

Information Technology Practicals related General Instructions

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

SCIENCE	COMMERCE	ARTS
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> 1 Group A Science, Commerce and Arts 9 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Group B Science </div> <div style="border: 1px solid black; padding: 5px;"> 18 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> 1 Group A Science, Commerce and Arts 9 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Group B Commerce </div> <div style="border: 1px solid black; padding: 5px;"> 18 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> 1 Group A Science, Commerce and Arts 9 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Group B Arts </div> <div style="border: 1px solid black; padding: 5px;"> 18 </div>

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.

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 Arts (98)

10. Conversion between Audio File Formats
11. Image Conversion between Image file formats
12. Conversion between Video file formats
13. PageMaker - use of tool box and creation of simple letterhead or identity card of your institute
14. PageMaker – Design of a commercial color newspaper ad related to the exhibition of educational books in the size 2 columns x 10 cm.
15. Conversion of a Word document into PDF (with and without Images)
16. Conversion of a PowerPoint/ Freelance Graphics Presentation into PDF (with and without Images)
17. Conversion of an Adobe PageMaker Document into PDF (with and without Images)
18. Creation of a PDF document with bookmarks/links within the same document
19. Study of Standard Security Features within a PDF Document
20. Conversion of a CorelDraw Image into PDF

**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**

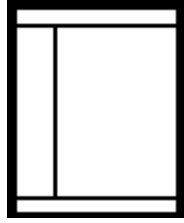
Experiment 1 Creation of a Website	
<p>Create a website using HTML. Write code for 3 separate pages having different filenames. Use any theme such College Profile, Company Profile, or Maharashtra State Profile. Each page must contain a hyperlink to the other two pages. All pages must have different backgrounds (colors or images) and different Titles.</p> <p>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.</p> <p>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.</p> <p>The last page must be a Feedback Form containing any 4 controls among Textbox, Checkbox, Radio, Drop Down List and Button.</p>	
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	
<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	
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)

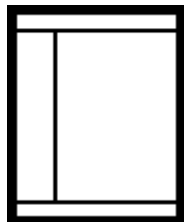
Create all the Web Pages without using any pre-existing Web Pages or code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

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)
<u>Note:</u> 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)
<u>Note:</u> 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 <u>forever</u> 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	
<p>Create a web page that plays a video <u>forever</u> with controls where the display dimensions are ____ x ____ pixels irrespective of the original video dimensions. The video must begin playing <u>automatically when the page is opened in a browser</u></p> <p>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 ____.</p> <p><u>The video must begin playing when the mouse is placed over the video area.</u></p> <p>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.</p>	
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	
<p>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.</p> <p>Get the handwritten HTML codes of all the pages checked and corrected from the examiner before using a computer.</p> <p>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.</p> <p>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.</p>	
After the upload process, ensure that the uploaded website is functional and can be viewed through a web browser. Show this to the examiner.	(4)
Obtain a hardcopy of the HTML codes of all the pages.	(3)
	(2)

Experiment 8 Cross Browser Testing and Differences in Rendering	
<p>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.</p> <p><i>* Images that are not existing, missing or not available are called as broken images.</i></p>	
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 Arts
Subject: Information Technology
Group B Arts Slips**

Experiment 10 Audio File Conversion	
<p>Obtain an audio wave file recorded in the PCM format having a Sampling Rate of 44.1 kHz, 16-bit stereo. This corresponds to a data transfer rate of 172 kb/sec for "CD-Quality Sound". The duration of this file may preferably be short if required, but not lesser than 15 seconds, to limit file size and processing time. Such a file if not readily available can be easily created using any Audio CD and Windows component Sound Recorder or Media Player.</p> <p>Name this file as 44.1k_16bit_Stereo_Original.wav and attribute it as Read-only. Using Sound Recorder File Menu Properties Format conversion option, create at least 16 wave files in the following manner.</p> <p>Choose at least 4 different sampling Rates such as 8 kHz, 16 kHz, 22.05 kHz and 44.1 kHz. For each sampling rate, create 4 files with the 16-bit stereo, 16-bit mono, 8-bit stereo and 8-bit mono options.</p> <p style="text-align: center;">Remember the following points in the process:</p> <ul style="list-style-type: none"> • For creation of a new format, always use the Use the 44.1k_16bit_Stereo_Original.wav original file every time. • Use the 'Save As' option to create these wave files and save different formats with different filenames to avoid overwriting the original file. • For ease in understanding, use filenames that explain all possible options used. For example a file may be named as "24k_16bit_mono.wav" corresponding to its Properties. • Use the PCM Wave File format only for all created files. <p>Compare these files in terms of file size and note down the same against their sampling rate and other properties. Now play them beginning from the highest sampling rate used and comment on the quality of the recorded sound.</p>	<p>(8)</p> <p>(1)</p>

Experiment 11 Image Conversion	
<p>Obtain a 24-bit Bitmap image having dimensions 800 by 600 pixels or greater. Preferably use an image which contains a variety of colours such as Natural Landscapes, Flora and Fauna etc. Name this file as Original.bmp and attribute it as Read-only to avoid accidental overwriting.</p> <p>Using any imaging utility such as Windows Paint with Microsoft Picture Manager OR Microsoft Photo Editor, create 3 more bitmap copies of the above image in other formats such as 256 colour bitmap, 16 colour bitmap and monochrome bitmap.</p> <p>Also create a GIF Image out of the same and create four copies in the JPEG format using compression factors of 90, 70, 50 and 30 respectively.</p> <p>Further Create 24 bit bitmap as well as 90 compression factor JPEG copies from the original image where the copies have height and width dimensions reduced by 50%.</p> <p>Remember the following points in the process:</p> <ul style="list-style-type: none"> • For creation of an image file, always use the Use the Original.bmp file every time. • Use the 'Save As' option to create these image files and save them with different filenames to avoid overwriting the original image. • Give all created files unique filenames. For ease in understanding, use filenames that make clear the options used. For example, files may be named as "256colour.bmp", "Compr70.jpg" and so on. <p>Compare these files in terms of file size and image quality and note down the same against their filename, file type and other properties.</p> <p>Compare the two reduced images to each other and comment on their file size and reduced image clarity as well.</p>	<p>(2)</p> <p>(3)</p> <p>(2)</p> <p>(1)</p> <p>(1)</p>

Note: Microsoft Picture Manager or Microsoft Photo Editor can be optionally installed along with Microsoft Office custom setup

Experiment 12 Video File Conversion	
Locate an AVI Format Video File with sound. Encode the same into MPEG format using any free AVI to MPEG Encoding Utility. Observe the difference in file size and image quality if any.	(4)
Ensure that the encoded MPEG file is correctly created by playing back the same.	(1)
Similarly use an MPEG format video sound. Encode the same into AVI format using any free MPEG to AVI Decoder. Observe the difference in file size. Ensure that the decoded AVI file is correctly created by playing back the same.	(4)

Experiment 13 PageMaker	
Use of Toolbox and creation of Student identity card for your institute	
Create an identity card for students in your institute using following options of the tool box	
<ol style="list-style-type: none"> 1) Select a suitable page setup. 2) Display Name of the college as heading with font size above 14, suitable font color and font style. 3) College Logo should be displayed on the top Left side. 4) Use line tool and rectangle tool wherever necessary at appropriate times. 5) Proper alignment for heading and address is required. 	(5)
Write down the step procedure used to create Identity card.	(2)
Show the output to Examiner and obtain the hard copy of the same.	(2)

Experiment 14 PageMaker	
Design of a commercial color newspaper Advertisement	
<ol style="list-style-type: none"> 1) Use suitable heading for a commercial coloured newspaper advertisement in relation to an exhibition of educational books. 2) Adjust entire content of advertisement in size 2 columns x 10 cm 3) Use suitable font size, font color & font style for advertisement. 4) Use proper background color for the advertisement 5) Insert appropriate image/s wherever necessary. (At least one image) 	(5)
Write down the procedure to create Advertisement in PageMaker.	(2)
Show the output to Examiner and obtain the hard copy of the same.	(2)

Experiment 15 Conversion of a Microsoft Word Document into PDF using Adobe Acrobat

(1)

Create a Microsoft Word document satisfying the following criteria:

- At least 3 full pages of Formatted text with a Page Setup for Letter or Legal sized pages Orientation Portrait with no margin exceeding 1.25"
- At least 2 or 3 different fonts must be used throughout the document. Matter may be divided into 2 or 3 paragraphs per page if desired.
- Size of the font used should not exceed 12 points for the normal body of the text and 14 points for Headings used if any.
- Do not embed any images in the document.

From the Print menu, select Adobe PDF as the printer, and set its properties such as Page Size, Margins and Orientation of the PDF to be created match the settings used in the original Document.

Convert this document into PDF using the Adobe PDF printer using different property settings in each case as stated below.

(2)

1) Keeping Compression and Font Embedding Options at default, generate 4 PDF files using PDF Writer with differences of 'SCREEN', 150 dpi, 300 dpi and 600 dpi in their Graphic Resolution. Save all 4 files with filenames 1.PDF, 2.PDF, 3.PDF and 4.PDF respectively in a Folder called GroupA.

(2)

2) Keeping Page Setup options as indicated above and the Graphic Resolution constant at 150 dpi as well as Font Embedding Options at Default, Choose The Compression Options for the PDF to be created in such a way that all other Compression settings at constant (Default) generate two more PDF files, one with and the other without text compression. Name these files as 5.PDF and 6.PDF respectively in a Folder named GroupB.

(2)

3) Keeping Page Setup options as indicated above and the Graphic Resolution constant at 150 dpi as well as Compression Options at Default, Choose the Font Embedding Options for the PDF to be created and create 2 PDF files in the following way. In one case, create a PDF file named 7.PDF embedding all fonts used in the document and in the other case create another DF file named 8.PDF without embedding any fonts. Save 7.PDF and 8.PDF in a new folder called GroupC.

(1)

Compare the files belonging to a particular group or directory with each other in terms of differences in file size and Screen appearance. Note down your findings and show the same to the examiner along with the created PDF files.

(1)

Also obtain a hardcopy of the file 2.PDF

OR

Experiment 15 Conversion of a MS Word Document containing Images into PDF using Adobe Acrobat

Create a Microsoft Word Document satisfying the following criteria:

(1)

- 2 pages of text with a Page Setup for Letter or Legal sized pages Orientation Portrait with no margin exceeding 1.25"
- At least 2 or 3 different fonts must be used throughout the document. Matter may be divided into 2 or 3 paragraphs per page if desired.
- Size of the font used should not exceed 12 points for the normal body of the text and 14 points for Headings used if any.
- **The document must have two Bitmap images embedded in it. One bitmap must be monochrome and the other must be a 24 bit image. None of the two must be displayed in the document with their width or height exceeding 200 pixels (2 inches) irrespective of their original dimensions.**

From the Print menu, select Adobe PDF as the printer, and set its properties such as Page Size, Margins and Orientation of the PDF to be created match the settings used in the original Document. Set the Graphic Resolution to 150 dpi. Keep the Font Embedding Options constant at Default. Convert this document into PDF using Adobe Acrobat PDF Writer with Image Compression options used as listed below.

1. Keep General and Monochrome Images Compression at default, create PDF files with differences in Color/Grayscale Image Compression as 1] No Compression, 2] Zip Compression, 3] JPEG Low Compression, 4] JPEG Mid Compression and 5] JPEG High Compression. Name the corresponding created PDF files as 1.PDF, 2.PDF, 3.PDF, 4.PDF and 5.PDF respectively and store all these files in a Folder called GroupA.

(3)

2. Keep General and Color/Grayscale Images Compression at default, create PDF files with differences in Monochrome Image Compression as 1] No Compression, 2] Zip Compression, 3] CCITT Group 3, 4] CCITT Group 4 and 5] Run Length. Name the corresponding created PDF files as 6.PDF, 7.PDF, 8.PDF, 9.PDF and 10.PDF respectively and store all these files in a Folder called GroupB.

(3)

Compare the files belonging to a particular group or directory with each other in terms of differences in file size and Screen appearance and record the same as readings. Note down your findings and show the same to the examiner along with the created PDF files.

(1)

Also obtain a hardcopy of the file 2.PDF

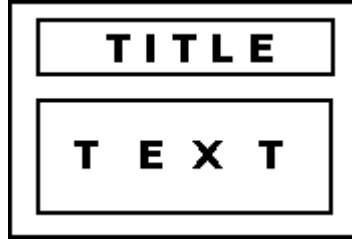
(1)

<p style="text-align: center;">Experiment 16 Conversion of a MS PowerPoint Presentation containing Images into PDF</p> <p>Create a Microsoft PowerPoint Presentation satisfying the following criteria:</p> <ul style="list-style-type: none"> • The presentation must be 4 slides where all slides have a common background colour scheme. Each slide must have its own unique title, a unique image and some relevant text. The Page Setup must be for Letter or Legal sized pages with Landscape Orientation. • At least 2 or 3 different fonts must be used throughout the presentation. • Size of the font used should not exceed 14 points for the body of the text. • The document must have one Bitmap image embedded per slide. Out of the four images used, two must be monochrome and two must be 24-bit colour images. <p>From the Print menu, select Adobe PDF as the printer, and set its properties such as Page Size, Margins and Orientation of the PDF to be created match the settings used in the original Presentation. Set the Graphic Resolution to 150 dpi. Keep the Font Embedding Options constant at Default. Convert this document into PDF using Adobe Acrobat PDF Writer with Image Compression options used as listed below.</p> <p>1. Keep General and Monochrome Images Compression at default, create PDF files with differences in Color/Grayscale Image Compression as 1] No Compression, 2] Zip Compression, 3] JPEG Low Compression, 4] JPEG Mid Compression and 5] JPEG High Compression. Name the corresponding created PDF files as 1.PDF, 2.PDF, 3.PDF, 4.PDF and 5.PDF respectively and store all these files in a Folder called GroupA.</p> <p>2. Keep General and Color/Grayscale Images Compression at default, create PDF files with differences in Monochrome Image Compression as 1] No Compression, 2] Zip Compression, 3] CCITT Group 3, 4] CCITT Group 4 and 5] Run Length. Name the corresponding created PDF files as 6.PDF, 7.PDF, 8.PDF, 9.PDF and 10.PDF respectively and store all these files in a Folder called GroupB.</p> <p>Compare the files belonging to a particular group or directory with each other in terms of differences in file size. Screen appearance of text, Screen appearance of images and record the same as readings. Note down your findings and show the same to the examiner along with the created PDF files.</p> <p>Also obtain a hardcopy of the first page of the file 2.PDF</p>	<p style="text-align: center;">(1)</p> <p style="text-align: center;">(3)</p> <p style="text-align: center;">(3)</p> <p style="text-align: center;">(1)</p> <p style="text-align: center;">(1)</p>
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OR

Experiment 16 Conversion of a MS PowerPoint Presentation into PDF

Create a Microsoft PowerPoint Presentation satisfying the following criteria:



(1)

- The presentation must be 4 slides where all slides have a common background colour scheme. Each slide must have its own unique title, some relevant text. The slides need not include any images. The Page Setup must be for Letter or Legal sized pages with Landscape Orientation.
- At least 2 or 3 different fonts must be used throughout the presentation.
- Size of the font used should not exceed 14 points for the body of the text.

From the Print menu, select Adobe PDF as the printer, and set its properties such as Page Size, Margins and Orientation of the PDF to be created match the settings used in the original Presentation. Set the Graphic Resolution to 150 dpi. Keep the Font Embedding Options constant at Default. Convert this document into PDF using Adobe PDF printer with Image Compression options used as listed below.

1) Keeping Compression and Font Embedding Options at default, generate 4 PDF files using PDF Writer with differences of 'SCREEN', 150 dpi, 300 dpi and 600 dpi in their Graphic Resolution. Save all 4 files with filenames 1.PDF, 2.PDF, 3.PDF and 4.PDF respectively in a Folder called GroupA. (2)

2) Keeping Page Setup options as indicated above and the Graphic Resolution constant at 150 dpi as well as Font Embedding Options at Default, Choose The Compression Options for the PDF to be created in such a way that all other Compression settings at constant (Default) generate two more PDF files, one with and the other without text compression. Name these files as 5.PDF and 6.PDF respectively in a Folder named GroupB. (2)

3) Keeping Page Setup options as indicated above and the Graphic Resolution constant at 150 dpi as well as Compression Options at Default, Choose the Font Embedding Options for the PDF to be created and create 2 PDF files in the following way. In one case, create a PDF file named 7.PDF embedding all fonts used in the document and in the other case create another PDF file named 8.PDF without embedding any fonts. Save 7.PDF and 8.PDF in a new folder called GroupC. (2)

Compare the files belonging to a particular group or directory with each other in terms of differences in file size. Screen appearance of text, Screen appearance of images and record the same as readings. Note down your findings and show the same to the examiner along with the created PDF files. (1)

Also obtain a hardcopy of the first page of the file 2.PDF (1)

Experiment 17 Conversion of an Adobe PageMaker Document into PDF

Create an Adobe PageMaker Document satisfying the following criteria:

- At least 3 full pages of Formatted text with a Page Setup for Letter or Legal sized pages Orientation Portrait with no margin exceeding 1.25"
- At least 2 or 3 different fonts must be used throughout the document. Matter may be divided into 2 or 3 paragraphs per page if desired.
- Size of the font used should not exceed 12 points for the normal body of the text and 14 points for Headings used if any.
- Do not embed any images in the document.

From the Print menu, select Adobe PDF as the printer, and set its properties such as Page Size, Margins and Orientation of the PDF to be created match the settings used in the original PageMaker Document. Convert this document into PDF using Adobe PDF in the following ways:

1) Keeping Compression and Font Embedding Options at default, generate 4 PDF files using PDF Writer with differences of 'SCREEN', 150 dpi, 300 dpi and 600 dpi in their Graphic Resolution. Save all 4 files with filenames 1.PDF, 2.PDF, 3.PDF and 4.PDF respectively in a Folder called GroupA.

2) Keeping Page Setup options as indicated above and the Graphic Resolution constant at 150 dpi as well as Font Embedding Options at Default, Choose The Compression Options for the PDF to be created in such a way that all other Compression settings at constant (Default) generate two more PDF files, one with and the other without text compression. Name these files as 5.PDF and 6.PDF respectively in a Folder named GroupB.

3) Keeping Page Setup options as indicated above and the Graphic Resolution constant at 150 dpi as well as Compression Options at Default, Choose the Font Embedding Options for the PDF to be created and create 2 PDF files in the following way. In one case, create a PDF file named 7.PDF embedding all fonts used in the document and in the other case create another DF file named 8.PDF without embedding any fonts. Save 7.PDF and 8.PDF in a new folder called GroupC.

Compare the files belonging to a particular group or directory with each other in terms of differences in file size and Screen appearance. Note down your findings and show the same to the examiner along with the created PDF files.

Also obtain a hardcopy of the file 2.PDF

OR

<p align="center">Experiment 17 Conversion of an Adobe PageMaker Document containing Images into PDF</p>	
<p>Create an Adobe PageMaker Document satisfying the following criteria:</p> <ul style="list-style-type: none"> • 2 pages of text with a Page Setup for Letter or Legal sized pages Orientation Portrait with no margin exceeding 1.25" • At least 2 or 3 different fonts must be used throughout the document. Matter may be divided into 2 or 3 paragraphs per page if desired. • Size of the font used should not exceed 12 points for the normal body of the text and 14 points for Headings used if any. • The document must have two Bitmap images embedded in it. One bitmap must be monochrome and the other must be a 24 bit image. None of the two must be displayed in the document with their width or height exceeding 200 pixels (2 inches) irrespective of their original dimensions. 	(1)
<p>From the Print menu, select Adobe PDF as the printer, and set its properties such as Page Size, Margins and Orientation of the PDF to be created match the settings used in the original PageMaker Document. Set the Graphic Resolution to 150 dpi. Keep the Font Embedding Options constant at Default. Convert this document into PDF using Adobe PDF Printer with Image Compression options used as listed below.</p>	
<p>1. Keep General and Monochrome Images Compression at default, create PDF files with differences in Color/Grayscale Image Compression as 1] No Compression, 2] Zip Compression, 3] JPEG Low Compression, 4] JPEG Mid Compression and 5] JPEG High Compression. Name the corresponding created PDF files as 1.PDF, 2.PDF, 3.PDF, 4.PDF and 5.PDF respectively and store all these files in a Folder called GroupA.</p>	(3)
<p>2. Keep General and Color/Grayscale Images Compression at default, create PDF files with differences in Monochrome Image Compression as 1] No Compression, 2] Zip Compression, 3] CCITT Group 3, 4] CCITT Group 4 and 5] Run Length. Name the corresponding created PDF files as 6.PDF, 7.PDF, 8.PDF, 9.PDF and 10.PDF respectively and store all these files in a Folder called GroupB.</p>	(3)
<p>Compare the files belonging to a particular group or directory with each other in terms of differences in file size and Screen appearance and record the same as readings. Note down your findings and show the same to the examiner along with the created PDF files.</p>	(1)
<p>Also obtain a hardcopy of the file 2.PDF</p>	(1)

Experiment 18 Creation of a PDF Document and creation of Bookmarks within the same.	
<p>Create a Microsoft Word Document satisfying the following criteria:</p> <ul style="list-style-type: none"> • At least 7 full pages of formatted text with a Page Setup for Letter or Legal sized pages Orientation Portrait with no margin exceeding 1.25". In order to save time, if necessary, text may be copied from other sources and simply pasted into the document, and then formatted as required. • Matter may be divided into 2 or 3 paragraphs per page if desired. • Size of the font used should not exceed 12 points for the normal body of the text and 14 points for Headings used if any. • Do not embed any images in the document. <p>Create a PDF document using Adobe PDF Printer from the above. After the PDF document creation, insert at least eight Bookmarks in the same. Two Bookmarks out of the 8 should lead to certain text in the document. The next two Bookmarks should give a magnified view of certain portions of certain pages. The following two Bookmarks should lead to Web Pages on the World Wide Web that are functional. The last two Bookmarks should lead to non-PDF local documents such as a Microsoft Word or Lotus document. Give suitable names to the Bookmarks,</p> <p>Note down o your paper, the names of the bookmarks created, the types of target, and details of the target.</p> <p>Test the functionality of the bookmarks and finally demonstrate the same to the examiner.</p>	<p>(1)</p> <p>(6)</p> <p>(2)</p>

OR

Experiment 18 Creation of a PDF Document and creation of Links within the same.	
<p>Create a Microsoft Word Document satisfying the following criteria:</p> <ul style="list-style-type: none"> • At least 11 full pages of formatted text with a Page Setup for Letter or Legal sized pages Orientation Portrait with no margin exceeding 1.25". In order to save time, if necessary, text may be copied from other sources and simply pasted into the document, and then formatted as required. • Size of the font used should not exceed 12 points for the normal body of the text and 14 points for Headings used if any. • Do not embed any images in the document. • The first page must be similar to a Contents Page carrying the Topic Name and Page Number of the following ten pages. • The remaining ten pages must each have a unique Topic and content, not exceeding one page. <p>Create a PDF document using Adobe PDF Printer from the above. After the PDF document creation, insert at least ten Links from the First (Contents) page to each Page in the document. Both The Page number as well as the Topic Name Corresponding to a particular Topic should act as a link to the same target. At least two out of the ten links must be 'visible' in the PDF document and the others must be invisible. Use different Magnification Options</p> <p>Make a note of the following on paper; the links created in terms of the Text that acts as the link, the type of link (Visible or invisible), the Type of Action the link takes and the Magnification. Test the functionality of all the links and finally demonstrate the same to the examiner along with the noted report.</p> <p>Obtain a hardcopy of the Contents Page only.</p>	<p>(1)</p> <p>(5)</p> <p>(2)</p> <p>(1)</p>

Experiment 19 Study of Standard Security Features within a PDF Document.	
<p>Create / Use a ready made Microsoft Word Document satisfying the following criteria:</p> <ul style="list-style-type: none"> • At least 3 full pages of Formatted text with a Page Setup for Letter or Legal sized pages Orientation Portrait with no margin exceeding 1.25" • Size of the font used should not exceed 12 points for the normal body of the text and 14 points for Headings used if any. • Do not embed any images in the document. 	
Create a PDF File called 1.PDF from the same using Adobe PDF printer. Open 1.PDF using Adobe Acrobat, and under Standard security Options, provide a password to the same. The Security Option chosen should only prevent the file from being opened without providing the correct password. Save this file as 2.PDF without modifying the original 1.PDF file.	(1)
Open 1.PDF once again and under Standard security options, provide the file with another password which would disable Printing of the file. Save this file as 3.PDF without modifying the original 1.PDF file.	(1)
Open 1.PDF once again and under Standard security options, provide the file with another password which would disable Content Copying and Extraction (Cut, Copy Paste) from the file contents or to the file contents. Save this file as 4.PDF without modifying the original 1.PDF file.	(1)
Open 1.PDF once again and under Standard security options, provide the file with another password which would disable Printing as well as Content Copying and Extraction from the file contents or to the file contents. Save this file as 5.PDF without modifying the original 1.PDF file.	(1)
Open 1.PDF once again and under Standard security options, provide the file with passwords which would disable Opening the file, Printing as well as Content Copying and Extraction from the file contents or to the file contents. Save this file as 6.PDF without modifying the original 1.PDF file.	(1)
Now note the following with for every file individually.	
<ul style="list-style-type: none"> • Whether a password is required to open the file. • Whether Printing the file is possible or not • Whether Editing the file i.e. Cutting or Copying a section of text from the file or Pasting text or images into the file is possible or not. 	(2)
Demonstrate the created files as well as the above findings to the examiner. Obtain a hardcopy of 1.PDF.	(1)

Experiment 20 Conversion of a CorelDraw Image into PDF	
<p>Start the CorelDraw Program (Ver. 8.0 or higher required). Open the Huntress.cdr file from the Samples folder. Export this file to the Encapsulated PostScript Format using the following Options:</p> <ul style="list-style-type: none"> • Image Header included in the Tiff Format, 8-bit, 72 dpi Resolution, • Colour Management Using the Printer's separations colour profile, • Send Bitmaps as RGB, Fountain steps 128, • PostScript level 2. 	
Convert this EPS file into PDF named Huntress1.PDF using Acrobat Distiller Program using Default Job Options settings.	(3)
Open the PDF file created. Give the image some time to appear completely. Observe the same.	
Repeat the above Process of EPS and PDF creation for various settings of Image Header Format-Bitsize and Resolution, Bitmap type and Fountain steps and PostScript. Name the newly created files as Huntress2.Pdf, Huntress3.Pdf and so on. Also note the settings for which EPS or PDF creation does not take place.	
Note down your observations in a tabular form in each case recording size of the EPS and PDF files created, approximate time taken to open the PDF file fully after creation, relative clarity of image on screen in terms of resolution and color quality versus all the EPS export parameters chosen.	(6)
Show the PDF files created to the examiner along with the above recorded data.	