University Computer Engineering

Narwadi Syllabus for Diploma Engineering

Subject Code: 09CE2101

Subject Name: Computer Fundamental Skill

Diploma Studies Year - I

Objective: The application of Computer knowledge is essential the students of all disciplines of Engineering in addition to their respective branch of study. Objective of this subject is to make the students understand the functioning of MS-Office. It will also help students in particular for creating business documents, data analysis and graphical representations using office automation like MS-Word, MS-Excel and MS-PowerPoint.

Credits Earned: 2 Credits

Course Outcomes: After completion of this course, student will be able to

- ▶ Personalize their own desktop
- Use various facilities available in the word processor
- Prepare Power Point presentation with different formats
- \triangleright Create different types of charts
- Prepare PowerPoint presentation
- Understand Internet concepts and usage of e-mail

Pre-requisite of course: NA.

Teachi	ing Scheme	(Hours)]	Theory M	larks	Tutorial/ Practical Marks		Total
Theory	Tutorial	Practical	Credits	ESE (E)	IA	(CSE)	Viva (V)	Term work (TW)	Total Marks
0	0	4	2	00	30	20	25	25	100

Teaching and Examination Scheme



Unit	Topics	Contact Hours
1	FUNDAMENTALS OF COMPUTER SYSTEM General understanding of various computer hardware components – CPU, Memory, Display, Keyboard,Mouse, HDD and other Peripheral Devices, Block diagram of computer system, Introduction to OS, My Computer & Recycle bin, Desktop, Icons and Explorer, Screen description, Dialog Boxes & Toolbars, taskbar, Working with Files & Folders, simple operations like copy, delete, moving of files and folders from one drive to another, Shortcuts, use of Control Panel, setting common devices using control panel, modem, printers, audio, network, fonts, creating users, internet settings, Start button & Program lists, Installing and Uninstalling new Software program on your computer - Copying in CD/DVD settings.	9
	OS Installation (Linux and MS Windows), Unix Shell and Commands, vi editor.	
2	BASICS OF HTML HTML Basics, Basic structure of HTML, Tags–HTML title, head, body, creation of basic webpage	2
3	OPEN OFFICE-WRITER Introduction to WPS Writer – Examples- Creation of new documents, opening document, insert a document into another document, Page setup, margins, gutters, font properties, Alignment, page breaks, customize header-footer, Saving a document, spell checker, creating a table, entering and editing, changing format of table, height width of row or column, editing-deleting Rows, borders, shading, Templates, drawing objects, mail merge, Printing a document.	9
4	OPEN OFFICE-SPREADSHEET Introduction to Workbook & Worksheets; Various Data Types; Using different features with Data, Cell and Texts; Inserting, Removing & Resizing of Columns & Rows; Working with data; Different Views of Worksheets; Column Freezing, Labels, Hiding, Splitting, Use of Formulas, Calculations & Functions; Cell Formatting including Borders & Shading; Working with Different Chart Types; Printing of Workbook & Worksheets with various options.	8

5	PRESENTATIONS	8
	Introduction - Opening new presentation, Parts of PowerPoint window, Features of PowerPoint, Background design, Word art, Clip art, Drawings - Animations, Sound, Views, types of views, inserting and deleting slides, arranging slides, slides show, rehearsal, setup show, custom show - creating custom presentations, auto content wizard, working with auto content wizard	
6	INTERNET Introduction – Basic Internet skills: Understanding browser, efficient use of search engines, awareness about Digital India portals (state and national portals) and college portals, Getting acquainted with Internet Connection, Browsers, Website URL, Open a website, Net Browsing,Email: Creating E- mail id – Sending, receiving and deleting E-mail - Email with Attachments – CC and BCC, Chatting, Creating Group mail - Google docs.	6
	Total Hours	42

Reference Books:

- 1. R. Taxali, "Computer Course", Tata McGraw Hills. New Delhi.
- 2. Wallace Wang, "MS-Office for Dummies", Wiley India, New Delhi
- 3. Dr. Shailendra Singh, Pawan Thakur, Anurag Jain," Basic Computer Engineering", Satya Prakashan, New Delhi, India

Suggested Theory distribution:

The suggested theory distribution as per Bloom's taxonomy is as per follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember	Understand	Apply	Analyze	Evaluate	Create
35%	35%	30%	0%	0%	0%

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Suggested List of Experiments:

- 1 Study of Basic steps of OS installation (Linux and windows).
- 2 Study and Explore security features of Operating Systems.
 - Install screen saver and change the monitor resolution by 1280X960 (i)
 - (ii) Set a new wallpaper
 - (iii) Create, move, delete and rename a folder
 - Copy, paste and cut a folder/file (iv)
 - (v) Display the properties for a file or folder
 - (i) Restore files and folders from Recycle bin
 - Create short cuts for folder/file (ii)
 - (iii) Find a file or folder by name
 - (iv) Select and move two or more files/folders using mouse
 - (v) Sort folders/files.
- 5 Visit five websites and prepare summary report about it.
- 6 Create HTML page contains single paragraph by using basic HTML tags.
- 7 Create a HTML page with an image in background and different background color.
- Write a letter about your College about 200 words with two paragraphs and 8 apply following functions
 - (i) Set Arial font of size 12
 - (ii) Bold Title of College
 - Make a justify alignment for paragraph text (iii)
 - Use format Painter to format the second paragraph (iv)
 - (v) Use 1.5 line spacing in paragraph
- 9 Create a newsletter of three pages with two columns text. The first page contains some formatting bullets and numbers. Set the document background colour and add 'confidential' as the watermark. Give the document a title which should be displayed in the header. The header/ footer of the first page should be different from other two pages. Also, add author name and date/ time in the header. The footer should have the page number.
- 10 Prepare a table using MS word – Sales Analysis for a period of five years for three products and sort that data.
- 11 Make out print of document by setting page layout and margins.
- 12 Create a document shown on the following page, Define the following settings for the document.
 - Page Length: 11mm
 - Top Margin: 1.5mm
 - Bottom Margin: 1.3mm

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- Left Margin: 1mm
- Right Margin: 1mm
- Header Margin: 0.8mm from the top edge of the paper
- Footer Margin: 0.7mm from the bottom edge of the paper

Define following header:

- Your investment: for odd pages
- Small Savings: for even pages
- Show the page number in footer.

Save the document with name "INVEST". Preview the document and Print only the first page of the document. Next, print the entire document in the landscape mode.

Contrary to popular belief, in India, the largest saving is done by the household sector, and not by the corporate sector. If the corporate sector can save a little more, the shortage of money resources can be overcome to a great extent.

To tap rural savings and savings from people with relatively small income, the Government has allowed Post Offices to offer 0.5% more interest on all accounts. There are a number of attractive schemes for different needs. The interest earned on the Post Office Savings accounts is totally *tax-free*.

The Savings Bank account in commercial banks offers about 5% interest per annum. The interest rates for Fixed Deposit accounts vary between 8% to 12% per annum. At present, the interest rate for 46 days-Fixed Deposit account is 8%. Therefore, you should not keep large amounts in your savings accounts. Instead, put most of it in Fixed Deposits.

The company Fixed Deposit (CFD) offers up to 15% interest per annum. Though CFD offers more interest, it is *unsecured*. You should be very careful in selecting the right company for making CFD. Moreover, the interest earned on CFD is totally taxable.

The Government has taken several steps to encourage savings by the household sector. It provides several tax concessions for saving in specified schemes. For instance, if a person saves in Provident Fund, Public Provident Fund (PPF), National Saving Certificates (NSC), National Savings Scheme (NSS), Jeevan Dhara, Jeevan Akshya or contributes to a Unit Linked Insurance Plan (ULIP) or Life Insurance Policy, he is entitled to certain tax rebates. To promote growth of new industry, investments in shares of certain new companies also qualify for tax rebate.

Depending on the income of a person and his future requirements, one can select a scheme that is most suitable. For Government employees, I will recommend the Provident Fund (PF) because it gives the maximum return with tax benefits. The rate of interest on savings in PF is 12% p.a. The lock up period is more (usually till retirement age), but one can easily take an interest-free loan. Moreover, for constructing or buying a house/flat, up to 90% of the amount can be withdrawn permanently from the PF account after 10 years. I know several persons, benefits and then withdraw the amount after the 10th year in PF, take full tax

For other persons, the Public Provident Fund (PPF) offers benefits similar to the PF. Any person can open a PPF account for 15 years period. An amount as low as Rs.100 or as high as Rs.60,000 can deposited in this account every year. For available. The interest earned in PPF is totally exempted from tax. As the PPF low, and as high as Rs.60,000 when your income is more during a financial year. Marwadi Syllabus for Diploma Engineering



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13 Prepare a ORIENT workbook using following function:

- Add heading as a Orient Industries Ltd. in range B2:D2
- Format the label in the range A4:F4, Create border lines above and below this range. Also create a border line below range A10:F10
- Add label Item in cell A4, Quantity in cell B4, Unit price in cell C4 and gross values in D4.
- Enter sales Tax Rate in cell A6 and 8% in cell B6 with two decimal places.
- Use the TODAY() function in cell E10 and NOW() in cell F10.Format cell in the mmm dd,yyyy(e.g. Jan 21,2021) format.
- Change the date format to dd-mmm-yy(e.g.14-Jan-21) format.
- 14 Using EXCEL prepare a table for Students marks and perform the following functions Total, Average, Percentage, conditional sum.
- 15 Create a result sheet containing Candidate's Register No., Name and Marks for six subjects. Freezing column containing the Candidate's register no and name Calculate the total and result. The result must be calculated as below and failed candidates should be turned to red.

Result is Distinction if Total >= 70 %First Class if Total >= 60 % and < 70 %Second Class if Total >= 50 % and < 60 %Pass if Total >= 35 % and < 50 %Fail otherwise

16 Prepare line, bar and pie chart to illustrate the subject wise performance of the class for any one semester with the following data

Operating Syste	98%	
C Programming	54%	
Electrical an Engineering	nd Electronics	87%
C Programming	95%	
Electrical an Practical	nd Electronics	100 %
Operating Syste	78%	

- 17 Using EXCEL sheet prepare a table for information about employees in an organization. It containing Employee ID, Employee Name, Designation, Gender, Hire Date. Perform sorting and filtering function on that table.
- 18 Prepare excel sheet and Perform linking function between two workbook.
- 19 Prepare a presentation by using Master slide Functionality.
- 20 Perform Hyperlink functionality in PowerPoint presentation.
- ²¹ Make a marketing presentation of any consumer product with at least 10 slides.

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Use different customized animation effects on pictures and clip art on any four of ten slides.

- 22 Create an e-mail id and perform the following
 - Write an e-mail inviting your friends about an Event that going to be organized by college
 - Make your own signature and add it to the e-mail message.
 - Add a word attachment of the venue route
 - Send the e-mail to at least 5 of your friends.
 - Add your Subject Faculty's email id in CC field and Class Coordinator's email id in BCC field.
- 23 Make a Google group of at least 10 person and share a spreadsheet and invite them to enter their details.
- 24 Study of Browser features, browsing, using various search engines, writing search queries
- 25 Study of Visit various e-governance/Digital India portals, understand their features, services offered.

Instructional Method:

- a. The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.
- b. The internal evaluation will be done on the basis of continuous evaluation of students in the laboratory and class-room.
- c. Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory.
- d. Students will use supplementary resources such as online videos, NPTEL videos, ecourses, Virtual Laboratory
- e. Online resources, Linux man pages, Wikipedia.