Global Designers, is supposed to design a web page as shown below :

The Taj Mahal

The Taj Mahal is a world famous white marble monument located on the Yamuna river bank in the Indian historical city of Agra.

Contact Us

Write the HTML code to design the above shown web page considering the specifications as given below :

(a) Background colour of the page should be pink and all the hyperlinked text should be green in colour.

(b) Image named taj.jpg should be placed in the centre of the webpage.

(c) Heading "The Taj Mahal" should be first level of the heading and underlined.

(d) Paragraph should have following formatting styles applicable :
Colour-Blue
Size-5
Font style-Times New Roman

(e)   At the bottom of the page, "Contact Us" text should be linked with admin@taj.com email id.

OR

Differentiate between Container and Empty elements in HTML. Also give any two examples of HTML tags from each category.

Strictly Confidential: (For Internal and Restricted use only)
Secondary School Examination
March 2019
Marking Scheme – Foundation of Information Technology (SUBJECT CODE 165)
(PAPER CODE – 53)

General Instructions:

1. You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and the teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully. **Evaluation is a 10-12 days mission for all of us. Hence, it is necessary that you put in your best efforts in this process.**

2. Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one's own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. **However, while evaluating, answers which are based on the latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and marks be awarded to them.**

3. The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.

4. If a question has parts, please award marks on the right-hand side for each part. Marks awarded for different parts of the question should then be totaled up and written in the left-hand margin and encircled.

5. If a question does not have any parts, marks must be awarded in the left hand margin and encircled.

6. If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out.

7. No marks to be deducted for the cumulative effect of an error. It should be penalized only once.

8. A full scale of marks 40 (example: 1-40) has to be used. Please do not hesitate to award full marks if the answer deserves it.

9. Every examiner has to necessarily do evaluation work for full working hours i.e. 8 hours every day and evaluate 25 answer books per day.

10. Ensure that you do not make the following common types of errors committed by the Examiner in the past:-
    a. Leaving the answer or part thereof unassessed in an answer book.
    b. Giving more marks for an answer than assigned to it.
    c. Wrong transfer of marks from the inside pages of the answer book to the title page.
    d. Wrong question wise totaling on the title page.
    e. Wrong totaling of marks of the two columns on the title page.
    f. Wrong grand total.
    g. Marks in words and figures not tallying.
    h. Wrong transfer of marks from the answer book to online award list.
    i. Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.)
    j. Half or a part of answer marked correct and the rest as wrong, but no marks awarded.

11. While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as (X) and awarded zero (0) Marks.

12. Any unassessed portion, non-carrying over of marks to the title page, or totaling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also of the Board. Hence, in order to uphold the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.

13. The Examiners should acquaint themselves with the guidelines given in the Guidelines for spot Evaluation before starting the actual evaluation.

14. Every Examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totaled and written in figures and words.
15. The Board permits candidates to obtain a photocopy of the Answer Book on request in an RTI application and also separately as a part of the re-evaluation process on payment of the processing charges.

Specific Instructions:
1. All answers provided in the Marking scheme are SUGGESTIVE.
2. Examiners are requested to accept all possible alternative correct answer(s).
3. Wherever HTML Tags are asked – ignore the format/additional arguments if so given in the answer(s)
4. Wherever multiple answers are suggested, they are in order of appropriateness

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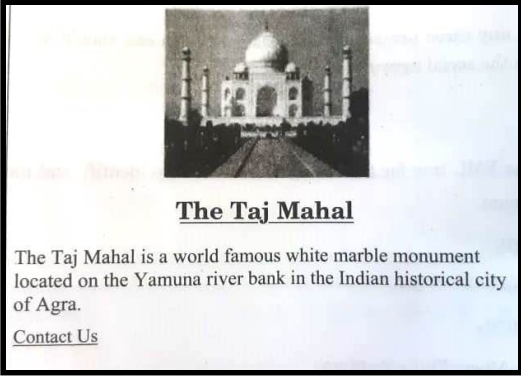|		SECTION A	
1		**Multiple Choice Questions:**	
	(a)	Which of the following are not the attribute of <A> tag? (i) NAME (ii) TITLE (iii) HREF (iv) SRC	1
	Ans	**(iv) SRC OR (ii) TITLE OR (iv) and (ii)**	
		(1 Mark for writing correct answer)	
	(b)	Heading tags in HTML are (i) H1…..H6 (ii) H1….H5 (iii) H1….H10 (iv) H1….H8	1
	Ans	**(i) H1….H6**	
		(1 Mark for writing correct answer)	
	(c)	Which of the following is/are a popular Web Browser(s)? (i) Firefox (ii) Safari (iii) Navigator (iv) All of the above	1
	Ans	**(iv) all of the above (or) (i) or (ii) or (iii)**	
		(1 Mark for writing correct answer)	
	(d)	Which of the following is not true about XML? (i) Its full form is Extensible Markup Language (ii) New tags can be defined in XML as per the requirement (iii) XML is used for data sharing (iv) XML tags are not case sensitive	1
	Ans	**(iv)** XML tags are not case sensitive	
		(1 Mark for writing correct answer)	
	(e)	M in HTML stands for (i) MANAGEMENT (ii) MARKUP (iii) MODIFIED iv) MACHINE	1
	Ans	**(ii) MARKUP**	
		(1 Mark for writing correct answer)	
2		Mention the suitable HTML tag and the attribute to insert an image named globe.jpg in the background of a webpage.	1
	Ans	**Tag is <body>** **Attribute is background**	

		OR `<body background="globe.jpg">` *(½ Mark for body tag)* *(½ Mark for background attribute)*	
3		Write the URL of any e-governance website.	1

	Ans	`india.gov.in, indianrail.gov.in, ssc.nic.in,`
		`mha.nic.in,eis.ernet.in, rbi.org.in, mca.gov.in,`
		`upsc.gov.in, incometaxindia.gov.in`
		OR
		any URL with part extension .gov
		OR
		any URL with part extension .org
		OR
		any URL with part extension .nic
		
		NOTE: the URL preceded with http:// or https:// or www. should be accepted	

		(1 Mark for writing correct answer)	
4		What is the full form of URL?	1
	Ans	**Uniform Resource Locator**	
		(1 Mark for writing correct answer) *OR* *(½ Mark for any two correct expanded words of URL)*	
5		Briefly discuss the role of a web browser in Internet surfing.	1
	Ans	**A web browser is a software that navigates through world wide web and displays web page**	1
		(1 Mark for writing correct answer) *OR* *(1 Mark for writing answer conveying proper role of a web browser)*	
6		What are e-Groups?	1
	Ans	**E-groups are online social networking services which allow a user to create, post, comment and read information of their interest**	1
		(1 Mark for writing correct answer) *OR* *(1 Mark for writing answer conveying proper explanation of e-Groups)*	
		SECTION 'B'	
7		Differentiate between e-mail Spamming and Computer Worms.	2
	Ans	**Spam: It refers to any unsolicited, unwanted email by an identified or unidentified source.** **Computer Worms: It is a program capable of reproducing and spreading itself to another computer system, usually by means of a computer network. It is a type of malware.**	2
		(1 mark for explaining e-mail spamming) *OR* *(1 Mark for writing answer conveying proper explanation of spamming)* *(1 mark for explaining Computer Worms)* *OR* *(1 Mark for writing answer conveying proper explanation of Worms)*	
8		Briefly explain the significance of Video Conferencing.	2
	Ans.	**A two-way video conversation among multiple participants**	
		(2 marks for explaining the significance of video conferencing) *OR* *(2 marks for writing answer conveying similar significance)* *OR* *(1 mark for writing example of video conferencing such as Skype, Facetime,*	

		Hangout, Duo, Messenger, Whatsapp Videocall etc.)	
9		Shreya, has just started learning HTML.She has made a list of few HTML tags which she will be using in creating a webpage but by mistake she has mentioned wrong attributes in front of the tags.Help her in selecting correct attributes from 'Column B ' for the tag given in 'Column A'	2

Column A (TAGS)	Column B (ATTRBUTES)
BODY	NAME
IMG	TEXT
OL	ALT
A	START

	Ans	BODY → TEXT IMG → ALT OL → START A → NAME	
		(½ mark each)	
		OR Mention any two attributes of <IMG> tag along with their significance.	
	Ans	Any two of the following: SRC - To locate the file or picture ALT - To specify the alternate text HEIGHT - To specify the height of the image WIDTH - To specify the width of the image ALIGN - To place the image against left /right/top/middle/bottom margin. BORDER - To specify the border width around the image HSPACE - To specify the whitespace on the left and right of the image VSPACE - To specify the whitespace on the top and bottom of the image SIZES - To specify image sizes for different page layouts SRCSET - To specify URL of image to use in different situations CROSSORIGIN - To allow images from 3rd party sites USEMAP - To specify an image as a client side image map	
		(½ mark each for any two correct attributes) *(½ mark each for correct significance or examples of any two attributes)*	
10		Explain the term Data and Database Briefly.	2
	Ans	**Data:** It is raw facts and figures. **OR** Numeric/text/image/audio/video values used in computers. **Database:** It is an organized collection of related data or information. It arranges information in the form of table. **OR** Collection of data which can be accessed / managed /queried in a systematic manner	
		(1 mark for writing correct explanation/definition/example of Data) *(1 mark for writing correct explanation/definition/example of Database)*	
		OR Observe the field names of a database given below in 'Column A' related to train reservation. Write suitable data types for each field in front of the respective field in 'Column B'.	2

Column A (Field Name)	Column B (Data Type)
PassengerName	

Age	
Gender	
MobileNo	

Ans.		2

Column A (Field Name)	Column B (Data Type)
PassengerName	Text /char/varchar/varchar_ignorecase
Age	number/numeric/integer/decimal
Gender	Text /char/ varchar/varchar_ignorecase
MobileNo	numeric/integer/number/decimal/text /varchar/varchar_ignorecase

(½ mark for correct Data type for each field)

11		Mr. Ayush Sports Captain of the school,has to display sequence of events of the upcoming Annual Sports Day on the school website.Help him in writing HTML code to create a table in HTML as shown in the given screenshot:	3

ANNUAL SPORTS DAY - SEQUENCE OF EVENTS		
8:00 AM - 9:00 AM	**9:00 AM - 1:00 PM**	**1:00 PM - 2:00 PM**
CULTURAL EVENTS	**TRACK EVENTS**	**PRIZE DISTRIBUTION**

Ans.			3

```
<HTML>
<BODY><TABLE BORDER = "1">
<TR> <TH COLSPAN= "3" > ANNUAL SPORTS DAY - SEQUENCE OF
EVENTS</TH></TR>
<TR ALIGN="CENTER"> <TD> 8:00 AM - 9 : 00 AM</TD>
<TD> 9 : 00 AM - 1 : 00 PM</TD>
<TD> 1 : 00 PM - 2 : 00 PM</TD></TR>
<TR ALIGN="CENTER"><TD> CULTURAL EVENTS</TD>
<TD>TRACK EVENTS</TD>
<TD>PRIZE DISTRIBUTION</TD></TR>
</TABLE>
</BODY>
</HTML>
```

(½ mark each for table tag and border)
(½ mark for colspan with TH/TD tag)
(½ mark for TR)
(½ mark for TD)
(½ mark for proper closing of all tags)

12		Discuss the role of web servers and web clients briefly.	3
	Ans.	**WEB SERVER:** It is a computer program that serves the requested HTML pages or web pages. It uses client /server model and world wide web's http and serves the files from websites to web users. **For example Apache,IIS,Sun java system .** **Web client:** Web browser is a web client. It is the requesting program that navigates through the WWW and displays web pages. **For example google chrome, navigator, firefox.** **Note: Examples are optional**	
		(1½ mark each for writing role of web server and web client) *OR* *(1 mark for writing a correct example of web server)* *(1 mark for writing a correct example of web client)*	

13		Sumit has to create following list through HTML as a part of his social science project.Help him in writing HTML code for the same. ASIAN COUNTRIES AND THEIR CAPITALS 1. INDIA o New Delhi 2. PAKISTAN o Islamabad 3. THAILAND o Bangkok	3

	Ans.	<pre><HTML>
		<BODY>ASIAN COUNTRIES AND THEIR CAPITALS
		<OL>
		  <LI> INDIA
		    <UL TYPE="circle">
		      <LI> New Delhi
		    </UL><LI>PAKISTAN
		    <UL TYPE = "circle">
		      <LI>Islamabad
		    </UL>
		  <LI>THAILAND
		    <UL TYPE="circle">
		      <LI> Bangkok
		    </UL>
		</OL>
		</BODY>
		</HTML></pre>
			3

		(1 mark for proper usage of OL tag with LI) *(1 mark for proper usage of UL tag with type → attribute)* *(1 mark for HTML structure with BODY and the heading)* *NOTE:* ● *Marks to be awarded for opening multiple OL tags correctly using START attributes* ● *Only ½ Mark to be given if <HTML> or <BODY> is used correctly.*	
14		What do you understand by the term "Computer Virus"? Mention any two symptoms which may confirm the virus infection.	3
	Ans.	A computer virus is a malicious software that attaches itself to other programs in order to alter their behaviour, often in a harmful way. Symptoms which may confirm the virus infection (Any two): 1. An antivirus software detects the presence of a computer virus 2. Slow startup and slow computer performance 3. Files get duplicated 4. Files get deleted by itself 5. Computer shuts down by itself 6. Unexpected behaviour of any executable program	
		(1 mark for correct definition/explanation of computer virus) *(1 mark each for any two similar type of symptoms)*	
		OR Suggest any three precautionary measures which one should adopt while being on the social networking websites	3
	Ans.	Precautionary measures: (Any three) 1. Regularly change the password 2. Do not post/share personal information like mobile no, address, family details, bank details etc anywhere online. 3. Avoid responding to unknown people.	

		4. Do not log on to your social networking page from a public network 5. Do not share or spread unconfirmed information to anyone 6. Your conversation should not hurt sentiments of any person/group/community/institution/organisation 7. Do not get influenced by rumours spread online.	
		(1 mark each for writing any three correct precautionary measures)	

15		Draw the XML tree for the code given below.Also identify and name the root element.
		
		`<LIBRARY>`
		  `<BOOKS>`
		    `<CLASSICS>`
		      `<Author>Albert Phill</Author>`
		      `<Name>Beyond the moon</Name>`
		    `</CLASSICS>`
		  `</BOOKS>`
		  `<MAGAZINE>`
		    `<SPORTS>`
		      `<Name>Sporstar</Name>`
		      `<Frequency>Fortnightly</Frequency>`
		    `</SPORTS>`
		  `</MAGAZINE>`
		`</LIBRARY>`
			5

	Ans	 **Root Element: LIBRARY**	
		(½ Mark for drawing LIBRARY as root) *(½ Mark for drawing BOOKS under LIBRARY)* *(½ Mark for drawing CLASSICS under BOOKS)* *(½ Mark for drawing MAGAZINE under BOOKS)* *(½ Mark for drawing SPORTS under MAGAZINE)* *(½ Mark for drawing Author under CLASSICS)* *(½ Mark for drawing Name under CLASSICS)* *(½ Mark for drawing Name under SPORTS)* *(½ Mark for drawing Frequency under SPORTS)* *(½ Mark for writing the name of the Root element as LIBRARY)* *Note: Marks not to be deducted for drawing/writing values of the XML tags below the tag.*	
16		Attempt any **one** question out of given **two:** Sushila, a web designer working with Global Designers,is supposed to design a web page as shown below :	

The Taj Mahal

The Taj Mahal is a world famous white marble monument located on the Yamuna river bank in the Indian historical city of Agra.

Contact Us

Write the HTML code to design the above shown web page considering the specifications as given below:

(a) Background colour of page should be pink and all the hyperlinked text should be green in colour.
(b) Image named taj.jpg should be placed in the centre of the webpage.
(c) Heading "The Taj Mahal" should be first level of the heading and underlined.
(d) Paragraph should have following formatting styles applicable:
   Colour-Blue
   Size-5
   Font style-Times New Roman
(e) At the bottom of the page,"Contact Us" text should be linked with admin@taj.com email id.

Ans	`<HTML>` `<BODY BGCOLOR="PINK" LINK="GREEN">` `<CENTER><IMG SRC="taj.jpg">  ` `<H1> <U> The Taj Mahal </U></H1> </CENTER>` `<P><FONT COLOR="BLUE" SIZE="5" FACE="TIMES NEW ROMAN">` `The Taj Mahal is a world famous white marble monument ` `located on the Yamuna river bank in the Indian historical city` `of Agra.</FONT></P>` ` <A HREF="mailto:admin@taj.com">Contact Us </A>` `</BODY> </HTML>`	

(½ mark for bgcolor attribute of <body>)
(½ mark for link attribute of <body>)
(½ mark for <img> → src)
(½ mark for writing <center> or attribute align = 'middle' in <img>)
(½ mark for <H1> tag)
(½ mark for <U> tag)
(½ mark for <font> tag with size OR text colour)
(½ mark for <font> tag with text style/face)
(½ mark for proper usage of <A> tag)
(½ mark for <html> structure)

	OR	5
	Differentiate between Container and Empty elements in HTML. Also give any two examples of HTML tags from each category.	
Ans	**HTML container elements require a starting as well as an ending tags. For eg <html>, <head>, <body>.** **Empty elements HTML empty elements require just a starting tag and not an ending tag. e.g. <img>, , <hr> etc.**	
	(1 mark for writing the difference between Container and Empty elements) *(1 mark each for writing any two examples of Container elements)* *(1 mark each for writing any two examples of Empty elements)*	