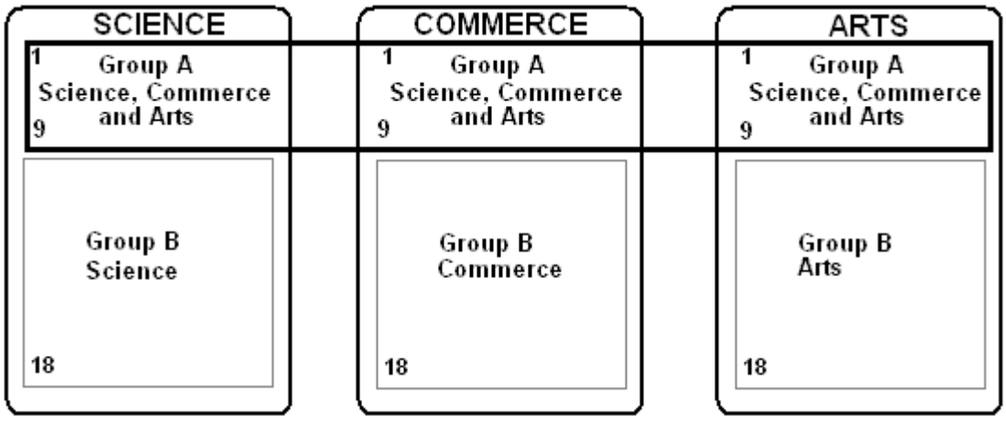
Information Technology Practicals related General Instructions

There are in all 20 Practical Expweriments in all three streams.



Distribution

Practical numbers 1 to 9 are common for Arts, Science and Commerce Streams. These 9 Practicals form ***Group A for Arts, Commerce and Science***.

Practical numbers 10 to 20 are different for Arts, Science and Commerce Streams. These 11 Practicals independently form ***Group B for Science, Group B for Arts and Group B for Commerce***.

Journal

The Journal has to be in form of a file. The journal will include either

- Hardcopies or print-outs of the code or document or presentation etc. depending upon the specific requirement of the particular practical performed.

OR

- Handwritten code/reports written by the students depending upon the specific requirement of the particular practical performed.

OR

- **BOTH** depending upon the specific requirement of the particular practical performed.

Besides this, the Journal will have an Index Sheet and a Certificate Page.

Every student must perform and document in the Journal a minimum of at least 12 practicals; considering a minimum of 6 experiments from Group A and 6 a minimum of 6 experiments from Group B. A performance of 8 or more experiments per Group is recommended.

Most practicals have two different experiments having the same number listed. If any student has entered two different experiments having the same number in the Journal, then the same shouldn't be counted as two separate experiments for the sake of counting the minimum requirement. It must be considered as a single experiment.

Practical Examination

The Final Practical Examination will be for 20 marks. Every student will have to perform **TWO** experiments; one from Group A and the other from Group B. Each experiment will carry 9 marks and the Journal will carry 2 marks. The total time given for an experiment including performance time is 1½ hour. Candidates are expected to finish 2 experiments in 3 hours without any in-between break. A hardcopy (print-out) of the code is necessary. Additional time may be granted to candidates in situations where a resource such as a printer has to be shared and used.

At the time of examination, the Practical slips must **not** be attached beforehand to the answer sheets. Instead, examiners must first write the experiment number and heading on the answer paper, make the student pick up any answer sheet without seeing the experiment number and heading, make the student write his/her roll number there itself and finally hand over the corresponding slips to candidates only after all candidates have selected the answer papers.

General

Students must **not** be allowed to use any HTML Editor such as Expression Web/FrontPage or Dreamweaver in order to create the Web Pages during the regular Practical or Practical Exam. Web Pages as well as code have to be created in a Text Editor such as Notepad only.

Note for Science Candidates

If necessary, Science students may be allowed to validate or verify Scripts using Script Editors such as Microsoft Script Editor (part of Microsoft Office) or Microsoft Interdev (part of Visual Studio 6).

It is recommended that Science Group B Practicals numbered from 10 to 16 related to ASP Server Side script be loaded and executed from one computer which will commonly serve all candidates. This computer must have the Internet Information Services (IIS) running. These experiments are not recommended to be performed using any other server software. **Personal Web Server (PWS) must not be used.**

Std. XII Information Technology Practical Experiments

Group A Experiments common for Science(97), Arts(98) and Commerce(99)

1. Creation of a Website
2. Creation of a Website with Frames and CSS
3. Hyperlinks on a Web Page using Client Side Image Mapping
4. Hyperlinks on a Web Page using Server Side Image Mapping
5. Use of Audio and Animation on Web Pages
6. Use of Video on Web Pages
7. Creation and Publishing a Website using FTP
8. Cross Browser Testing and Differences in Rendering
9. Use of an Embedded Indian Font on a Web Page

Group B Experiments for Science (97)

10. ASP code to display a report of client IP Address, Browser etc.
11. ASP code to display Server Side Time and Client Side Time.
12. ASP code to calculate the number of days a person has lived on basis of the Date of Birth/the number of days left before the next occurrence of select dates
13. ASP code to display contents from a Text File
14. ASP code to display Hit Counter/Number of Votes cast
15. ASP code that accepts data, and puts the same into a Database/ that verifies username and password from a Database
16. Creation of a database and ASP code that allows a user to view relevant information from the same/ Use of database and ASP code that allows a user to view as well as edit information
17. Use of Event Driven Client Side JavaScript
18. Use of JavaScript for Validation of Amount and Pin code/Telephone number
19. Use of JavaScript for Validation of Username and Password
20. Use of JavaScript for Validation of Date/E-mail address

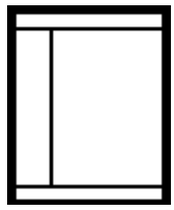
Maharashtra State Board of Secondary and Higher Secondary Education, Pune 411005
Practical Slips for Std. XII Arts, Science and Commerce
Subject: Information Technology
Group A Arts, Science and Commerce Slips

Experiment 1 Creation of a Website	
Create a website using HTML. Write code for **3** separate pages having different filenames. Use any theme such College Profile, Company Profile, or Maharashtra State Profile. Each page must contain a hyperlink to the other **two** pages. All pages must have different backgrounds (colors or images) and different Titles. Name the **first page as "Index.htm".** This page must contain general information about the theme chosen and must have a heading in the largest possible size. This page must also display at least one image which must have alternate text as well as must act as a hyperlink to another page. This page should also contain any 3 physical style tags. The **second page** must contain a tiled background image and must contain a table having a border and a background color with at least 4 columns, 5 rows, merged at 2 different positions. This page must also contain an URL to at least one e-mail address. The **last page** must be a **Feedback Form** containing any 4 controls among Textbox, Checkbox, Radio, Drop Down List and Button.	
Get the handwritten HTML codes of all the pages checked and corrected from the examiner before using a computer.	(4)
Create the Web Pages without using any pre-existing Web Pages or code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner.	(3)
Obtain a hardcopy of the HTML codes of all the pages.	(2)

OR

Experiment 1 Creation of a Website	
Create a website based on the theme of "Save the Earth's Environment" using HTML. Write code for 3 separate pages having different filenames based on this theme. All pages must have different background colours and different Titles. The **first page** must contain a hyperlink to the other two pages in such a way that when a hyperlink on the same is clicked, the corresponding page must open in a new window without changing the content of the source web page. Name the **first page as "Index.htm".** This page must contain general information about the theme chosen and must have a heading in the largest possible size. This page must also display at least one image which must have alternate text as well as must act as a hyperlink to another page. This page should also contain any 3 physical style tags. The **second page** must enlist factors responsible for environmental damage, types of pollution etc in an Ordered List nested within an Unordered List with at least five points. The page must also have a marquee with Background color scrolling from left to right carrying the theme name. The **last page** should be a **Member Registration Form** having a Text Area form control With any other three different types of Form controls from the following; Textbox, Radio, Drop Down List and Button.	
Get the handwritten HTML codes of all the pages checked and corrected from the examiner before using a computer.	(4)
Create the Web Pages without using any pre-existing Web Pages or code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner.	(3)
Obtain a hardcopy of the HTML codes of all the pages.	(2)

Experiment 2 Creation of a Website with Frames and CSS



Create a web page in HTML containing 4 frames approximately having a layout as shown in the adjoining figure. Name this file as "Index.htm". When the "Index.htm" page is called through a web browser, the page should be displayed with frames. The frames should display contents of 4 different HTML pages. The top and bottom frames should always display the contents of two web pages "Top.htm" and "Bottom.htm" respectively. The left pane should always display the contents of a web page named "Left.htm" and right pane by default, should display contents of a web page named "Right.htm".

The Left.htm page must contain 2 hyperlinks; the first hyperlink must be to the Right1.htm page, the second one to a page called as Right2.htm. **Note that when these hyperlinks from the "Left.htm" are used or clicked from the "Index.htm" page, only the contents of the Right Frame must change to display the appropriate Web page. The contents of no other page must change.**

All six pages must have a different title and all the pages excluding "Index.htm" must have a different background color. Make use of Internal CSS code on **Left.htm, Right1.htm**, **Right2.htm** having at least **three different selectors with minimum three properties for each selector** with respect to use of various fonts, colors, sizes and text highlighting. Do not make use of external class files. The entire presentation may be based on a suitable theme.

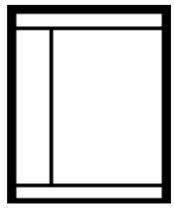
Get the handwritten HTML codes of the "Index.htm", "Left.htm", "Right1.htm", "Right2.htm" page checked and corrected from the examiner before using a computer. (4)

Create all the Web Pages without using any pre-existing Web Pages or code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the HTML codes of the Index.htm and the Left.htm pages. (2)

OR

Experiment 2 Creation of a Website with Frames and CSS



Create a web page in HTML containing 4 frames approximately having a layout as shown in the adjoining figure. Name this file as "Index.htm". When the "Index.htm" page is called through a web browser, the page should be displayed with frames. The frames should display contents of 4 different HTML pages. The top and bottom frames should always display the contents of two web pages "Top.htm" and "Bottom.htm" respectively. The left pane should always display the contents of a web page named "Left.htm" and right pane by default, should display contents of a web page named "Right.htm".

The Left.htm page must contain 2 hyperlinks; the first hyperlink must be to the Right1.htm page, the second one to a page called as Right2.htm. **Note that when these hyperlinks from the "Left.htm" are used or clicked from the "Index.htm" page, only the contents of the Right Frame must change to display the appropriate Web page. The contents of no other page must change.**

All six pages must have a different title and all the pages excluding "Index.htm" must have a different background color.

Create 2 different **external** CSS Code Files one for "Left.html" and other for "Right1.htm" ,"Right2.htm" having at least **three different selectors with minimum three properties** for each selector with respect to use of various fonts, colors, sizes and text highlighting**.**

Get the handwritten HTML codes of the "Index.htm", "Left.htm", and both CSS codes checked and corrected from the examiner before using a computer. (4)

Enter the codes without referring to any pre-existing Web Pages or code. Save the files and execute the same. Demonstrate proper functioning of the same to the examiner. (3)

Obtain a hardcopy of the HTML codes of the Index.htm, Left.htm and both external CSS Code pages. (2)

Experiment 3 Hyperlinks on a Web Page using Client Side Image Mapping

Create a web page, which uses a JPEG or GIF image on the same. Students should use the available image present in the computer. Create at least 3 three different shapes such as rectangle, circle and polygon which should not overlap. Make use of client-side internal mapping where the **hotspots coordinates** should be **noted** using the Ms-Windows imaging application **Paint**. All hyperlinks used in the map code however should be to different URLs, and should be functional on the World Wide Web. **Do not create URLs to local Web Pages and do not create target web pages.**

Get the handwritten HTML code checked and corrected from the examiner before using a computer. (4)

Create the Web Page without using any pre-existing Web Pages or code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the HTML code of the Web Page. (2)

Note:

Shapes should not be drawn on the image while noting coordinates.

Shapes should not go outside the boundaries of the image used.

Experiment 4 Hyperlinks on a Web Page using Server Side Image Mapping

Create a web page which uses a JPEG or GIF image on the same. Students should use the available image present in the computer. Create at least 3 three different shapes such as rectangle, circle and polygon should not overlap. Make use of a Server-side external image map where the map file is stored on a web server **and the hotspots coordinates** should be **noted** using the Ms-Windows imaging application **Paint**. All hyperlinks used in the map code however should be to different URLs, and should be functional on the World Wide Web. **Do not create URLs to local Web Pages and do not create the target web pages.**

Get the handwritten HTML code as well as code written for the external map file checked and corrected from the examiner before using a computer. (4)

Create the map file and Web Page without using any pre-existing Web Pages or code. Save the files, upload the map file to any Web server that is local or a free Web Server on the World Wide Web that supports Image Maps. Execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the HTML code of the Web Page. (2)

Note:

Shapes should not be drawn on the image while noting coordinates.

Shapes should not go outside the boundaries of the image used.

Experiment 5 Use of Audio and Animation on Web Pages

Create a web page that continuously plays a background sound _____ number of times **without** controls. This page must also contain an animated GIF Image where the display dimensions are 100 x 75 pixels irrespective of the original Image dimensions. Alternate text must also be used.

Create another web page that continuously plays a sound forever with controls. This page must also contain another animated GIF image along with alternate text where the display dimensions are 100 x 75 pixels irrespective of the original image dimensions.

The audio file/s must play directly from the web-page itself without the use of any hyperlink. These files be provided by the examiner and need not be encoded or created by students. Any Wave, MP3, MIDI or AU sound file may be used.

Get the handwritten HTML code for both the pages checked and corrected from the examiner before using a computer. (4)

Create the Web Pages without using any pre-existing Web Pages or code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the HTML codes of both the Web Pages. (2)

Experiment 6 Use of Video on Web Pages

Create a web page that plays a video forever **with controls** where the display dimensions are ____ x ____ pixels irrespective of the original video dimensions.
The video must begin playing automatically when the page is opened in a browser

Create another web page that plays a video file **without controls** where the display dimensions are ____ x ____ pixels irrespective of the original video dimensions. The video must be looped _____ times with a delay of _____ milliseconds between each session. The border size must be ___.
The video must begin playing when the mouse is placed over the video area.

The video file/s must play directly from the web-page itself without the use of any hyperlink. These video files be provided by the examiner and need not be encoded or created by students, Any AVI, MOV or MPEG file may be used.

Get the handwritten HTML code of both the pages checked and corrected from the examiner before using a computer. (4)
Create the Web Pages without using any pre-existing Web Pages or code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)
Obtain a hardcopy of the HTML codes of both the Web Pages. (2)

Experiment 7 Creation and Publishing a Website using FTP

Create a website using 3 HTML files, 2 JPEG images having file size not exceeding 40 kb per image, 3 GIF images having file size not exceeding 30 kb per image. The web pages must be linked to each other using hyperlinks and may also have the display the images. One of them must carry a link to the executable file. Ensure that all linked web pages along with the images are stored in a common Folder/directory.
Get the handwritten HTML codes of all the pages checked and corrected from the examiner before using a computer. (4)
Create the Web Pages without using any pre-existing Web Pages or code. Save the files, execute the same and verify the functioning of the pages and links before upload.
Locate a free FTP server on your local network or on the internet. Make use of WS_FTP, CuteFTP or other free GUI based FTP client program. Using this client create a folder called “HSCPRAC” on the server. Upload the created website files in the newly created folder on the server.
After the upload process, ensure that the uploaded website is functional and can be viewed through a web browser. Show this to the examiner. (3)
Obtain a hardcopy of the HTML codes of all the pages. (2)

Experiment 8 Cross Browser Testing and Differences in Rendering

Create a web page using HTML code that contains at least four major differences related to Marquee attributes, Light and Dark Border Colors of Tables, display of **broken images*** with its attributes and display of a blink text. The differences must be clearly distinguishable between the two Browsers Microsoft Internet Explorer 6 or higher and Mozilla 2 or higher.
** Images that are not existing, missing or not available are called as broken images.*

Get the handwritten HTML code checked and corrected from the examiner before using a computer. (4)
Create the Web Page without using any pre-existing Web Pages or code. Save the files and execute the same on the two browsers. Observe the differences and note down the same on the answer sheet. Demonstrate the differences in rendering between the browsers to the Examiner. (3)
Obtain a hardcopy of the HTML code of the Web Page. (2)

Experiment 9 Use of an Embedded Indian Font on a Web Page	
Create a Web Page that contains the name of your College/ Institution followed by the full Postal address in an Indian Language using an Indian Font, without using any alphabets from the English Language. Use iLeap, IndiaPage or any other suitable Indian Language word processors to create the same. Most Indian Language Word Processors allow users to export or Save Files as HTML. If this feature is not available, then the file may be exported or saved in Rich Text Format (RTF) and then converted into HTML using a Word Processor such as Microsoft Word. **However, do not use any general purpose Word Processor such as Word with Indian Fonts installed for basic creation.**	
Get the handwritten HTML code checked and corrected from the examiner before using a computer.	(2)
Enter the program on the computer, Create the web page in HTML and save the file. Use Web Embedding Font Technology (WEFT) for IE **or** Dynamic Fonts (Bitstream) for Mozilla/Netscape to create the embedded or dynamic font. Upload the Web Page and the embedded or dynamic font related file to any functional free Web server on the World Wide Web. View this web page through the corresponding Web Browser on another terminal that **does not have** the used font installed, and verify that the page can still be viewed with the Indian font used.	(5)
Obtain a hardcopy of the HTML code of the page.	(2)

Maharashtra State Board of Secondary and Higher Secondary Education, Pune 411005
Practical Slips for Std. XII Science
Subject: Information Technology
Group B Science Slips

Experiment 10 ASP code to display a report of client IP Address, Browser etc.	
Write code using ASP script that would retrieve the following information : 1. The IP address of the remote host making the request 2. The port number to which the request was sent 3. The name and version of the server software that answers the request and runs the gateway. 4. The browser that sent the request 5. The server host name. 6. Method used for making the request. 7. Protocol name making the request.	
Get the handwritten code checked and corrected from the examiner before using a computer.	(4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner.	(3)
Obtain a hardcopy of the code.	(2)

Experiment 11 ASP code to display Server Side Time and Client Side Time.	
Write code using ASP script and JavaScript/VBScript that would display server side time and date as well as client side time and date on the same page. The code should perform the following validation: On basis of the date, the display must include the Weekday (i.e. Sunday, Monday etc.) as well as the name of the display month i.e. (March, April etc.) in words for both client side as well as server side.	
Get the handwritten code checked and corrected from the examiner before using a computer.	(4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner.	(3)
Obtain a hardcopy of the code.	(2)

OR

Experiment 11 ASP code to display Server Side Time and Client Side Time.	
Write code using ASP script and JavaScript/VBScript that would display server side time and date as well as client side time and date on the same page. The code should perform the following validation: On basis of the date, the display must include the number of days left for the next week to begin (presuming that Sunday is the first day of the week), and number of days left for the next month to begin for both client side as well as server side.	
Get the handwritten code checked and corrected from the examiner before using a computer.	(4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner.	(3)
Obtain a hardcopy of the code.	(2)

Experiment 12 ASP code to calculate the number of days a person has lived on basis of the Date of Birth.

Write code using ASP script that requests the user to enter his/her date of birth in a text box. After submitting this data, must display the total number of days the user has lived using server side ASP code.

The page may contain proper instructions to the user regarding the manner in which the date must be entered.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)
Obtain a hardcopy of the code. (2)

OR

Experiment 12 ASP code to calculate the number of days left before the next occurrence of select dates

Write ASP code to display a Page containing a Dropdown Box having three items listed; “Maharashtra Day”, “Republic Day” and “Independence Day”. The user must select any one out of these three. And then click on a button object. The user should then get information regarding how many days are left from the current date till the next occurrence of the selected day.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)
Obtain a hardcopy of the code. (2)

Experiment 13 ASP code to display contents from a Text File

Create a text file containing few lines of text. Create 3 different HTML pages using ASP script that do the following:

1. Read and display only the first _____ number of characters of a text file
2. Read and display the first line of a text file
3. Display the entire text file with line numbers in the left.

Get the handwritten codes for all three pages checked and corrected from the examiner before using a computer. (4)
Enter the codes on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)
Obtain hardcopies of the original text file and coding of **2.** and **3.** only. (2)

OR

Experiment 13 ASP code to display contents from a Text File

Create a text file containing few lines of text. Create 2 different HTML pages using ASP script that do the following:
Read and display a text file and skipping display of the first ____ number of characters.
Read and display a text file and skipping display of the first line.
Get the handwritten codes for both the pages checked and corrected from the examiner before using a computer. (4)
Enter the codes on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)
Obtain hardcopies of the original text file and coding of both the pages. (2)

Experiment 14 ASP code to display number of votes cast with hit counter

Write code using ASP that has a question to which users are supposed to cast a Vote. There should be two buttons giving users two options: "**Yes**" and "**No**". The server should keep a count of the Number of votes that have been cast in favour of each option. Whenever a user or voter views this page, he/ she should get an account of how many votes have already been cast against the available options as well provision to cast the vote. The count of the number of votes that have been cast in favour of each option should be absolute for any user who views the web page at the same time.

It should also display the total number of times the page is visited by the users irrespective of the vote casted or not in either Red/Green/Blue color.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the code. (2)

Experiment 15 ASP code that accepts data and puts the same Into a Database.

Create an empty database using Microsoft Access containing 2 Fields, Name and Age. Use **OLEDB** or use and configure **ODBC Data Source Administrator** to link to this database. Write code using ASP that displays a form requesting the first name and age from a user in two separate text boxes. Upon submitting the same, this information should get validated and stored in the database created and connected earlier. The validation code should verify the following:

- Some data must be entered in the name and age text box. They cannot be empty with nothing entered.
- The age should be integral entered in numbers only.

If invalid data is entered then the record should not be saved and a proper error message must be displayed.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without using any pre-existing code. Save the files and execute the same. Open the Access Database on the server and verify that Records are actually getting saved. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the code. (2)

OR

Experiment 15 ASP code that verifies username and password from a Database

Create a database using Microsoft Access containing 2 Fields username and password. Create at least 5 records. Use **OLEDB** or **Use and configure ODBC Data Source Administrator** to link to this database. Write code using ASP script that would display a login page, which accepts username and password. The code should then check whether the username and password entered by the user is registered in the database.

If the username with the corresponding password exists, only then the user should be directed to a Welcome Page. Else the message "Invalid User" must be displayed in a Message Box.

Get the handwritten code checked and corrected from the examiner before using a computer. There is no need to do the same for the Welcome Page. (4)

Create the database, connect the same on the server ODBC. Enter the ASP code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the ASP code page. Do not obtain a hardcopy of the Welcome Page (2)

Experiment 16 Creation of a database and ASP code that allows a user to view relevant information from the same

Create a database using Microsoft Access containing 2 Fields, Employee Name and Salary. Feed at least 10 records. Write ASP code that displays records from this database corresponding to employees having salaries less than or greater than a particular amount. The less than or greater than options must be made available as two choices using radio buttons and the particular salary amount being investigated should be provided by the user in a textbox present on the page. A button must be available on this page, which will trigger the validation process when clicked.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Create the database and Use **OLEDB** or **Use and configure ODBC Data Source Administrator** to link to this database. Create the ASP code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the ASP code page. (2)

OR

Experiment 16 Use of database and ASP code that allows a user to view as well as edit information

You are given a pre-created and functional Access Database on the server containing two fields and four records. This database stores the employee number and their corresponding salaries as their fields. Write ASP code which will display a web page that shows the employee number and corresponding salaries in a tabular form. The page must also display two text boxes One for the employee number and the other for its incremented salary and a button object having value “change salary”. When this button is clicked the action should update the database to the changed price as well as display the updated information in the same format as earlier.

Database Entry

Employee Number	Salary
1010	12568
1022	7896
1033	9876
1045	10258

Please enter the new salary to be changed.

Employee Number: [ ] New Salary: [ ] Change Salary

Use **OLEDB** or **Use and configure ODBC Data Source Administrator** to link to this database.

Get the handwritten code checked and corrected from the examiner before using a computer.
Enter the code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (4)
Obtain a hardcopy of the code. (3)

(2)

Experiment 17 Event Driven Client Side Script

Create a web page in HTML having a white background and two Button Objects. Write code using JavaScript such that when the mouse is placed over the first button object without clicking, the color of the background of the page should change after every __ seconds. There should at least be 7 different and visibly distinct background colors excluding the default color. When the second button object is clicked, appropriate message should be displayed in Browsers status bar.

Create another web page using JavaScript where the background color changes automatically after every ___ seconds. This event must be triggered automatically after the page gets loaded in the browser. There should at least be 7 different and visibly distinct background colors. When the page is unloaded, the appropriate alert message should be displayed.

Get the handwritten codes for both the pages checked and corrected from the examiner before using a computer. (4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)
Obtain a hardcopy of the code for both the pages. (2)

Experiment 18 Use of JavaScript for Validation of Pin code and Amount	
Create a page in HTML that contains two text boxes. One textbox should be used by users, say employees of a certain company to enter their Postal address Pin code and the other textbox should be used to enter their salary. Do not use Dropdown boxes. Use JavaScript to validate the entered Pin code and salary. A valid Pin code will contain no characters other than digits. The number of digits used in the pin code should be at least ___ number of digits and should not exceed ___ number of digits. If the pin code entered is not acceptable, then a Message box carrying an appropriate message must indicate the same. In this case after the message, the invalid pin code should get deleted and focus should be back on the pin code text box to re-enter the same. The salary entered can be any non-negative number. If decimal point is used in salary, then the number of digits after the same should not exceed two. No other symbols will be allowed. If the salary entered is invalid in any way, a message box showing the message "**Invalid value! Please Re-Enter**" should appear, the entered salary should get deleted and focus should be back on the text box to re-enter the same. If both, Pin code as well as salary are valid and acceptable, then a Message Box showing the message "**Acceptable**" should be flashed. A single validation button should be used to validate both.	
Get the handwritten code checked and corrected from the examiner before using a computer.	(4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner.	(3)
Obtain a hardcopy of the code.	(2)

OR

Experiment 18 Use of JavaScript for Validation of Telephone Number and Amount	
Create a page in HTML that contains two text boxes. One textbox should be used to enter their Telephone Number and the other textbox should be used to enter their Income. Do not use Dropdown boxes. Use JavaScript to validate the entered Phone number and Income. A valid Phone number code will contain no characters other than digits. The number of digits used in the Phone Number should be at least ___ and should not exceed ___. If the Phone Number entered is not acceptable then a Message box carrying an appropriate message must indicate the same. In this case, after the message the invalid Phone Number should get deleted and focus should be back on the Phone Number text box to re-enter the same. The Income entered can be any non-negative number. If decimal point is used, then the number of digits after the same should not exceed two. No other symbol will be allowed. If the Income value entered is invalid in any way, a message box showing the message "**Invalid value! Please Re-Enter**" should appear, the entered Income value should get deleted and focus should be back on the text box to re-enter the same. If both, Phone Number as well as Income are valid and acceptable, then a Message Box showing the message "**Acceptable**" should be flashed. A single validation button should be used to validate both.	
Get the handwritten code checked and corrected from the examiner before using a computer.	(4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner.	(3)
Obtain a hardcopy of the code.	(2)

Experiment 19 Use of JavaScript for Validation of Username and Password.

Create a page in HTML that allows a user to enter a username and password. Use JavaScript to validate the entries.

- The username must consist of at least ___ number of characters and must not exceed _____ number of characters. The password must consist of at least 6 characters and at most _____ number of characters.
- The username characters can consist only of Uppercase or Lowercase alphabets and digits.
- The password characters cannot consist of any blank space character.
- The password field should not display the password as it is typed in. Each character should be represented by the '*' character.

Upon submission, the user must receive an appropriate message whether the entered username and password are acceptable or not. If not, then the message should also indicate whether the username or password or both are invalid.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain a hardcopy of the code. (2)

Experiment 20 Use of JavaScript for Validation of Date

Create a page in HTML that contain a text box and a button object. The textboxes should be used by users to enter their date of birth in the format dd-mm-yyyy. Do not make use of any dropdown boxes. Use JavaScript to validate the date entered when the button object is clicked.

If the date entered is not acceptable, then a Message box carrying an appropriate message must indicate the same. In this case, after the message box, the wrong date should get deleted and focus should be back on the date text box to re-enter the same.

The message displayed in case of invalid dates must be different for each case. Three cases are to be considered as listed below:

- Invalid Date, such a date can never occur (e.g. 37-48-1929)
- Valid date, but ahead of the system date.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain a hardcopy of the code. (2)

OR

Experiment 20 Use of JavaScript for Validation of E-mail Address.

Create a page in HTML that contains a text box and a button object. The textbox should be used by users to enter their e-mail address. Use JavaScript to validate the e-mail address entered. The following five points have to be noted.

Regarding the '@' character.

- The E-mail address must contain the character '@' and it should appear only once in the address.
- '@' cannot appear in the beginning or end of the address.

Regarding the . (Dot) characters.

- The E-mail address must contain at least one **.** (Dot) character in the part of the address after the '@' character.
- The **.** (Dot) character cannot come immediately before or after the '@' character.
- The **.** (Dot) character cannot appear in the beginning or end of the address.

If the e-mail address entered is invalid in any way, a message box showing the message "**Invalid e-mail address! Please Re-Enter**" should appear, the entered e-mail address should get deleted and focus should be back on the text box to re-enter the same.

If E-mail address is valid and acceptable, then a pre existing Html file should get displayed.

A single validation button should be used to validate e-mail address.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain a hardcopy of the code. (2)