

**COMPUTER STUDIES**  
**Paper 2**  
**(PRACTICAL)**  
**(Reading Time: 15 minutes)**  
**(Examination Session: Three hours)**  
**(Maximum Marks: 100)**

**(Candidates are allotted additional time of 15 minutes for only reading the paper.  
They must NOT start writing during this time)**

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**INSTRUCTIONS**

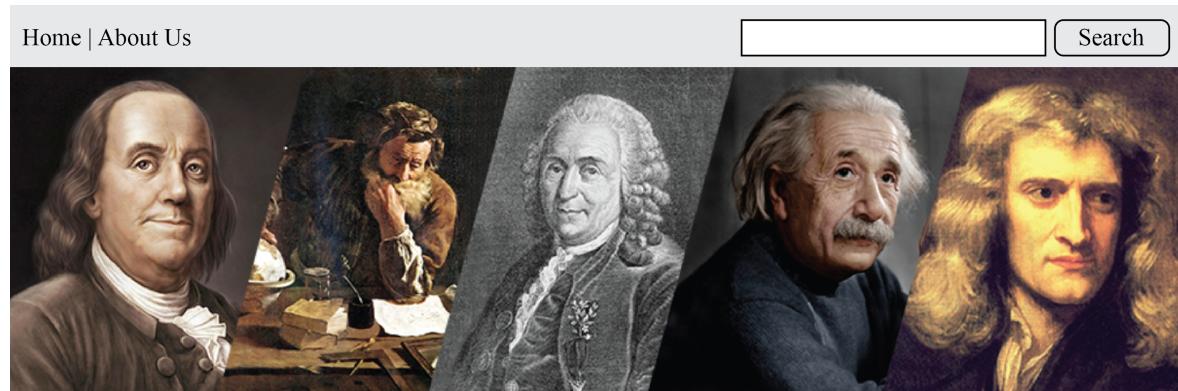
1. This paper consists of **TWO** sections: section A and section B. Section A is on HTML. Section B covers both HTML and JavaScript.
2. Section A is compulsory. Section B contains **TWO** questions from which you are required to attempt only **ONE**.
3. All your work should be saved in a folder named with your actual index number on the Desktop. For example,  012190010001 this folder is named with the index number 012190010001. Your name or school name **CANNOT** be used as a folder name or file names.
4. You are allowed to use **ONLY Notepad** for this practical. Use of any other HTML editors will result in the cancellation of your work.
5. The intended marks for questions or parts of questions are given in brackets [ ].
6. Save your work from time to time to prevent loss of work due to unexpected power failure or hardware/software problem.
7. Make sure that your folder is handed over to the visiting examiner at the end of the examination.
8. **DO NOT** leave the examination hall before you have made sure that you have answered all the required number of questions.

## SECTION A [50 MARKS]

### ANSWER ALL QUESTION

#### Question 1

Refer to the figure given below and answer the questions that follow.



Home | About Us  Search

### QUOTES

**Niels Bohr**  
*Everything we call real is made of things that cannot be regarded as real.*  
[Like](#) [Inspired](#) [Follow](#)

**Lao Tzu**  
*If you correct your mind, the rest of your life will fall into place.*  
[Like](#) [Inspired](#) [Follow](#)

**Albert Einstein**  
*Mankind invented the atomic bomb, but no mouse would ever construct a mousetrap.*  
[Like](#) [Inspired](#) [Follow](#)

**Confucius**  
*A seed grows with no sound but a tree falls with huge noise. Destruction has noise, but creation is quiet. This is power of silence.*  
[Like](#) [Inspired](#) [Follow](#)

**Nicolas Tesla**  
*When they call you crazy, remember that great ideas don't come from average minds.*  
[Like](#) [Inspired](#) [Follow](#)

### UPCOMING EVENTS

28/11/2019 - BHSEC COMPUTER STUDIES PRACTICAL

01/12/2019 - BCSE AND BHSEC EXAMINATIONS BEGINS

05/12/2019 - WORLD AIDS DAY

09/12/2019 - INTERNATIONAL ANTI-CORRUPTION DAY

11/12/2019 - INTERNATIONAL CHILDREN'S DAY

14/12/2019 - CLASS XI AND IX RESULT DECLARATION DAY

17/12/2019 - NATIONAL DAY

Home | About Us ©Inspiring BHUTAN Follow Us: Facebook| Twitter

Figure 1

- a) Save the webpage as index.html. [½]
- b) The title of the webpage should be Inspiration. [½]
- c) Use table for the layout of the webpage. [5]
- d) The navigation bar should contain the following features:
  - 1) Background color to differentiate regions of the webpage [1]

- 2) Links to Home and About Us pages [2]
- 3) Search feature [4]
- e) Use available image/s with appropriate dimension for the webpage. [3]
- f) The Quote part of the webpage should contain the following features:
  - 1) Background color [1]
  - 2) Markup for the section heading [1]
  - 3) Heading markup for the author [2]
  - 4) Formatting quotes as shown in Figure 1 [4]
  - 5) Markup for the three buttons [6]
  - 6) Separating line for the quotes as shown in Figure 1 [2]
- g) The Upcoming Events section of the page must contain the following:
  - 1) Background color. [1]
  - 2) Section heading markup. [1]
  - 3) Date and events markups. [4]
  - 4) Separating line for each section as show in Figure 1 [2]
- h) The footer of the webpage should contain following features:
  - 1) Background color [1]
  - 2) Markup and layout for the links [2]
  - 3) When user clicks on the social media links, it should open a new webpage [4]
  - 4) Copyright text [3]

**SECTION B [50 MARKS]**  
**ATTEMPT ANY ONE QUESTION**

**Question 2**

In the **index.html** page created for **Question 1**, you have included content of the **Quote**, **Upcoming Events** sections and year in footer using html markups only. In **Question 2** you will use **index.html** of **question 1** as a template but replace the content of **Quote**, **Upcoming Events** and year in footer using JavaScript.

- a) Save the webpage as **magic.html** [1]
- b) Create a JavaScript file and save it as **inspire.js** [1]
- c) Include **inspire.js** in the **magic.html** [2]

d) **inspire.js** should contain following arrays:

- 1) **Author** array with four names as its elements [3]
- 2) **Quote** array with four quotes as its elements [3]
- 3) **eventDate** array with five dates as its elements [3]
- 4) **event** array with five dates as its elements [3]

e) Create functions in **inspire.js** as follows:

- 1) **quote** function to display the elements of **Author** and **Quote** array. The function must also consist of embedded html tag to markup its content. The output should be as shown below: [11]

**QUOTES**

**Niels Bohr**  
*Everything we call real is made of things that cannot be regarded as real.*

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**Lao Tzu**  
*If you correct your mind, the rest of your life will fall into place.*

Like   Inspired   Follow

**Albert Einstein**  
*Mankind invented the atomic bomb, but no mouse would ever construct a mousetrap.*

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- 2) **events** function to display the elements of **eventDate** and **event** array. It must also consist embedded html tag to markup its content. The output should be as shown below: [8]

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3) **feedback** function to display three buttons. This function must be called in **quote** function. [4]

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4) **currYear** function to display current year in the footer. [5]

5) Call the functions **quote**, **events**, **currYear** and **feedback** to render output similar to Figure 1. [6]

### **Question 3**

Using the **index.html** as a template, rename the page as **quoteSearch.html**. The search feature improves the user experience as well as their engagement with website. This page adds search features to the website. Search should be capable of the following:

- The keyword is searched in Author and **Quote** array and alert the search results.
- Search keyword can't be blank.
- If there is no matching keyword, it must alert the user.

a) Save the webpage as **quoteSearch.html** [1]

b) Create a JavaScript file and save it as **search.js** [1]

c) Include **search.js** in **quoteSearch.html** [2]

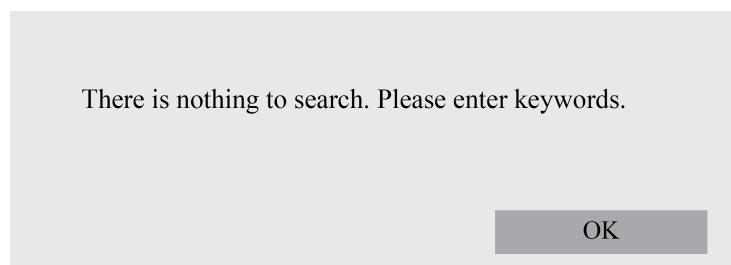
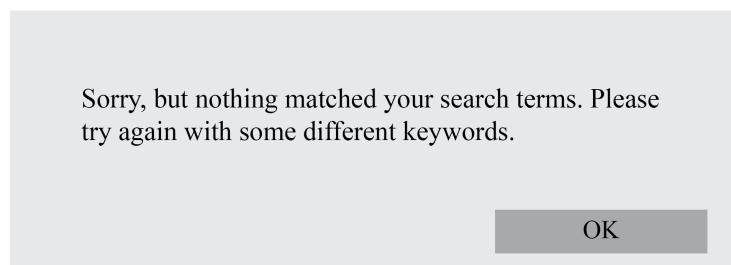
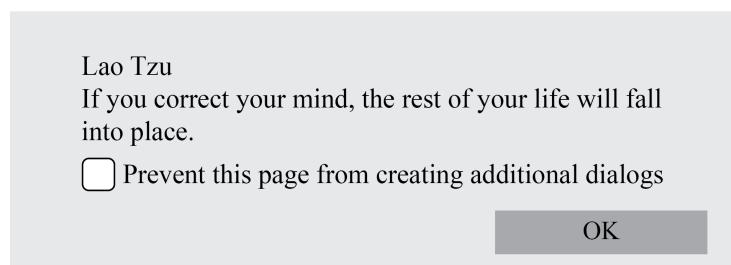
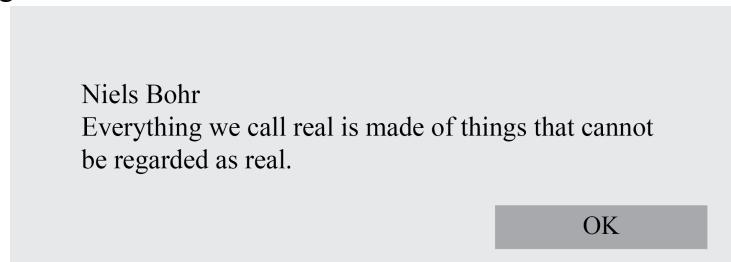
d) Create following arrays in **search.js**

- 1) **Author** array with four names as its elements [3]
- 2) **Quote** array with four quotes as its elements [3]
- 3) **searchResult** array with no elements [2]

e) Create following functions in **search.js**

1) **searchFunc** function to get keywords from the form to compare with the elements of **Author** and **Quote**. If there is a match, result should be stored in **searchResults** array. It should not accept empty data from the form. [22]

2) **searchDisplay** function should show the search result through alert message. It should also alert if the search is not found. Sample of alert messages are shown below. [10]



f) Call the functions wherever applicable. [6]

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