

# Capital College and Research Center

## Koteshwor, Kathmandu

A practical work of

**Computer Science** 

**Grade: XI** 

#### **Affiliated under NEB**

Project work submitted for the partial fulfillment of 10+2 Program

For grade 11 in computer science for

# **NEB final Practical Examination 2079**

Project prepared by:	<u>Internal Examiner</u>

Name: Abhishek Adhikari Name:

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Stream: Science <u>External Examiner:</u>

Shift: Day Name:

Section:P1 Signature:

# **Letter of Certification**

This is to certify that Mr. Abhishek Adhikari student of **Capital College and Research Center (CCRC)** grade XI has sincerely performed his lab work and actively participate in the preparation of the project report under my suspension and guidance based on computer science.

We will further support them in computer activities and wish success in the future.

Signature:.....

# **Department of Computer Science**

(Mr. Dhirendra Kumar Yadav)

Date:

# **Acknowledgement**

We must take this opportunity to acknowledge our sincere gratitude to the **Capital college and research center** for providing this type of quality education in the field of computer science which helps students to broaden the concept of computer science.

In addition, we would to give a word of thanks Mr. Dhirendra Kumar Yadav and rest of the entire computer member of **Capital College and Research Center**, who encouraged us to perform various computer activities.

THANK YOU

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#### **CHAPTER ONE: MS WORD**

#### **Attempt all questions:**

- 1. What is word processor? What are the features of word processor? Give some examples.
- Word processor is application software that helps for writing, editing, formatting a document. Moreover, it also helps for designing and presenting the document in attractive format.

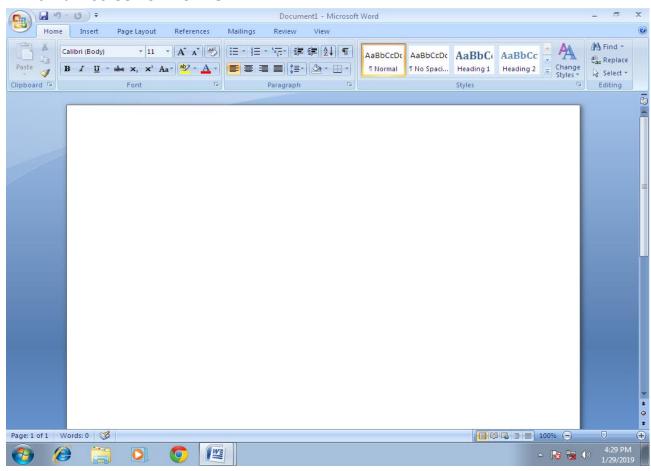
#### Features of word processor

- It is used for creating, saving and closing, printing a documents.
- It is used for formatting text, paragraphs, table and page.
- It is used for drawing pictures, charts and graphs.
- It is used for inserting symbols, objects, word art, clip art, graphics, etc.
- It is used for automating the work by using macros.
- It is used for sending multiple mails by using mail merge tool.
  - EXAMPLES: MS Word, Word Perfect, Word Star, Lotus Notes, etc.

#### 2. How to open Microsoft Word?

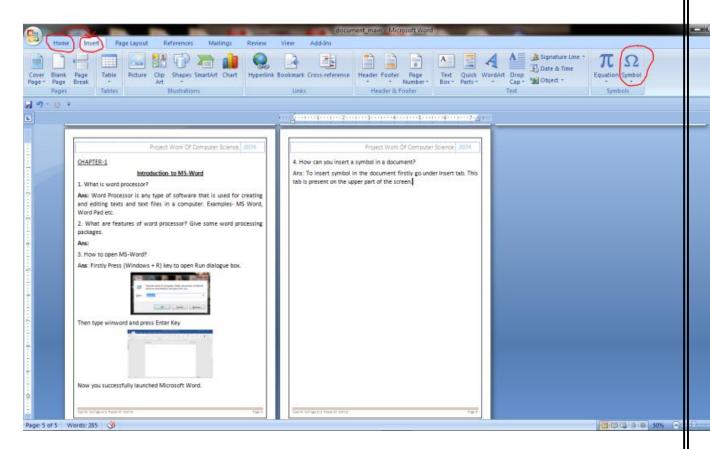
- We can open Microsoft Word by following steps:
  - Click on the **Start** menu in the bottom left corner of the screen.
  - Choose All Programs then Microsoft Office(from the sub-menu which appears)
    - Or,
  - From the **Desktop** in windows, double-click on the **Word 2007** icon.

3. Print main screen of MS WORD.



## 4. How can you insert a Symbol, Date and Time in document?

To insert symbol in the document firstly go under Insert tab. This tab is present on the upper part of the screen.



Now from the Symbol menu you can add numerous symbols as per your need.

#### 5. What is Spelling and Grammar and Thesaurus?

> Spelling is another feature of MS-Word that underlines the misspelled word in red and grammatically incorrect ones in green. It displays word in the dialog box as well as selects the word within the document and offers a substitution or correction.

Thesaurus is also one of the features of MS-Word which allows user to look up synonyms (different words with the same meaning) and antonyms (words with the opposite meaning.

#### 6. What is merging document? Write the steps with example.

- Merging document is the process of attaching(merging) two or more documents of different written sources. This helps to save time and efforts.
- Steps for merging mails/documents:
  - First, open Word Document.

- Then, type your email in Word.
- Click on the "Mailings" tab in the ribbon.
- In the "Start Mail Merge" grouping, click on the "Start Mail Merge"
  button. It will show a list of mail merge options available. You can choose
  Letters, E-Mail Messages, Envelopes, Labels or Directory. In this case as we
  want to send an email. Click on "E-Mail Messages"
- Next you need to select the recipients of your email merge. These names could come from any number or sources, maybe an Excel 2007 spreadsheet. Maybe you're Outlook 2007 Contacts or you could just type them yourself. To do that, click on the "Select Recipients" box in the "Start Mail Merge" group. Either find your data source from your outlook contacts, or create a new list.
- If you want to edit any of the recipients in the list, now is the time to click on "Edit Recipient List" in the "Start Mail Merge" group.
- The next step is to add the appropriate fields to personalize the greeting, the recipient's name, or to add any other piece of data you might have on the contact anywhere throughout your recipient list.
  You can find the appropriate fields in the "Write & Insert Fields" group (still on the "Mailings" tab). More than likely you will want to add at least a greeting line(Dear Bill... or something like that). To do that, click on the "Greeting Line" button in the "Write & Insert Fields" group.
- Once you are happy with your greeting line format, click "OK". Word 2007
   will now drop the field into your document.
- Now you can preview your results to ensure that everyone's name is coming up correctly. Click the "Preview Results" button in the "Preview Results" group, then use the forward and back arrows beside it to run through your recipient list.

# Why to study at CCRC College

- Professional experience
- 10+2 classes of science and management
- Limited number of students in each class
- Resourceful library with internet and email
- Hostel and transport
- Scholarships for outstanding students
- Parent teacher association (TPA)
- Computer classes
- Morning and day shifts
- Fees on easy installments
- Career guidance services.



#### **Make your identity card:**

# CAPITAL COLLEGE AND RESEARCH CENTER

STUDENT IDENTIFICATION:

FACULTY: SCIENCE



Name: Ram Karki

Class: XI

Section: P1

Shift: Day

Date of Issue: 1st August, 2021

Valid up to: 31st July, 2023

#### **CHAPTER TWO:MS EXEL**

1.what is spreadsheet package ?what are its merits and demerits? Give some examples.

#### Ans:

A spreadsheet is a sheet of paper that shows accounting or other data in rows and columns; a spreadsheet is also a computer application program that simulates a physical spreadsheet by capturing, displaying, and manipulating data arranged in rows and columns.

Today, Microsoft Excel is the most popular and widely used spreadsheet program, but there are also many alternatives. Below is a list of spreadsheet programs that can be used to create a spreadsheet.

- Google Sheets (online and free).
- iWork Numbers Apple Office Suite.
- LibreOffice -> Calc (free).
- Lotus 1-2-3 (discontinued).
- Lotus Symphony Spreadsheets.
- Microsoft Excel.
- OpenOffice -> Calc (free).
- VisiCalc (discontinued).

In business, strategic planning is essential and requires valid information in order to make key decisions. Choosing the right tools for inputting, tracking, analyzing and storing data will help business owners and managers make the best choices for their company's business. One of the components within software productivity suites is the spreadsheet. Spreadsheets are popular among accountants and among those who like to collect and track data, yet there are some limitations, which may not make them the best choice for every office application.

## Some merits and demerits of spreadsheet:

Advantage: Organizing Data

Spreadsheets are frequently the go to tool for collecting and organizing data, which is among the simplest of its uses. Information can easily be placed in neat columns and rows and then sorted by information type. Although a large collection of data may be overwhelming to view in its raw state, tools within the program allow the user to create presentations where the data is analyzed and plugged into pie charts or tables for easy viewing and interpretation.

#### Disadvantage: User Bias

However, the downside is that only the information that the user chooses for analysis is included in these presentations, and therefore, other pertinent information that may influence decision making might be excluded, unintentionally. To make reporting of data more user friendly and comprehensive, companies are choosing to use reporting tools such as Tableau and Qlik, instead of relying solely on the spreadsheet.

#### Advantage: Streamlines Calculations

No one likes to spend all their time at work doing repetitive calculations. The great appeal of spreadsheets is that the program does all the math for the user. Once a formula is written and the program has a set command, complex calculations can easily be computed for the related data that has been input. This allows users to ask "what if" types of questions and to easily get the answers they need without the need to rework the calculations.

For example, if the spreadsheet is set up to calculate your gross profit, when any variable such as cost per unit, shipping costs, or sales discount are changed, the software automatically recalculates the new gross profit based on the new information.

#### Disadvantage: Learning the Syntax Takes Skill

The difficult part for many users, is that the calculations must be entered into the spreadsheet as formulas. This requires learning the correct syntax for each type of calculation you wish to make. Although many classes are available to learn the skills necessary to use these formulas, many users still find them difficult. If the syntax is incorrect, the program will not return the correct information when the calculations are

run. Additionally, if users input the wrong data, even in only one cell of the spreadsheet, all related calculations and cells will be affected and have incorrect data.

Advantage: Multiple User Access

In today's collaborative work environment, multiple users within an office often need access to the same documents. If using Microsoft Excel, the spreadsheets can be shared, but only one user can change data at a time. If local copies are made and updated, other users will not have access to the new data. Google Sheets offers the solution of file sharing and allowing multiple users to access and update a single form.

Be aware that, in both cases, there is no file history. Therefore, no matter who makes changes at any time, when any changes are made, the previous information history is lost.

Disadvantage: Lack of Security

Another spreadsheet disadvantage is the lack of security for your files. Typically, spreadsheets are not that secure and therefore are at greater risk for data corruption or mismanagement of information. Files that contain sensitive financial information may not be safe from hackers, even if password protected.

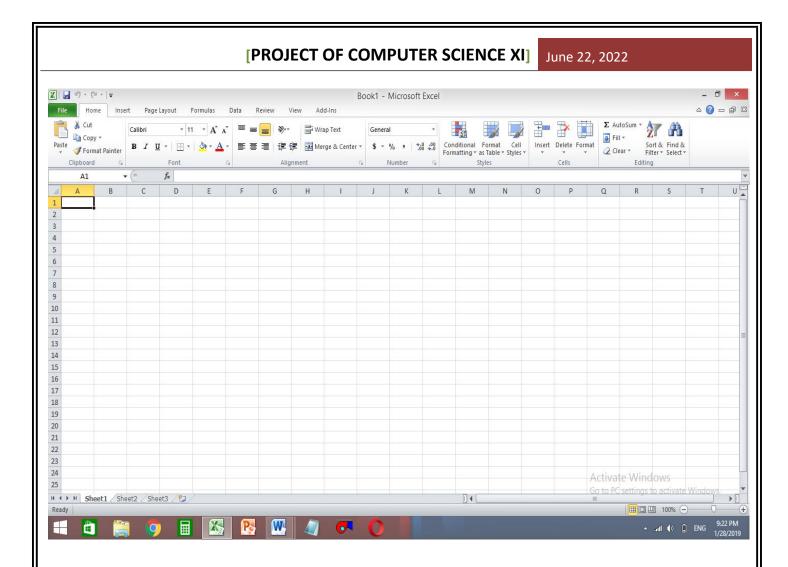
#### 2. How to open MS Excel.

#### Ans:

- Go to the start button on the desktop and press it .
- Click on All Programs.
- Then click on MS office Excel 2007.
- This opens the Excel 2007 program.

#### 3. Print main screen of MS Excel.

Ans:



#### 4. Define the following Terms:

#### a. Workbook and Worksheet

#### Workbook:

An Excel worksheet is a single spreadsheet that contains cells organized by rows and columns. A worksheet begins with row number one and column A. Each cell can contain a number, text or formula. A cell can also reference another cell in the same worksheet, the same workbook or a different workbook. In Excel 2010, the maximum size of a worksheet is 1,048,576 rows by 16,384 columns.

#### Worksheet:

A workbook is an Excel file that contains one or more worksheets. Each of the workbook& worksheets are in separate tabs on the bottom of the Excel window. By default, a new Excel workbook will contain three worksheets. You can switch between worksheets by

clicking on the worksheet& tab on the bottom of the Excel window. In Excel 2010 the number of worksheets in a workbook is limited only by your computer& available memory.

#### b. Cell, cell reference and cell range

#### Cell:

A cell is the intersection between a row and a column on a spreadsheet that starts with cell A1. Each cell in a spreadsheet can contain any value that can be called using a relative cell reference or called upon using a formula.

#### Cell reference:

A cell reference is also known as cell address. A cell reference allows user to access data in the cell . MS Excel supports three types of cell references: relative, absolute and mixed cell references.

#### Cell range:

A cell range is a collection of selected cells in a spreadsheet. ... In Excel, a range is defined by the reference of the upper left cell (minimum value) of the range and the reference of the lower right cell (maximum value) of the range.

#### c. Function and formula bar

#### **Function:**

A formula is an expression which calculates the value of a cell. Functions are predefined formulas and are already available in Excel. For example, cell A3 below contains a formula which adds the value of cell A2 to the value of cell A1.

#### Formula bar:

The formula bar is a section in Microsoft Excel and other spreadsheet applications. It shows the contents of the current cell and allows you to create and view formulas. The two

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pictures below are examples of what the formula bar looks like in Microsoft Excel. To start creating a formula, click the mouse cursor in the formula bar and enter an equal sign (=). In both of the examples below, we're using the =SUM, which is telling Excel to add each of the cells.

d. Row heading and column heading

#### Row heading:

In Excel and Google Sheets, the column heading or column header is the gray-colored row containing the letters (A, B, C, etc.) used to identify each column in the worksheet. The column header is located above row 1 in the worksheet.

#### Column heading:

In Excel and other spreadsheet applications, the column header is the colored row of letters used to identify each column within the sheet, or workbook. The column header row is located above the row one.

### **CHAPTER THREE: MS-POWERPOINT**

#### 1. What is MS PowerPoint?

MS PowerPoint is a presentation program developed by Microsoft which is included in the standard Office suite along Microsoft Word and Excel. It is the software that allows users to create anything from basic slide shows to complex presentations.

#### 2. What is presentation?

A presentation is a collection of data and information that is to be delivered to a specific audience. A PowerPoint presentation is a collection of electronic slides that can have text, pictures, graphics, tables, sound and video that can run automatically or can be controlled by a presenter.

#### 3. What is slide?

Each page in a PowerPoint presentation is called slide. A collection of pages arranged in sequence that contain text and images for presenting to an audience. It often refers to a Microsoft PowerPoint presentation. See presentation graphics, PowerPoint and slide transition.

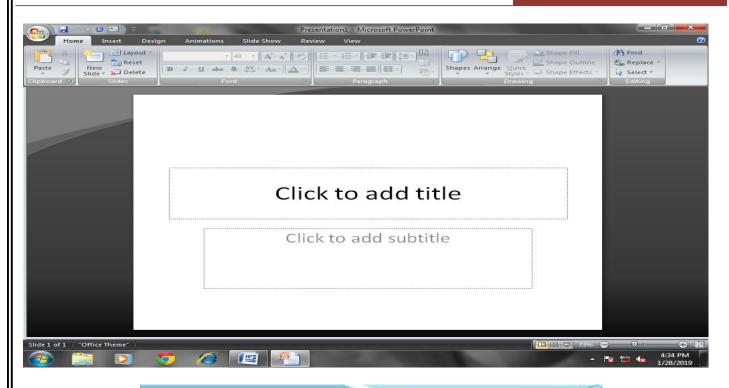
#### 4. How to open MS PowerPoint?

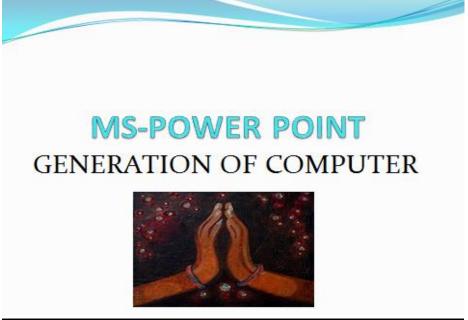
Steps to open MS PowerPoint are as follows:

- Click the start button in the lower left corner of the screen, and then click All Programs, next move your cursor over Microsoft Office, then click Microsoft PowerPoint 2007.
- 5. Print main screen of PowerPoint.



June 22, 2022





# GENERATION OF COMPUTER



# • FIRST GENERATION OF COMPUTER

First generations of computers were powered by thousands of vacuum tubes or thermionic valves and their memory was stored on magnetic storage. Most data were inserted using punch cards and output is on the same form.

2010/02/6

COMPUTER PRACTICAL

10

# GENERATION OF COMPUTER



#### SECOND GENERATAIONS OF COMPUTER

Transistors was used in second generation. Magnetic cores were used as primary memory magnetic disks,tapes were used as secondary memory. High level programming language were used.

2010/02/6

COMPUTER PRACTICAL

# **GENERATION OF COMPUTER**



#### THIRD GENERATION OF GENERATIONS

Integrated circuit is used in third generation computer which made computer smaller. Operating system was used that allowed machines to run many different programs at once.

2019/02/6

COMPUTER PRACTICAL

4

## GENERATION OF COMPUTER



#### FOURTH GENERATION OF COMPUTER

Fourth generation computers are the modern day nowadays computers. VLSI and ULSI ensured that millions of components could be fit in single chip .They use microprocessor as CPU.

2019/02/6

COMPUTER PRACTICAL

# **GENERATION OF COMPUTER**



## FIFTH GENERATION OF COMPUTER

These computers are still in development stage, but scientists are trying since 1990. These computers will use AI technology. They will use superconducting memory like bio-chips and natural language will be used.

2019/02/6

COMPUTER PRACTICAL

#### **CHAPTER FOUR:INTRODUCTION TO WEB PAGE**

# **HTML** web page designing

1. What is html? Write its features.

Ans: **Hypertext Markup Language** (**HTML**) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items.

#### Features:

- 1. HTML can be used to display any type of documents.
- 2. HTML is very simple and easy which gives flexibility in designing web pages.
- 3. HTML allows us to link one page to another through which we can easily attach required things while creating a web page.
- 4. HTML is not a case sensitive language.
- 5. HTML is a versatile language and can be used in any platform.
- 2. What are the types of HTML tags? Explain with examples.
  - ➤ Types of HTML tags are:
  - 1. Paired Tags: It is also called container tag. A tag is said to a paired tag if it along with a companion tag or closing tag appears at the end. For example, the tag is paired tag. The tag with its closing tag is used to render in Bold Text. In paired tag, first tag is called the opening tag and the second tag is called the closing tag.

For eg: <h1>.....</h1>

2. Singular tags:

The second type of tag is the singular tag, which is also known as a stand-alone tag or empty tag. The stand-alone tag does not have companion tag or closing tag.

For example: Other singular tags are:

Tags Description

<BR> Insert a link break

<HR> Defines a horizontal rule

<!--> Defines a comment

- 2. Meta tags: The Meta tag is one of the head elements. Meta tag is used to make the Website or its content searchable on the WWW or internet. This tag offers information about page or description about page or author of page or keyword that is relevant to that page. Actually, it is used for search engine information. The search engine interacts with the Meta tag of the HTML page at first.
- 3. What is hyperlink tag? Write method of creating hyperlinks.

Ans: The <a> tag defines a hyperlink, which is used to link from one page to another. The most important attribute of the <a> element is the href attribute, which indicates the link's destination. By default, links will appear as follows in all browsers: An unvisited link is underlined and blue.

Method of creating hyperlink:

<Html>

<Head><title>Hyperlink</title></head>

<Body>

<h1>Method of creating hyperlink</h1><br><br>

<a href="d:/book/hyperlink.html">About Hyperlink</a><br>

<hr>

<a href=<u>http://www.google.com</u>>Google Homepage</a>

<br><br><

<a href="galary.html"><IMG SRC="pic1.jpg" height=50 width=50></a>

</body>

</html>

#### 4. What are the tags for character formatting?

Ans:

The HTML element defines a paragraph:

Example

This is a paragraph

This is another paragraph.

**HTML Headings** 

Headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading. <h6> defines the least important heading.

Example

<h1>Heading 1</h1>

<h2>Heading 2</h2>

<h3>Heading 3</h3>

<h4>Heading 4</h4>

<h5>Heading 5</h5>

<h6>Heading 6</h6>

**Text Formatting tags:** 

Tag Description

<br/>b> Defines bold text

	[PROJECT OF COMPUTER SCIENCE XI] June 22, 2022
<em></em>	Defines emphasized text
<j></j>	Defines italic text
<small></small>	Defines smaller text
<strong></strong>	Defines important text
<sub></sub>	Defines subscripted text
<sup></sup>	Defines superscripted text
<ins></ins>	Defines inserted text
<del></del>	Defines deleted text
<mark></mark>	Defines marked/highlighted text

5. What are the tags for ordered and unordered list? Give on example.

#### Ans:

Ordered List: An order list defines a list of items using number or character.
 The tag defines ordered list.

```
For example:
```

</html>

 Unordered list: An unordered list makes bulleted list of items. The <UL> tag defines unordered list.

6. What is HTML table? Write HTML code to display mark sheet table with all attributes of table tag.

#### Answer:

#### HTML CODE TO DISPLAY MARKSHEET

```
<html>
<head><title>Marksheet</title></head>
<body>
```

<br>

<caption><h1>MARK SHEET</caption>

Name: Abhishek Adhikari

Grade: ELEVEN

Symbol no: 12729009

Stream: SCIENCE

Section: P1

<br>

S.NSubjectF.MP.MMarkObtainedGrade PointGradeHighest Mark

1

COM.ENGLISH

100

40

74

3.2

B+

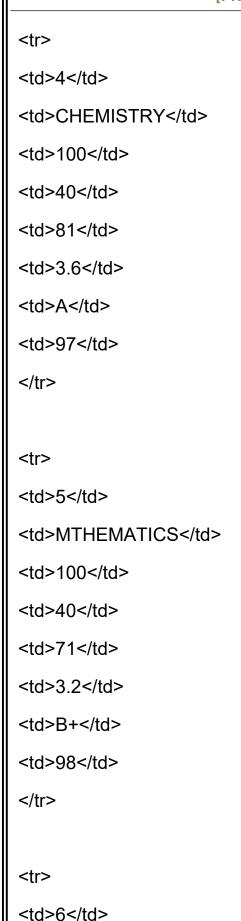
86

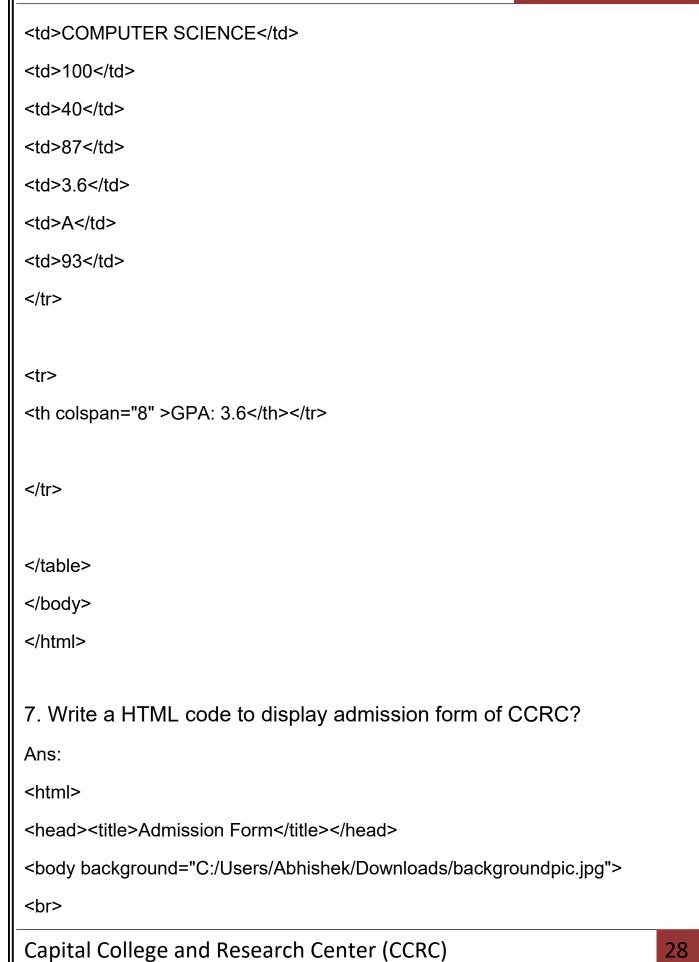
IOE MODEL TEST

PHYSICS

2.4

C+





```
<center><big>Admission Form</big></center>
<br><br><br>>
<center>
<form>
<fieldset>
<legend>Admission Form</legend>
Name: <input type="text" value="Enter your name" maxlength=25>
Address: <input type="text"</td>
Email: <input type="text" size="30"</td>
Phone number: <input type="text" maxlength="10">
SEE Grade: <input type="text" name="SEE Grade" size="4" maxlength=4</td>
Passed year: <input type="text" maxlength=4 size="4"</td>
Gender: <input type="radio" name="r1">Male
          <input type="radio" name="r1">Female 
Hobbies: <input type="checkbox">Football
           <input type="checkbox">Basketball
           <input type="checkbox">Cricket
            <input type="checkbox">Table Tennis
```

```
Faculty: <select>
       <option>Science
       <option>Management
        </select>
Shift: <input type="Radio" name="r1">Morning
      <input type="Radio" name="r1">Day
Select File: <input type="file" size=20 maxlength=40>
<label>Comment box:<br><textarea rows=5 cols=40></textarea></label>
Send: <input type="submit" value="send">
Clear: <input type="reset" value="clear">
</fieldset>
</form>
</center>
<body>
</html>
OUTPUT:
```

#### [PROJECT OF COMPUTER SCIENCE XI] June 22, 2022 Admission Form Admission Form Name: Enter your name Address: Email: Phone number: SEE Grade: Passed year: Gender: OMale OFemale Hobbies: □Football □Basketball □Cricket □Table Tennis Faculty: Science ∨ Select File: Choose File No file chosen Shift: OMorning ODay Comment box: Send: send Clear: clear

## **Expected Output of Marksheet:**

## MARK SHEET

Name: Abhishek Adhikari

Grade: ELEVEN Symbol no: 12729009 Stream: SCIENCE Section: P1

S.N	Subject	F.M	P.M	Mark Obtained	Grade Point	Grade	Highest Mark
1	COM.ENGLISH	100	40	74	3.2	B+	86
2	IOE MODEL TEST	140	56	29			58
3	PHYSICS	100	40	57	2.4	C+	97
4	CHEMISTRY	100	40	81	3.6	A	97
5	MTHEMATICS	100	40	71	3.2	B+	98
6	COMPUTER SCIENCE	100	40	87	3.6	A	93
		-		GPA: 3.6	va .		1

#### **CHAPTER FIVE: CONCEPT OF C-PROGRAMMING**

#### **C Programming Language**

C is a structured programming language developed by Dennis Ritchie in 1973 at Bell Laboratories. It is one of the most powerful programming languages. It is a highly efficient language because it has both features of high level language and low level language. So it is also known as middle level language. It is developed for creating system applications that directly interact with the hardware devices such as drivers, kernels, etc. Its main features are:

- > It is a Structured Programming Language.
- > It has 32 reserved words.
- > It is a robust language with rich set of built-in functions and operators that can be used to write any complex program.
- > C program is highly portable this means that program once written can be run on another machines with litter or no modification.
- > Clanguage is the most widely used language in operating system development today.

## **Basic Concept of C-Programming**

#### Scanf() and Printf() Function:

The printf() and scanf() functions are used for input and output in C language. Both functions are inbuilt library functions, which are defined in stdio.h(header file). It is also known as formatted I/O function. It use formatted specifiers such as %s, %d, %c, %f, etc. To print or read strings, integer, character or float respectively for input output process. There are many other formatting options available which can be used based on requirements.

#### i. Printf():

Printf() is used for output on the screen along with format specifier or escape sequence.

Syntax: printf("format string", argument\_list)

Where, format string is a significant string or format specifier argument\_list is a list of arguments

#### ii. Scanf():

Scanf() is used to get inputs given by user.

Syntax: scanf("format string", argument\_list)

Where, format string is a significant string or format specifier argument list is a list of arguments

## **CHAPTER FIVE: CONCLUSIONS**

I would like to thank Mr. Dhirendra Kumar Yadav and whole CCRC computer team who gave me a learning experience about the various experiences—about the various functions of different—programs application and software. During this project , I have gained a lot of knowledge about some important computer software (applications) such as :Ms.word ,Ms.excel,Ms.powerpoint, webpage designing(HTML) and so on.

