UNIVERSITY INSTITUTE OF ENGINEERINGAND TECHNOLOGY, CSJM UNIVERSITY, KANPUR Departemnt of Electronics & Communication Engineering Subject: Introduction to IT Systems, Code-ES102

2022-23 (Even Semester) Diploma in Electrical Engineering I sem Year: Ist Year (2K22)

End Semester Examination

Maximum marks: 75

All questions are compulsory from Section A, attempt any 5 questions from section B & 2 from Section C

Section A

Time: 3 hours

20 marks (20 questions of 1 mark each)

1.Write down the name of free software offered by Apache foundation to create documents, spreadsheet, ppt, drawing & database management.

Ans. Open Office

2. What is ALU?

Inside a computer, there is an Arithmetic Logic Unit (ALU), which is capable of performing logical operations (e.g. AND, OR, Ex-OR, Invert etc.) in addition to the arithmetic operations (e.g. Addition, Subtraction etc.).

3. Which component of Openoffice is used to prepare text document.

Open Office Writer

4. Does OpenOffice.org include a Browser and an E-Mail Client?

5. Which file format does OpenOffice.org use?

ODF (Open document File)

Mention the source to get Openoffice

https://openoffice.apache.org/blog/announcing-apache-openoffice-4-110

6. What is CPU? Central Processing Unit (CPU) consists of the following features -

- CPU is considered as the brain of the computer.
- CPU performs all types of data processing operations.
- It stores data, intermediate results, and instructions (program).
- It controls the operation of all parts of the computer.

7. Does OpenOffice.org include a Browser and an E-Mail Client?

No, but it integrates perfectly with several Open Source solutions, for eaxmple Firefox as a Browser and Thinderbird and Evolution as E-Mail Clients.

8.What is Microsoft Edge?

A Web Browser include advanced features provided by Microsoft

Edge connects with Microsoft's online platforms, with the help of Cortana, Microsoft's virtual assistant. Cortana provides voice control, search functionality, and personalized information. Edge also has a "Reading List" function to sync content between devices. It has a "Reading Mode" that makes reading websites easier. Edge has extensions hosted on the Microsoft Store.

9. What is Opera?

A Web Browser 10. What is Internet explorer? Microsoft web browser which is highly secured 11. Write down the address of CSJMU web portals. <u>https://erp.csjmu.ac.in/</u> <u>https://studentservices.csjmu.ac.in</u> <u>https://ssc.csjmu.ac.in/webpages/frmStudentLogin.aspx</u> <u>https://csjmu.ac.in/frontpage/marksheet-dispatched-details/</u> <u>https://results.csjmu.ac.in</u>

12.Write down the address of Aadhar card wen portal. https://uidai.gov.in/

Define following term 1x5 (i) PSP (ii XCF (iii) PNG (iv) TIFz (v)ODF (vi) XML (vii) PDF (viii)MPEG

Section B (30 marks (Attempt any 5 questions of 6 marks each)

1. Write down the various steps to create a template using the Openoffice writer tool. Saving as a Microsoft Word File

If you need to exchange files with users of Microsoft Word who are unwilling or unable to receive *.odt files, you can save a document as a Microsoft Word file. 1) Important—First save your document in the file format used by Writer (.odt). If you do not, any changes you made since the last time you saved will appear only in the Microsoft Word version of the document.

2) Then choose File > Save As. On the Save As dialog, in the File type (or Save as type) drop-down menu, select the type of Word format you need. Click Save.

Caution Some formatting may be lost when you save in formats other than OpenDocument Formats. You may wish to test some typical files to see if yours save correctly in other formats.

Figure 8. Saving a file in Microsoft Word format

From this point on, all changes you make to the document will occur only in the Microsoft Word document. You have changed the name and file type of your document. If you want to go back to working with the .odt version of your document, you must open it again. To have Apache OpenOffice save documents by default in the Microsoft Word file format, go to Tools > Options > Load/Save. See "Choosing options for loading and saving documents" in Chapter

11 (Setting Up and Customizing Apache OpenOffice).

- 2. Write down the address of Government web portal for KYC <u>https://web.umang.gov.in/landing/partners</u> <u>http://www.educationportal.mp.gov.in/ekyc/</u> <u>https://services.india.gov.in/service/detail/online-pan-application-1</u> <u>https://www.india.gov.in/gsearch?s=Pan%20card</u>
- 3. Define IT system from structural perspective?

- 4. Define IT system from Functional perspective?
- 5. Write down three activities in an information system produce the information that organizations need to make decisions, control operations, analyze problems, and create new products or services.
- 6. How do you differentiate between Internet Explorer & Opera?

What is Opera Browser? A multiplatform web browser. It is a secure, innovative browser with a built-in ad blocker, free VPN, units converter, social messengers, battery saver and much more - all for your best browsing experience.

What is Internet Explorer? A series of graphical web browsers included in the Microsoft Windows line of operating systems. It is a series of graphical web browsers included in the Microsoft Windows line of operating systems, starting in 1995. It was first released as part of the add-on package Plus! for Windows 95 that year.

Opera Browser and Internet Explorer belong to "Web Browser" category of the tech stack.

7. Write down security settings of GoogleChrome.

Choose your privacy settings

You can improve your browsing experience with privacy settings. For example, when you visit a web page, Chrome can use a web service to automatically load pages based on the page's links. Most of these settings are turned on by default, but you can turn them off.

Computer AndroidiPhone & iPad

- 1. On your computer, open Chrome.
- 2. At the top right, click More **Settings**.
- 3. Click **Privacy and security** and choose your settings.
- To control how Chrome handles content and permissions for a site, click **Site settings**.
- To delete information from your browsing activity, like your history, cookies, or saved passwords, click **Clear browsing data**.
- To control how Chrome handles cookies and tracking, click Cookies and other site data.
- To manage safe browsing and protection, click Security.

Learn about your privacy options

• Preload pages

Chrome makes browsing and searching faster by preloading pages it thinks you might visit. To do this, Chrome may use cookies, if you allow cookies, and may encrypt and send pages through Google to hide your identity from sites. Learn more about cookies.

• Send a "Do Not Track" request with your browsing traffic

You can include a "Do Not Track" request with your browsing traffic. However, many websites will still collect and use your browsing data to improve security, provide content, services, ads, and recommendations on their websites, and generate reporting statistics.

• Allow sites to check if you have payment methods saved

If you've saved payment methods to Chrome, you can let Chrome offer your saved info to make filling out forms easier. Learn more about how to fill out forms automatically.

• Safe Browsing

Get an alert whenever Chrome sees that the website you're going to could be harmful. When you visit a website, Chrome checks it against a list of websites stored on your computer that are known to be bad. If the website matches anything on the list, your browser sends a partial copy of the address to Google to find out if you're visiting a risky site. Learn more about Safe Browsing protection.

Help improve security on the web for everyone

Chrome will periodically send some system information and page content to Google so we know about any threats you encounter. Chrome will also send this data any time you visit a suspicious site. Learn more about what data helps Chrome get better at blocking bad downloads and detecting malware.

• Warn you if passwords are exposed in a data breach

You may get an alert from Chrome if you use a password and username combination that has been compromised in a data leak on a third party website or app.

8. Write down function of Key board. P.T.O.

A computer keyboard is an input device used to enter characters and functions into the computer system by pressing buttons, or keys. It is the primary device used to enter text. A keyboard typically contains keys for individual letters, numbers and special characters, as well as keys for specific functions. A keyboard is connected to a computer system using a cable or a wireless connection.

Typical keyboard for a desktop computer

typical keyboard

Most keyboards have a very similar layout. The individual keys for letters, numbers and special characters are collectively called the character keys. The layout of these keys is derived from the original layout of keys on a typewriter. The most widely used layout in the English language is called QWERTY, named after the sequence of the first six letters from the top left.

Other sets of keys common to almost all keyboards are entering and editing keys (e.g., Enter, Delete, Insert), modifier keys (e.g., Control, Shift), navigation keys (e.g., arrows for up, down, left, right) and lock keys (e.g., Caps Lock). Additional keys are very operating system specific (such as the Windows and Apple keys).

Most keyboards also include a set of function keys at the top (F1, F2, etc.). The function keys typically perform a very specific task within a particular software application. So, what they do may depend on what you are doing on your computer at the time.

Section C (12.5 marks (Attempt any 2 question)

1. Discuss about various components of Openoffice in detail.

What Is Apache OpenOffice?

Apache OpenOffice is a freely available, full-featured office productivity suite. Its native file format is OpenDocument, an open standard format that is supported by several office suites but is not controlled by any one company and has been adopted by some governments (e.g., the United Kingdom) as a required file format for publishing and accepting documents. Apache OpenOffice can also open and save documents in many other formats, including those used by various versions of Microsoft Office.

Apache OpenOffice includes the following components.

Writer (word processor)

Writer is a feature-rich tool for creating letters, books, reports, newsletters, brochures, and other documents. You can insert graphics and objects from other components into Writer documents. Writer can export files to several versions of Microsoft Word files, Adobe's Portable Document Format (PDF), HTML and other formats.

Calc (spreadsheet)

Calc has all the advanced analysis, charting, and decision-making features expected from a high-end spreadsheet. It includes over 300 functions for financial, statistical, and mathematical operations, among others. The Scenario Manager provides "what if" analysis. Calc generates 2-D and 3-D charts, which can be integrated into other Apache OpenOffice documents. You can also open and work with Microsoft Excel workbooks and save them in some Excel formats. Calc can also export spreadsheets to PDF and HTML.

4 | Chapter 1 Introducing Apache OpenOffice

Impress (presentations)

Impress provides all the common multimedia presentation tools, such as special effects, animation, and drawing tools. It is integrated with the advanced graphics capabilities of Apache OpenOffice's Draw and Math components. Slide shows can be further enhanced with Fontwork's special effects text, as well as sound and video clips. Impress is compatible with Microsoft's PowerPoint file format and can also save your work in numerous graphics formats.

Draw (vector graphics)

Draw is a vector drawing tool that can produce everything from simple diagrams or flowcharts to 3-D artwork. Its Smart Connectors feature allows you to define your own connection points. You can use Draw to create drawings for use in any of Apache OpenOffice's other components, and you can create your own clip art and add it to the Gallery. Draw can import graphics from many common formats and save them in over 20 formats, including PNG, HTML, and PDF. Base (database)

Base provides tools for day-to-day database work within a simple interface. It can create and edit forms, reports, queries, tables, views, and relations, so that managing a connected database is much the same as in other popular database applications. Base provides many features, such as the ability to analyze and edit relationships from a diagram view. In its default configuration, Base uses HSQLDB, which is included in Apache OpenOffice, as its database engine and stores the database tables in the Base document. It can also use dBASE, Microsoft Access, MySQL, Oracle, or any ODBC compliant or JDBC compliant database engine and connect to external tables.

Math (formula editor)

Math is Apache OpenOffice's formula or equation editor. You can use it to create complex equations that include symbols or characters not available in standard font sets. While it is most commonly used to create formulas in other documents, such as Writer and Impress files, Math can also work as a standalone tool. You can save formulas in the standard Mathematical Markup Language (MathML) format for inclusion in web pages and other documents not created by Apache OpenOffice.

2. Explain the process to create mailmerge documents using the openoffice tool.

Using Mail Merge

Writer provides very useful features to create and print:

• Multiple copies of a document to send to a list of different recipients (form letters)

- Mailing labels
- Envelopes

All these facilities use a registered data source (a spreadsheet or database containing the name and address records and other information).

- (a) Write down the components of IT system. (b) Discuss about function of each component. Components of Information Systems 1. Resources of people: (end users and IS specialists, system analyst, programmers, data administrators etc.). 2. Hardware: (Physical computer equipments and associate device, machines and media). 3. Software: (programs and procedures). 4. Data: (data and knowledge bases), and 5. Networks: (communications media and network support).
- 4. (a) Write down various example of IT Systems. (b) Discuss about any one of these in detail. GoogleWebComponents
- 5. firebase-element
- 6. Web components for the Firebase Web API
- 7. 96
- 8. 80
- 9. GoogleWebComponents
- 10. google-analytics
- 11. Google Analytics web components
- 12. 184
- 13. 84
- 14. GoogleWebComponents

- 15. google-calendar
- 16. Google Calendar web components
- 17.96
- 18. 43
- 19. GoogleWebComponents
- 20. google-castable-video
- 21. A Polymer element for casting video
- 22. 41
- 23. 26
- 24. GoogleWebComponents
- 25. google-chart
- 26. Google Charts API web components
- 27. 339
- 28. 135
- 29. GoogleWebComponents
- 30. google-drive
- 31. Google Drive Polymer element
- 32. 75
- 33. 34
- 34. GoogleWebComponents
- 35. google-feeds
- 36. Polymer element for the Google Feeds API
- 37. 21
- 38. 30
- 39. GoogleWebComponents
- 40. google-hangout-button
- 41. Google Hangout button web component
- 42.34
- 43. 20
- 44. GoogleWebComponents
- 45. google-map
- 46. Google Maps web components
- 47. 425
- 48. 268
- 49. GoogleWebComponents
- 50. google-sheets
- 51. Google Spreadsheets web components
- 52. 82
- 53. 29
- 54. GoogleWebComponents
- 55. google-signin
- 56. Google Sign-in web component

- 57. 278
- 58. 100
- 59. GoogleWebComponents
- 60. google-streetview-pano
- 61. Google Maps Street View web component
- 62. 31
- 63. 27
- 64. GoogleWebComponents
- 65. google-url-shortener
- 66. Web component that shortens URLs with the Google URL Shortener API
- 67.42
- 68. 24
- 69. GoogleWebComponents
- 70. google-youtube-upload
- 71. Element enabling you to upload videos to YouTube.
- 72. (a) What is Google translate? (b) Write the process to convert the ms file into into different languagesW

Google Translate doesn't just translate words and phrases for you; it can also translate entire documents, such as plain text and rich-text documents, Microsoft Word documents, HTML, and even translate PDFs. (It also <u>translates entire websites</u>.) The file-size limit for translating documents (as stated in Google's FAQs) is 1MB. However, you may have success with larger documents. After all, it doesn't hurt to try. Keep in mind, the larger the document, the longer the translation will take.

To use Google Translate to translate an entire document, follow these steps and see the figure below for reference:

- 1. Open a Web browser and go to <u>translate.google.com</u>. You don't need a Google account to access it, because it's free to all.
- 2. In the top left area of your screen, click the Documents button.
- 3. Click Browse to navigate to a document on your hard drive that you want to translate.
- 4. At the top left of the window in which your document appears, choose the language that the document is already in for example, English.
- 5. On the right, choose the language you want the document translated into for example, French.
- 6. Click Translate.

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				Choose a c	ocument			
			Upload a .doc, .	docx, .odf, .pdf, .pp		txt, .xls, or .xls)	¢	
				Browse your	computer			
			3) (*) (o.1		

Google Translate

The translation appears in a blank browser window. If you hover over each line, you can see the original English text that it was translated from.

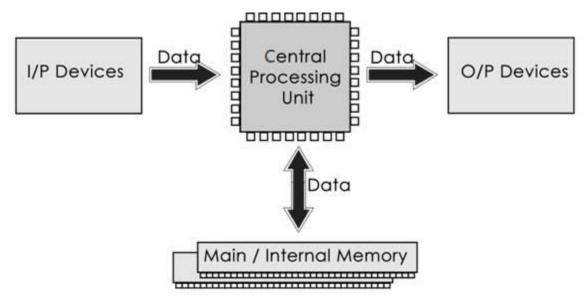
If you think the translation is incorrect, you can change it — just hover your cursor over a line of the translation and click the Contribute a Better Translation link. Type your translation into the text box and click Contribute. Your translation is submitted to Google Translate.

To use the translated text, simply copy and paste it from the browser window into a new document.

Just like other online translation tools, Google Translate is far from perfect. It does have a good reputation for accuracy, but it does make mistakes. So use it with caution. It may work fine in casual situations — for example, if you're translating a love poem into another language for Valentine's Day. But if you rely on it for translating official business documents, be very careful. It's probably better to pay for a reputable translation when business is on the line.

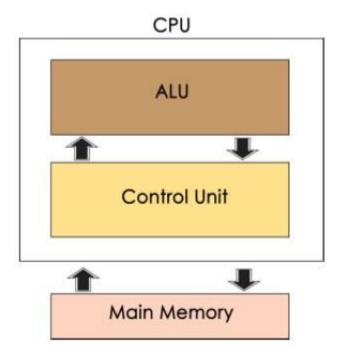
- 73. Write down the steps to create webpage on Wikipedia. discuss about any one page which you have created.
- 74. Discuss about various hardware components of Computer System.

Computer systems consist of three components as shown in below image: **Central Processing Unit, Input devices and Output devices**. Input devices provide data input to processor, which processes data and generates useful information that's displayed to the user through output devices. This is stored in computer's memory.



Central Processing Unit

The Central Processing Unit (CPU) is called "the brain of computer" as it controls operation of all parts of computer. It consists of two components: Arithmetic Logic Unit (ALU), and Control Unit.



Arithmetic Logic Unit (ALU)

Data entered into computer is sent to RAM, from where it is then sent to ALU, where rest of data processing takes place. All types of processing, such as comparisons, decision-making and processing of non-numeric information takes place here and once again data is moved to RAM.

Control Unit

As name indicates, this part of CPU extracts instructions, performs execution, maintains and directs operations of entire system.

Functions of Control Unit

Control unit performs following functions -

- It controls all activities of computer
- Supervises flow of data within CPU
- Directs flow of data within CPU
- Transfers data to Arithmetic and Logic Unit
- Transfers results to memory
- Fetches results from memory to output devices

Memory Unit

This is unit in which data and instructions given to computer as well as results given by computer are stored. Unit of memory is "Byte".

1 Byte = 8 Bits