3.1   BASICS OF INFORMATION TECHNOLOGY

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RATIONALE

Information technology has great influence on all aspects of life. Almost all work places and living environment are being computerized. In order to prepare diploma holders to work in these environments, it is essential that they are exposed to various aspects of information technology such as understanding the concept of information technology and its scope; operating a computer; use of various tools of MS office; using internet etc. form the broad competency profile of diploma holders. This exposure will enable the students to enter their professions with confidence, live in a harmonious way and contribute to the productivity.

Note:

1.   *Teaching of theory should be dovetailed with practical work*
2.   *The following topics may be taught in the laboratory along with the practical exercises.*

DETAILED CONTENTS

1.   Information Technology – its concept and scope

2.   Computers for information storage, information seeking, information processing and information transmission

3.   Elements of computer system, computer hardware and software; data – numeric data, alpha numeric data; contents of a program, processing

4.   Computer organization, block diagram of a computer, CPU, memory

5.   Input devices; keyboard, mouse etc; output devices; VDU and Printer, Scanner, Plotter

6.   Electrical requirements, inter-connections between units, connectors and cables

7.   Secondary storage; magnetic disks – tracks and sectors, optical disk (CD and DVD Memory), primary and secondary memory: RAM, ROM, PROM etc., Capacity; device controllers, serial port, parallel port, system bus

8.   Exercises on file opening and closing; memory management; device management and input – output (I/O) management with respect of windows

9.   Installation concept and precautions to be observed while installing the system and software

10.   Introduction about Operating Systems such as MS-DOS and Windows

11.   Special features, various commands of MS word and MS-Excel

12.   About the internet – server types, connectivity (TCP/IP, shell); applications of internet like: e-mail and browsing

13.   Various Browsers like WWW (World wide web); hyperlinks; HTTP (Hyper Text Transfer Protocol); FTP (File Transfer Protocol)

14.   Basics of Networking – LAN,WAN, Topologies

LIST OF PRACTICALS

1.   Given a PC, name its various components and list their functions

2.   Identification of various parts of a computer and peripherals

3.   Practice in installing a computer system by giving connection and loading the system software and application software

4.   Installation of DOS and simple exercises on TYPE, REN, DEL, CD, MD, COPY, TREE, BACKUP commands

5.   Exercises on entering text and data (Typing Practice)

6.   Installation of Windows 98 or 2000 etc.

    (1)   Features of Windows as an operating system
        -    Start
        -    Shutdown and restore
        -    Creating and operating on the icons
        -    Opening closing and sizing the windows
        -    Using elementary job commands like – creating, saving, modifying, renaming, finding and deleting a file
        -    Creating and operating on a folder
        -    Changing setting like, date, time color (back ground and fore ground)
        -    Using short cuts
        -    Using on line help

7.   MS-WORD

- File Management:
  Opening, creating and saving a document, locating files, copying contents in some different file(s), protecting files, Giving password protection for a file

- Page Set up:
  Setting margins, tab setting, ruler, indenting

- Editing a document:
  Entering text, Cut, copy, paste using tool- bars

- Formatting a document:
  Using different fonts, changing font size and colour, changing the appearance through bold/ italic/ underlined, highlighting a text, changing case, using subscript and superscript, using different underline methods

- Aligning of text in a document, justification of document ,Inserting bullets and numbering

- Formatting paragraph, inserting page breaks and column breaks

- Use of headers, footers: Inserting footnote, end note, use of comments

- Inserting date, time, special symbols, importing graphic images, drawing tools

- Tables and Borders:
  Creating a table, formatting cells, use of different border styles, shading in tables, merging of cells, partition of cells, inserting and deleting a row in a table

- Print preview, zoom, page set up, printing options

- Using Find, Replace options

- Using Tools like:
  Spell checker, help, use of macros, mail merge, thesaurus word content and statistics, printing envelops and lables

- Using shapes and drawing toolbar,

- Working with more than one window in MS Word,

- How to change the version of the document from one window OS to another

- Conversion between different text editors, software and MS word

8. MS-EXCEL

- Starting excel, open worksheet, enter, edit, data, formulas to calculate values, format data, create chart, printing chart, save worksheet, switching from another spread sheet

- Menu commands:
  create, format charts, organise, manage data, solving problem by analyzing data, exchange with other applications. Programming with MS-Excel, getting information while working

- Work books:
  Managing workbooks (create, open, close, save), working in work books, selecting the cells, choosing commands, data entry techniques, formula creation and links, controlling calculations, working with arrays

- Editing a worksheet, copying, moving cells, pasting, inserting, deletion cells, rows, columns, find and replace text, numbers of cells, formatting worksheet

- Creating a chart:
  Working with chart types, changing data in chart, formatting a chart, use chart to analyze data

- Using a list to organize data, sorting and filtering data in list

- Retrieve data with MS – query: Create a pivot table, customising a pivot table. Statistical analysis of data

- Customise MS-Excel:
  How to change view of worksheet, outlining a worksheet, customise workspace, using templates to create default workbooks, protecting work book

- Exchange data with other application: linking and embedding, embedding objects, linking to other applications, import, export document.

9. Internet and its Applications

a) Log-in to internet
b) Navigation for information seeking on internet

c)   Browsing and down loading of information from internet
d)   Sending and receiving e-mail

-      Creating a message
-      Creating an address book
-      Attaching a file with e-mail message
-      Receiving a message
-      Deleting a message

RECOMMENDED BOOKS

1.   Fundamentals of Computer by V Rajaraman; Prentice Hall of India Pvt. Ltd., New Delhi

2.   Computers Today by SK Basandara, Galgotia publication Pvt ltd. Daryaganj, New Delhi

3.   MS-Office 2000 for Everyone by Sanjay Saxena; Vikas Publishing House Pvt. Ltd., New Delhi

4.   Internet for Every One by Alexis Leon and Mathews Leon; Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi

5.   A First Course in Computer by Sanjay Saxena; Vikas Publishing House Pvt. Ltd., Jungpura,New Delhi

6.   Mastering Windows 95, BPB Publication, New Delhi

7.   Computer Fundamentals by PK Sinha; BPB Publication, New Delhi

8.   Fundamentals of Information Technology by Leon and Leon;Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi

3.2   ILLUSTRATION – I

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RATIONALE

The aim of the subject is to prepare the students technically, practically and aesthetically for translating ideas/messages/words into visual forms.

DETAILED CONTENTS

Practical Exercises

Exercise – I

Introduction **:** Definition and principles of illustration and its application in Applied Art and Craft. Illustration in line and half tone.

Exercise – II

Illustrating the human figure, faces, expressions and actions in line (black and white – 3 exercises).

Exercise – III

Illustration from daily life such as fairs, festivals, play-grounds, social ceremonies etc. in line and half tone (3 exercises)

Note:

      i)   Size: imperial ½
      ii)   At least 10 sketches on living and non-living things every day
      iii)   Submission : At least, best four finished illustrations

3.3   SCULPTURE AND STUDY OF OBJECTS - II

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RATIONALE

The aim of the subject is to familiarise the student to the fundamental of making sculptures. All assignments should be designed to understand problems of volume, weight, clay form in space etc as against rendering on flat (two dimensional surfaces) and in round (three dimensional). Adequate technical skills may be provided depending on the formation available

DETAILED CONTENTS

Practical Exercises

Exercise – I

Study of the following features of the human head in clay:

-   Ear
-   Lips
-   Nose
-   Eye

Exercise – II

Study of the following objects in coil methods in clay:

-   Pot
-   Jug
-   Bowl
-   Spoon
-   Basket
-   Flower Vase

Exercise – III

Study of the following flora and fauna in thumb and palm method (Round and Relief) in clay:

-   Fruits
-   Vegetables
-   Trees
-   Birds

- Animals
- Flowers

Exercise – III

Making mould in plaster of Paris and its casting of above said models using different materials

Note:

i)   At least 2 casted objected should be submitted for internal assessment

RECOMMENDED BOOKS

1.   Symbol Source Book by Hennry D. Reyfess

2.   Artists and Illustration Encyclopedia by John Quick

3.4   PRESS AND MAGAZINE LAYOUT - I

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RATIONALE

The aim of this subject is to develop skill in the students related to organizing the elements of a layout such as headlines and subheads; illustrations; body copy or blocks of copy, and the logotype that feature the brand name or the firm name or display symbol that feature the trade mark or the trade character.

DETAILED CONTENTS

Practical Exercises

Sr. No.	Relevant Instructions for Practicals	Practical Exercises
1.	Introduction to press layout, understanding of visualization step and the layout step	-
2.	Elements of a layout – Headings, sub-headings, illustrations, body copy, logotype or display symbol, trade marks, trade characters, coupons, packages, prices and seals of approval	Comprehensive layouts using all the elements mentioned in exercise I on various Industrial products (Four Exercises; Colour: Black and white: 4 Columns x 30 Cms. Each)
3.	The thumbnail, rough/visual and its further refinement to comprehensive layout making look strikingly similar to the final advertisement.	Thumb nail sketching on given subject for advertising purpose and making rough layout in a given space comprising of head line, slogan or subheadings, illustrations, copy or text, logo type, trade mark etc. (20 exercises with pencils, crayon, black and white)

Note:

1. Students are expected to indicate suitable type faces, its points and measurement of the text/copy matter.
2. The students should maintain a reference book containing various types of press advertisements and magazine advertisements with other relevant materials to be collected from old newspapers and magazines
3. Students are required to take photographs for its use
4. Submission : 3 best works

3.5   POSTER DESIGN - I

L   T   P
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RATIONALE

The students must be able to understand the basic concepts, principles and other requirements related to poster designing. A diploma holder must be able to prepare posters on different subjects like product posters and social posters. The subject should be quite effective in enhancing the knowledge of poster designing.

DETAILED CONTENTS

Practical Exercises

Exercise – I

Introduction to simple poster designing – various sections of poster (product promoting posters, institutional posters, cultural posters etc.)

Exercise – II

Preparing two/three flat colours typographical (slogan, sub-slogan etc.) poster design on a given subject like exhibition, book fair, obey traffic rules etc. (Size ½ Imperial)

Exercise – III

Preparing four flat colours poster design on a given subject like handicrafts, folk art, donate eyes, donate blood and aids awareness. (Two exercises from each topic). Submission : At least four works.

Note:

1.   Posters should be done in flat colours
2.   Students subject taken to print houses to see and understand the reproduction methods
3.   Tonel value of flat colours may be used

3.6   PHOTOGRAPHY

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RATIONALE

The role of photography plays an important part in the development of modern world. Photography in the field of advertising is increasingly used day by day. It is necessary to teach various aspects and techniques of photography to the students so that an applied art students could use various types of photographs in their art work.

DETAILED CONTENTS

Practical Exercises

Sr. No.	Relevant Instructions for Practicals	Practical Exercises
1.	Introduction to the art of photography	Taking photographs in black and white (natural light and artificial light) on the following subjects for posters, press ads, greeting cards and calendars etc. - Nature - Human figure - Portraits - Consumer products
2.	Basic principles of photography - Introduction of various types of cameras, photographic lens, aperture and shutter speed, depth of field, films etc. - Photography paper for black and white films and their characteristics, films choice (according to its subject, light condition) - The dark room equipments, chemicals used in black and white printing/film processing	Developing and printing, making contact sheets, enlarging in different sizes
3.	Introduction to digital photography, learning various techniques of today's technological age	

Note:

1. Ten Exercises

2. Submission: Portrait   One   8"x10
                 Composition   One   8"x10
                 Consumer Product One   8"x10