

1. Introduction to Computers

Very Short Answers

- 1. What is a computer?
- 2. Distinguish between data and information.
- 3. What are the components of a CPU?
- 4. What is the function of an ALU?
- 5. Write the functions of control unit.
- 6. What is the function of memory?
- 7. Differentiate Input and output unit.
- 8. Distinguish Primary and Secondary memory.

Short Answers

- 1. What are the characteristics of a computer?
- 2. Write the applications of computer.
- 3. What is an input device? Give two examples.
- 4. Name any three output devices.
- 5. Differentiate optical and Laser mouse
- 6. Write shortnote on impact printer
- 7. Write the characteristics of sixth generation.
- 8. Write the significant features of monitor.

Explain in detail

- 1. Explain the basic components of a computer with a neat diagram.
- 2. Discuss the various generations of computers.
- 3. Explain the following
- a. Inkjet Printer b. Multimedia projector c. Bar code / QR code Reader

2. Number Systems

Very Short Answers

- 1. What is data?
- 2. Write the 1's complement procedure.
- 3. Convert (46)₁₀ into Binary number
- 4. We cannot find 1's complement for $(28)_{10}$. State reason.
- 5. List the encoding systems for characters in memory.

Short Answers

- 1. What is radix of a number system? Give example
- 2. Write note on binary number system.
- 3. Convert (150)₁₀ into Binary, then convert that Binary number to Octal
- 4. Write short note on ISCII
- 5. Add a) $-22_{10}+15_{10}$ b) $20_{10}+25_{10}$

Detail Answers

- 1. a) Write the procedure to convert fractional Decimal to Binary
- b) Convert (98.46)₁₀ to Binary
- 2. Find 1's Complement and 2's Complement for the following Decimal number
- a) -98 b) -135
- 3. a) Add 1101010₂+101101₂
- b) Subtract 1101011₂ 111010₂

3. Computer Organization

Very Short Answers

- (1) What are the parameters which influence the characteristics of a microprocessor?
- (2) What is an instruction?
- (3) What is a program counter?
- (4) What is HDMI?
- (5) Which source is used to erase the content of a EPROM?

Short Answers

- (1) Differentiate Computer Organization from Computer Architecture.
- (2) Classify the microprocessor based on the size of the data.
- (3) Write down the classifications of microprocessors based on the instruction set.
- (4) Differentiate PROM and EPROM.
- (5) Write down the interfaces and ports available in a computer.
- (6) Differentiate CD and DVD
- (7) How will you differentiate a flash memory and an EEPROM?

Detail Answers

- (1) Explain the characteristics of a microprocessor.
- (2) How the read and write operations are performed by a processor? Explain.
- (3) Arrange the memory devices in ascending order based on the access time.
- (4) Explain the types of ROM.

4.Operating Systems

Very Short Answers

- 1) What are the advantages of memory management in Operating System?
- 2) What is the multi-user Operating system?
- 3) What is a GUI?
- 4) List out different distributions of Linux operating system.
- 5) What are the security management features available in Operating System?
- 6) What is multi-processing?
- 7) What are the different Operating Systems used in computer?

Short Answers

- 8) What are the advantages and disadvantages of Time-sharing features?
- 9) Explain and List out examples of mobile operating system.
- 10) What are the differences between Windows and Linux Operating system?
- 11) Explain the process management algorithms in Operating System.

Detail Answers

- 12) Explain the concept of a Distributed Operating System.
- 13) Explain the main purpose of an operating system.
- 14) Explain advantages and disadvantages of open source operating systems.

5. Working with Typical Operating System (Windows & Linux

Very Short Answers

- 1. Differentiate cut and copy options.
- 2. What is the use of a file extension?
- 3. Differentiate Files and Folders.
- 4. Differentiate Save and save As option.
- 5. What is Open Source?
- 6. What are the advantages of open source?
- 7. Mention the different server distributions in Linux OS.
- 8. How will you log off from Ubuntu OS?

Short Answers

- 1. Analyse: Why the drives are segregated?
- 2. If you are working on multiple files at a time, sometimes the system may hang.

What is the reason behind it. How can you reduce it?

- 3. Are drives such as hard drive and floppy drives represented with drive letters? If so why, if not why?
- 4. Write the specific use of Cortana.
- 5. List out the major differences between Windows and Ubuntu OS.
- 6. Are there any difficulties you face while using Ubuntu? If so, mention it with reasons.
- 7. Differentiate Thunderbird and Firefox in Ubuntu OS.
- 8. Differentiate Save, Save As and Save a Copy in Ubuntu OS.

Detail Answers

- 1. Explain the versions of Windows Operating System.
- 2. Draw and compare the icon equivalence in Windows and Ubuntu.

3. Write the procedure to create, rename, delete and save a file in Ubuntu OS. Compare it with Windows OS.

6.Word Processor Basics (OpenOffice Writer)

Very Short Answers

- 1. How do you insert pictures in to your document?
- 2. What are the different packages in OpenOffice writer?
- 3. What is auto text in writer?
- 4. How do you merge cells in a table?
- 5. State the difference between proprietary software and open source software?

Short Answers

- 1. What is the difference between moving and copying text?
- 2. What are the different types of orientation?
- 3. How do you insert rows and columns?
- 4. What are the different ways to save a document?
- 5. Write the steps to change the line spacing of text.

Detail Answers

- 1. What are the different methods to change margin in writer?
- 2. What are Header and Footer? How do you insert page numbers?
- 3. Write the steps to Find and Replace a word with another word in OpenOffice writer?
- 4. Explain Page formatting in writer.

7. Spreadsheet-Basics (OpenOffice Calc)

Very Short Answers

- 1. What are the types of toolbars available in OpenOffice calc?
- 2. What is a Cell pointer?
- 3. Write about the text operator in OpenOffice Calc.
- 4. Write the general syntax of constructing a formula in Calc.
- 5. What are the keyboard shortcuts to cut, copy and paste?
- 6. Can you edit the contents of a cell? If yes, explain any one of the method of editing the cell content.

7. What are the options available in "Insert Cells" dialog box?

Define the following (i) Text Operator (ii) Rows and Columns of spreadsheet

10. Differentiate between Copy -Paste and Cut-Paste

Short Answers

- 1. Write a short note on OpenOffice Calc.
- 2. Write about inserting columns and rows in Calc.
- 3. Differentiate Deleting data using Backspace and Delete
- 4. Write any three formatting options.
- 5. In cell A1=34 A2=65 A3=89 write the forumla to find the average.

Detail Answers

- 1. Explain about changing the column width in Calc.
- 2. Write the steps to generate the following series. 5, 10, 20 2560

	A	В	C	D	Е
1	2012	CHENNAI	MADURAI	TIRICHI	COIMBATORE
2	2013	1500	1250	1000	500
3	2014	1600	1000	950	350
4	2015	1900	1320	750	300
5	2016	1850	1415	820	200
6	2017	1950	1240	920	250

8. Presentation-Basics (OpenOffice Impress)

Very Short Answers

- 1. What is the difference between a slide and a slide show?
- 2. How many in-built slide layouts does impress consist of?
- 3. What do you understand by a presentation?
- 4. Define a template in Impress.
- 5. What do you understand by the slide layout?

Short Answers

- 1. How many types of views are provided by Impress to its users?
- 2. Who uses the presentation software and why?
- 3. Define the Slide Sorter view and its significance.
- 4. What is a Normal view? Explain.
- 5. How are transition effects helpful in creating an effective presentation in Impress?

Detail Answers

- 1. Valarmathi's teacher asks her to create a presentation in OpenOffice Impress. As Valarmathi has never worked in Impress before, help her to perform the following tasks:
- a. She wants that except for the first slide, all the slides should have the same design. For this, what does she need to do?
- b. To easily communicate with her audience, she wants to provide them with a hard copy of the slides of the presentation. What should she create for it?
- c. She wants to insert some pictures and movie files in some slides. How can she do that?
- d. Suggest her the view that would be the most suitable for showing the presentation to the audience.
- e. To make her presentation more attractive, she wants to add some effects in it. How can she do it? Suggest.
- 2. Explain how a presentation can help a salesperson to promote his/her products.
- 3. Sivabalan created a presentation to be shown at his school's Annual Function. Just 5 minutes before the presentation, he noticed that he has misspelt the name of the school, which is appearing in all the 30 slides of the presentation. How can he rectify this mistake in all the slides in one-shot?
- 4. List some advantages of using templates.

9.Introduction to Internet and Email

Answer to the following questions

- 1. List any four types of available networks?
- 2. Name the two important protocols for internet?
- 3. What is a network?
- 4. What is the role of ICANN?
- 5. What is a search engine?
- 6. What is a browser?
- 7. What are the components of url addressing?
- 8. What is a website?
- 9. What is CC and BCC in an email?
- 10. What is a Static web Page?
- 11. What is a Dynamic web page?
- 12. What are the benefits of e-governance?
- 13. What is Phishing?

Answer to the following questions

- 1. Differentiate PAN and CAN network.
- 2. What is TCP/IP?
- 3. Write a note on Hotspot internet service.
- 4. Differentiate Data Card and Dongles.
- 5. Write a note on two access methods of connecting to internet.
- 6. Differentiate browser and a search engine with suitable examples.
- 7. Differentiate Website and Webpage.
- 8. What is the difference between Static and dynamic web page.
- 9. Write a note on W3C?

10. What are Advantages of email.

Answer to the following questions

- 1. Compare the different geographical types of Network.
- 2. Explain any five types of internet services.
- 3. Explain any five internet applications with suitable examples.
- 4. Write a note on any five Internet browsers other than that given in the book.an
- 5. Classify and explain any five e-commerce parties with suitable examples.
- 6. Explain the different types of interactions in e-governance.

10. HTML - Structural Tags

Answer to the following questions (2 Marks):

- 1 Sandhiya is creating a webpage. She is entering HTML code on her computer. In between, she keeps pressing "Refersh" / "Reload" button on her browser. What is the purpose?
- 2. Explain with the help of an example the difference between container and empty elements of HTML.
- 3. What is the wrong in the following coding?
- <html>
- <my web page>
- <title> Welcome to my web page
- </head>
- </title>
- 4. How do you define comments in HTML?
- 5. How do you include an image as your web page background?

Answer to the following questions (3 Marks):

- 1. Explain the attributes available with <body> tag.
- 2. What are the attributes available in html tags?

- 3. How do you view the source file?
- 4. How do you save a file as HTML file?

11.HTML - Formatting text, Creating Tables, List and Links

Answer to the following questions (2 Marks):

- 1. Write a short note on (i) (ii)
- 2. What is the use of <mark> tag?
- 3. Write the following equation as HTML notation:

$$Pd = 25 - Q2$$

- 4. Write about any two attributes of font tag.
- 5. What is thematic break?
- 6. What is pixel?
- 7. What are the types of list in HTML?
- 8. How will you define numbered list?

Answer to the following questions (3 Marks):

1. Write an HTML code to display the following text in exactly the same way as given below.

I am studying Computer Science Application.

- 2. Briefly explain the attributes of <hr>> tag.
- 3. What are the core tags used to create table in HTML?
- 4. Write an HTML code to provide hyperlink to https://www.w3schools.com
- 5. Difference between and tags.
- 6. Write HTML code to produce the following table:

	В
A	C

1. Write an HTML code the show the following text:

MODERN ATOMIC THEORY

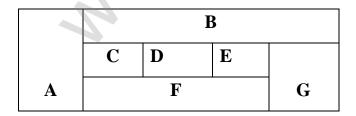
The findings of modern atomic theory are given as follows:

An atom is the smallest particle which takes part in chemical reaction. An atom is considered to be a divisible particle.

The atoms of the same element may not be similar in all respects. eg: Isotopes (17Cl35, 17Cl37)

The atoms of different elements may be similar in some respects. eg. Isobars (${}_{18}Ar_{40,\,20}Ca_{40}$)

- 2. Explain the attributes used with tag in HTML.
- 3. Explain the types of list with suitable HTML code.
- 4. What is Link and explain the types of links.
- 5. Write HTML code to create the following table:



12. HTML - Adding multimedia elements and Forms

Answer to the following questions (2 Marks):

- 1. List out the popular image formats.
- 2. Write down the general format of marquee
- 3. What is inline sound or movie?
- 4. What is the purpose of <input> tag?
- 5. Which tag is used to specify the list of items in dropdown list box?
- 6. What are the major attributes are available in <textarea> tag?

Answer to the following questions (3 Marks):

- 1. Write a short note on familiar images format.
- 2. How will you scroll the text in HTML?
- 3. Explain the main attributes used with <form> tag.
- 4. Explain the values of <input> tag's type attribute.
- 5. Explain the attributes of <select> and <option> tags.

13. CSS - Cascading Style Sheets

Answer to the following questions (2 Marks):

- 1. What is the use of <style> tag?
- 2. What is CSS?
- 3. Write the general format of linking CSS with HTML.
- 4. What is Inline Style?
- 5. Write down general format of CSS declaration.

Answer to the following questions (3 Marks):

- 1. What are the advantages of using CSS?
- 2. Write a short note on rule of CSS.

- 3. Write a CSS file to define text color and alignment to tag.
- 4. Write a CSS file to define font type, style and size to <h1> tag.

- 1. Write an HTML document to display the following paragraph as per the given description Using CSS:
- Font Name: Cooper Black
- Style : Bold Italics
- Color: Blue
- "The State Institute of Education (SIE) was established in 1965 to provide for systematic study of problems relating to School Education under the administration of Directorate of School Education."
 - 2. List and explain the Font and text element properties and values used CSS.

14. Introduction to Javascript

Answer to the following questions (2 Marks):

- 1. Write a syntax of <script> tag
- 2. What is scope of variables and types of scope variable?
- 3. Write a notes to type casting in JavaScript
- 4. How many Literals in JavaScript and mention its types.
- 5. What is conditional operator give suitable example.
- 6. What are the comments in Java Script?
- 7. Write note on types of Operator.
- 8. Write the role of variable in JavaScript.
- 9. What is the uses of prompt dialog box?

Answer to the following question (3 Marks)::

- 1. What are the advantages of programming language?
- 2. Brief the basic data types in Java Scripts.
- 3. Write note on string Operator.

- 4. Write about <script> tag
- 5. What are the uses of Logical Operators?
- 6. Difference between the increment and Decrement operator.

- 1. Explain about the popup dialog boxes in JavaScript.
- 2. Explain about the Arithmetic operator with suitable example.

15. Control Structure in JavaScript

Answer to the following questions (2 Marks):

- 1. What are the different types of control statement used in JavaScript?
- 2. What is meant by conditional statements in JavaScript?
- 3. List out the various branching statements in JavaScript?
- 4. Write the general syntax for switch statement
- 5. Differentiate the break and continue statement.

Answer to the following questions (3 Marks):

- 1. What if if statement and write its types.
- 2. Write the syntax for else-if statement.
- 3. What is called a loop and what are its types?
- 4. Differentiate between while and do while statements
- 5. What message will be displayed, if the input for age is given as 20, for the following snippet.

```
if (age> = 18)
{
  alert ("you are eligible to get Driving licence"}
} else
alert ("you are not eligible to get driving licence"); }
```

- 1. Explain for loop with example
- 2. Explain switch case statement with example
- 3. Write the output for the following program

```
<Html>
<Head>
<Title> for statement</title>
<Head>
<Body>
<script language= "java Script" type = "text / javaScript")
var no1= prompt ("please enter table you want:", "0");
document write ("<h2> multiplication for your need </h2>")
for (Var no2= 0; no2<=10; no2++)
{
    document write (no1+ "x" + no2+ "=" + no1+no2+ "<br>
</script>
</body>
</Html>
```

4. Write a Java Script program using while statement to display 10 numbers.

16.JavaScript Functions

Answer to the following questions (2 Marks):

- 1. What is a function in JavaScript?
- 2. What is the use of function?
- 3. Write a note on Library functions.
- 4. Write a note on user defined functions.
- 5. Write the syntax of functions.

- 1. Write a program in JavaScript to find the cube of a number using function
- 2. Write a program in JavaScript to find the sum of 10 numbers using function.

17. Computer Ethics and Cyber Security

Answer to the following questions (2 Marks):

- 1. What is harvesting?
- 2. What are Warez?
- 3. Write a short note on cracking.
- 4. Write two types of cyber attacks.
- 5. What is a Cookie?

Answer to the following questions (3 Marks):

- 1. What is the role of firewalls?
- 2. Write about encryption and decryption.
- 3. Explain symmetric key encryption.
- 4. What are the guidelines to be followed by any computer user?
- 5. What are ethical issues? Name some.

Answer to the following questions (5 Marks):

- 1. What are the various crimes happening using computer?
- 2. What is piracy? Mention the types of piracy? How can it be prevented?
- 3. Write the different types of cyber attacks.

18. Tamil Computing

Answer to the following questions

- 1. List of the search engines supporting Tamil.
- 2. What are the keyboard layouts used in Android?
- 3. Write a short note about Tamil Programming Language.
- 4. What TSCII?

5. Write a short note on Tamil Virtual Academy.

ALL THE BEST