FOUR YEAR UNDERGRADUATE PROGRAM (NEP–2020)
Program: Bachelor in Science (2024 -28)
DISCIPLINE – INFORMATION TECHNOLOGY
SESSION – 2024-25

DSC -01 to 08		DSE -01 to 12	
Code	**Title**	**Code**	**Title**
ITSC-01T	Fundamental of IT and MS-Office	ITSE -01	Data Structure
ITSC-01P	**Lab 1:** MS-Office	ITSE -02	Internet and E-Commerce
ITSC-02T	Programming in C++	ITSE -03	Information and Network Security
ITSC-02P	**Lab 2:** Programming in C++	ITSE -04	Introduction to Artificial Intelligence
ITSC-03T	Relational Database Management System	ITSE -05	Computer System Architecture
ITSC-03P	**Lab 3:** Relational Database Management System (Oracle / MySQL)	ITSE -06T	Mobile Application Development
ITSC-04T	Programming in . Net	ITSE -06P	**Lab 8:** Mobile Application Development
ITSC-04P	**Lab 4:** Programming in . Net	ITSE -07	Software Engineering
ITSC-05T	Programming in Java	ITSE -08	Theory of Computation
ITSC-05P	**Lab 5:** Programming in Java	ITSE -09	Soft Computing
ITSC-06T	Web Technology	ITSE -10	Computer Graphics
ITSC-06P	**Lab 6:** Web Technology	ITSE -11	Cloud Computing
ITSC-07T	Programming in Python	ITSE -12	Major Project
ITSC-07P	**Lab 7:** Programming in Python		
ITSC-08T	Fundamental of IoT and Applications		
ITSC-08P	**Lab 9:** Fundamental of IoT and Applications		
DGE -01 & 02		**VAC**	
ITGE -01T	Fundamental of IT and MS-Office	ITVAC-01	Artificial Intelligence
ITGE -01P	**Lab 1:** MS-Office	**SEC**	
ITGE -02T	Programming in C++	ITSEC-01	MS OFFICE
ITGE -02P	**Lab 2:** Programming in C++		

Program Outcomes (PO):

- Gain a complete exposure to the theories and practices of Information Technology.
- Get transformed into a skilled learner and active programmer, enabling the students to focus on their higher studies.
- Value IT professionals and programmers.
- Explore how the concepts and applications of Information technology lead to innovative thinking with a problem–solving attitude.

Program Specific Outcomes (PSO):

- Understand the basic IT knowledge and practical application in MS Office.
- Understanding the concept of programming and develop program in C++.
- Understanding the concept of data structure and implementation with C / C++.

- Understanding the concept of DBMS and implementation in MySQL / Oracle.
- Understanding the concept of Dot Net technology with practical implementation.
- Understanding the concept of OOPs and Java programming and develop program in Java.
- Understanding the concept of web technology and its implementation with HTML / CSS / DHTML / PHP.
- Understand the basic concept of internet and E-commerce.
- Understanding the basic concept of information and network security.
- Understanding the basic concept of Artificial Intelligence.

Curriculum Structure

Scheme

Program: B.Sc.

Discipline: Information Technology

Semester	Course Type	Course Code	Course Title	Total Credit	Total Marks	
					Max	Min
1st Semester	DSC (Major/Core)	ITSC-01T	Fundamental of IT and MS-Office	3	100	40
		ITSC-01P	**Lab 1**: MS-Office	1	50	20
2nd Semester	DSC (Major/Core)	ITSC-02T	Programming in C++	3	100	40
		ITSC-02P	**Lab 2**: Programming in C++	1	50	20
3rd Semester	DSC (Major/Core)	ITSC-03T	Relational Database Management System	3	100	40
		ITSC-03P	**Lab 3**: Relational Database Management System (Oracle/MySQL)	1	50	20
	DSE	ITSE-01	Data Structure	4	100	40
4th Semester	DSC (Major/Core)	ITSC-04T	Programming in .Net	3	100	40
		ITSC-04P	**Lab 4**: Programming in .Net	1	50	20
	DSE	ITSE-02	Internet and E-Commerce	4	100	40
5th Semester	DSC (Major/Core)	ITSC-05T	Programming in JAVA	3	100	40
		ITSC-05P	**Lab 5**: Programming in JAVA	1	50	20
	DSE	ITSE-03	Information and Network Security	4	100	40
6th Semester	DSC (Major/Core)	ITSC-06T	Web Technology	3	100	40
		ITSC-06P	**Lab 6**: Web Technology	1	50	20
	DSE	ITSE-04	Introduction to Artificial Intelligence	4	100	40
7th Semester	DSC (Major/Core)	ITSC-07T	Programming in Python	3	100	40
		ITSC-07P	**Lab 7**: Programming in Python	1	50	20
	DSE	ITSE-05	Computer System Architecture	4	100	40

		ITSE-06T	Mobile Application Development	3	100	40
		ITSE-06P	**Lab 8:** Mobile Application Development	1	50	20
		ITSE-07	Software Engineering	4	100	40
		ITSE-08	Theory of Computation	4	100	40

8th Semester	DSC (Major/Core)	ITSC-08T	Fundamental of IoT and Applications	3	100	40
		ITSC-08P	**Lab 9:** Fundamental of IoT and Applications	1	50	20
	DSE	ITSE-09	Soft Computing	4	100	40
		ITSE-10	Computer Graphics	4	100	40
		ITSE-11	Cloud Computing	4	100	40
		ITSE-12	Major Project	4	100	40

Dr. H.S. Hota
Chairman

(Dr. K.B. Dubey)

(Dr. S K Sahu)

Dwijet Kothryfe

Dr. Vivek Sinha
Dr. Anil sharma

(Dr. s. Jain)

(R. Khuntey)

(Sushil kumar Sahu)

(Suresh Thakur)

(Dr. Anoshika Shukle Sbt)

Shailendra Anu

Jeetendra Kumar
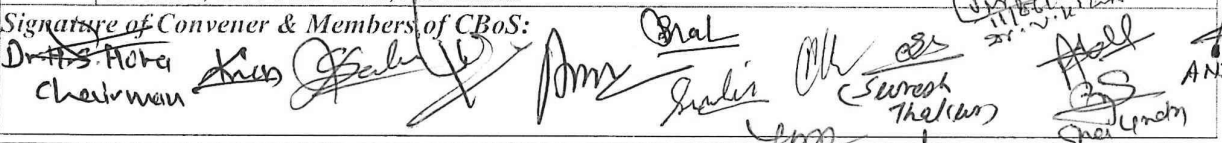
11-06-2024
(Dr. Sanjay Kumar)

ANJEETA KUJUR

FOUR YEAR UNDERGRADUATE PROGRAM (2024 – 28)
DEPARTMENT OF INFORMATION TECHNOLOGY
COURSE CURRICULUM

PART- A:	Introduction		
Program: Bachelor in Science (IT) *(Certificate / Diploma / Degree/Honors)*		**Semester – I**	**Session: 2024-2025**
1	Course Code	ITSC-01T	
2	Course Title	**Fundamental of IT and MS-Office**	
3	Course Type	**DSC (Discipline Specific Course)**	
4	Prerequisite	*As per program*	
5	Course Learning Outcomes (CLO)	After Completing this course, students will be able to: • Study and use of basic concepts and terminology of information technology. • Organize files and documents on storage devices. • Acquire knowledge of ICT and Internet applications. • Develop information technology solutions by evaluating user requirements in advance trends of IT. • Acquire knowledge of MS-Excel, MS-PowerPoint and MS-Access.		
6	Credit Value	**3 Credits**	*Credit = 15 Hours - Learning & Observation*
7	Total Marks	Max. Marks: 100	Min Passing Marks: 40

PART -B: Content of the Course

Total No. of Teaching–Learning Periods (01 Hr. per period) - 45 Periods (45 Hours)

Unit	Topics (Course contents)	No. of Period
I	**Indian Knowledge System and Computer Science:** Number System in India-Historical evidence, Salient aspect of Indian Mathematics, Bhuta-Samkhya system, Katapayadi system, pingala and the binary system, Sulbha Sutra as modern arithmetic and numerical mathematics. **Introduction to Computer**: History of computer, Generations and Classification, Basic Anatomy of Computer: Block Diagram, Central Processing Unit (CPU): Function of each Unit, Memory: Primary, Cache, Flash, Software and its needs, Types of S/W: System Software and Application Software, Types of Programming Language: Machine Language, Assembly Language, High Level Language their advantages and disadvantages, Language Processors/Translators: Assembler, Interpreter and Compiler, Fundamental of Information Technology: Data and Information, Concept of IT, Application of IT, What is ICT?, Components of ICT, Impact of ICT in Society. **Advanced Trends in IT:** Cloud Technology, Virtual LAN Technology, M-Commerce, Nanotechnology, Virtual Reality, 3-D Printing, Internet of Things (IoT), Artificial Intelligence (AI), Machine Learning (ML), Cloud Computing, Quantum Computing, G-Suite, GoI digital initiatives in higher education: SWAYAM, Swayam Prabha, National Academic Depository, National Digital Library of India, E-Sodh-Sindhu, Virtual labs, e-Yantra and NPTEL.	12
II	**MS-Word:** Introduction to word processing software and its features, Creating new document, Saving documents, Opening and Printing documents. Home Tab: Setting fonts, Paragraph settings, Various styles (Normal, No spacing, Heading1, Heading2, Title, Strong), Find & Replace, Format painter, Copy paste and paste special. Insert Tab: Pages, Tables, Pictures, Clipart, Shapes, Header & Footer, Word Art, Equation and Symbols. Page Layout Tab: Page setup, Page Background, Paragraph (indent and spacing). Mailing Tab: Create Envelops and Labels, Mail Merge. Review Tab: Spelling and Grammar check, New comment, Protect document, View Tab: Document views, Zoom, Window (New window, Split, Switch window).	11

III	**MS-Excel:** Introducing Excel, Use of Excel sheet, creating new sheet, Saving, Opening, and Printing workbook. Home Tab: Font, Alignment, Number, Styles and cells and editing, Conditional Formatting. Insert Tab: Table, Charts (column chart, Pie chart, Bar chart, Line chart) and Texts (header & footer, word art, signature line). Page Layout Tab: Page setup options, Scale to fit (width, height, scale). Formulas Tab: Auto sum (sum, average, min, max), Logical (IF, and, or, not, true, false), Math & Trig (sin, cos, tan, ceiling, floor, fact, mod, log), Sort and Filter options, Data validation, Group and ungroup. Review Tab: Protect sheet, Protect workbook, and Share workbook. View Tab: Page breaks, Page layout, Freezing Panes, Split and hide.	11
IV	**Working with PowerPoint and MS-Access** **PowerPoint:** Introducing PowerPoint, Use of PowerPoint presentation, Creating new slides saving, Opening and printing. Home Tab: New slide, Layout, Reset, Delete, Setting text direction, Align text, Convert to smart art, Drawing options. Insert Tab: Table, Picture, Clipart, Photo album, Smart art, Shapes and chart, Movie and sound, Hyperlink and action, Text box, Word art, Object. Design Tab: Page setup options, Slide orientation, Applying various themes, Selecting background style and formatting it. Animations Tab: Custom animation for entrance, Exit and emphasis, Applying slide transition, Setting transition speed and sound, Animation on rehearse timing. Slideshow & View Tab: Start slide, Show options, and Setup options. View tab: Presentation views, Colors and Window option. **MS-Access:** Introduction to DBMS, features of DBMS, creating blank databases, Saving it in accdb format, Defining data type in MS Access, Creating tables, creating reports, query wizard.	11
Keywords	*Information Technology (IT), Information and Communication Technology (ICT), G-Suite, MS Word, MS Excel, MS Power Point, MS-Access.*	

Signature of Convener & Members of CBoS:

Dr. A.S. Hota
Chairman

ANJEETA KUJUR

(Suresh Thakur)

PART-C: Learning Resources

Text Books, Reference Books and Others

Text Books Recommended:

- Computer Fundamentals, P.K. Sinha, BPB Publication, Sixth Edition.
- Fundamentals of Information Technology, Chetan Shrivastava, Kalyan Publishers.
- Fundamentals of Computers, V. Rajaraman, PHI Sixth Edition.
- Computer Fundamentals and Office Automation, Dr. Santosh Kumar Miri, Iterative International Publisher IIP.
- Computer Fundamentals Architecture and Organization, B. Ram, New Age International Publishers, Fifth Edition.
- Fundamentals of Information Technology, Alexis Leon and Mathews Leon, Vikash Publication.

Reference Books Recommended:

- Introduction to Information Technology, V. Rajaraman, PHI publication.
- Fundamental of IT, Leon and Leon, Leon Tec world.
- Introduction to Information Technology, Aksoy and Denardis, Cengage learning.
- Computers Today, Suresh K. Basandra, Galgotia Publications.
- Information Technology – The breaking wave, Dennis P.Curtin, Kim Foley, Kunai Sen and Cathleen Morin, TMH.
- OFFICE 2013 in Simple Steps, Kogent Solution Inc., DremTech Press.
- Access 2010 in Simple Steps by Kogent Learning Solutions Inc.

Online Resources:

- Introduction to Computer Fundamental from W3school:
  https://www.w3schools.blog/computer-fundamentals-tutorial
- Introduction to MS-Word from W3school:
  https://www.w3schools.blog/ms-word-tutorial
- Introduction to MS-Excel from W3school:
  https://www.w3schools.com/excel/excel_introduction.php
- Introduction to MS-PowerPoint from W3school:
  https://www.w3schools.blog/powerpoint-tutorial
- Introduction to MS-Access from W3school:
  https://www.w3schools.com/sql/sql_ref_msaccess.asp
- Fundamentals of Computers & Information Technology (in Hindi) :
  https://www.mcu.ac.in/wp-content/uploads/2020/04/1PGDCA1-Unit-I-Fundamentals-of-Computers-Information-Technology.pdf.
- Fundamentals of Computers & Information Technology (in Hindi):
  https://hte.rajasthan.gov.in/dept/dte/board_of_technical_education,_rajasthan/government_polytechnic_college_hanumangarh/uploads/doc/fundamental-_final-rkd.pdf.
- Information and Computers
  Technology: https://cbseacademic.nic.in/web_material/doc/2014/11_ICT-IX.pdf.pdf.
- Microsoft Office (in Hindi):
  https://www.scribd.com/document/534988849/9-Microsoft-office-in-hindi-www-GkNotesPDF-com.
- MS-OFFICE:
  https://www.rgycsm.org/uploads/books/MICROSOFT-OFFICE-BOOK.pdf.
- MS-OFFICE:
  Hindi Notes: https://www.copaguide.com/2020/04/ms-office-topics.html.
- Microsoft Office Full Crash Course:
  https://www.youtube.com/watch?v=SH4oyV5AJ6A

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks:	100 Marks
Continuous Internal Assessment (CIA):	30 Marks
End Semester Exam (ESE):	70 Marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal Test / Quiz-(2): 20 +20 Assignment / Seminar - 10 Total Marks - 30	Better marks out of the two Test / Quiz obtained marks in Assignment shall be considered against 30 Marks
End Semester Exam (ESE):	Two section – A & B Section A: **Q1.** Objective – 10 x1= 10 Mark; **Q2.** Short answer type- 5x4 =20 Marks Section B: Descriptive answer type qts.,**1 out of 2** from each unit-4x10=40 Marks	

Name and Signature of Convener & Members of CBoS:

Dr. H.S. Hota
Chairman

(Suresh Thakur)

jeetendra Kumar

Shailendra Ar.

ANJEETA KUJUR

FOUR YEAR UNDERGRADUATE PROGRAM (2024 – 28)
DEPARTMENT OF INFORMATION TECHNOLOGY
COURSE CURRICULUM

PART- A: Introduction

Program: Bachelor in Science (IT) *(Certificate / Diploma / Degree)*		Semester - I	Session: 2024-2025
1	Course Code	ITSC-01P	
2	Course Title	Lab 1: MS- Office	
3	Course Type	Practical	
4	Prerequisite	*As per program*	
5	Course Learning. Outcomes (CLO)	After Completing this course, students will be able to: - Gain Practical knowledge of MS-Office. - Organize files and documents on storage devices. - Acquire knowledge of ICT and Internet applications. - Develop information technology solutions by evaluating user requirements in advance trends of IT. - Acquire knowledge of MS-Excel, MS-PowerPoint and MS-Access.	
6	Credit Value	1 Credits	*Credit =30 Hours Laboratory or Field Learning/Training*
7	Total Marks	Max. Marks: 50	Min Passing Marks: 20

PART -B: Content of the Course

Total No. of learning-Training/performance Periods: 30 Periods (30 Hours)

List of Experiments	No. of Period
Application of Information Technology 1. How to create mail in a Gmail account? Write the uses of Inbox, Sent, Outbox, Draft, Spam and Trash labels. 2. How to design Google form? Write the steps with appropriate windows. 3. How to create different student classes in Google classroom. 4. How do teachers create assignments and provide due dates, or grades in Google Classroom? 5. How do students find assignments, due dates, or grades in Google Classroom? 6. How to use social media platforms like twitter, Facebook and YouTube? 7. How to use social media platforms like Flickr, Skype, yahoo and WhatsApp? 8. How to use Google spreadsheets, Google Slides and Google forms? 9. How to share files between mobile phone and computer system/Laptop using Bluetooth. ** **MS-Word** 1. Prepare a grocery list having four columns (Serial number, the name of the product, quantity and price) for the month of April, 06. ➤ Font specific actions for Title (Grocery List):14-pointArialfontinboldanditalics. ➤ The headings of the columns should be in12-point and bold. ➤ The rest of the document should be in10-point Times New Roman. ➤ Leave a gap of 12-points after the title.	30 Hrs.

2. Create a telephone directory.
   - ➢ The heading should be16-point Arial Font in bold.
   - ➢ The rest of the document should use10-point font size.
   - ➢ Other headings should use10-point Courier New Font.
   - ➢ The footer should show the page number as well as the date last updated.
3. Design a time-table form for your college.
   - ➢ The first line should mention the name of the collegein16-point Arial Font and should be bold.
   - ➢ The second line should give the course name/teacher's name and the department in14-pointArial.
   - ➢ Leave a gap of 12-points.
   - ➢ The rest of the document should use10-point Times New Roman font.
   - ➢ The footer should contain your specifications as the designer and date of creation.

4. XYZ Publications plan store lease an e-book design dapper your syllabus. Design the First page of the book as per the given specifications.
   - ➢ The title of the book should appearinboldusing20-pointArialfont.
   - ➢ The name of the author and his qualifications should be in the center of the page in16-point Arial font.
   - ➢ At the bottom of the document should be the name of the publisher and address in16-point Times New Roman.
   - ➢ The details of the offices of the publisher (only location) should appear in the footer.

5. Create the following one page documents.
   - ➢ Compose a note inviting friends together at your house, including a list of things to bring with them.
   - ➢ Design a certificate in landscape orientation with a border around the document.
   - ➢ Design a Garage Sale sign.
   - ➢ Make an assignment outlining your rules for your bedroom at home, using a numbered list.

6. Create the following documents:
   - ➢ A newsletter with a headline and 2 columns in portrait orientation, including at least one image surrounded by text.
   - ➢ Use a newsletter format to promote upcoming projects or events in your classroom or college.

7. Convert following text to a table, using comma as delimiter Type the following as shown (do not bold).
   Color, Style, Item
   Blue, A980, Van
   Red, X023, Car
   Green, YL724, Truck
   Name, Age, Sex
   Bob, 23, M
   Linda, 46, F
   Tom, 29, M

8. Enter the following data into a table given on the next page.

Salesperson	Dolls	Trucks	Puzzles
Kennedy, Sally	1327	1423	1193
White, Pete	1421	3863	2934
Pillar, James	5214	3247	5467
York, George	2190	1278	1928
Banks, Jennifer	1201	2528	1203
Atwater, Kelly	4098	3079	2067
Pillar, James	5214	3247	5467
York, George	2190	1278	1928
Banks, Jennifer	1201	2528	1203
Atwater, Kelly	4098	3079	2067

Add a column Region (values: S, N, N, S, S, S) between the Salesperson and Dolls columns to the given table Sort your table data by Region and within Region by Sales person in ascending order:

In this exercise, you will add a new row to your table, place the word Total at the bottom of the Sales person column, and sum the Dolls, Trucks, and Puzzles columns.

9. Wrapping of text around the image.
10. How to install MS-Office in Windows operating system.
11. How to convert word, excel and PowerPoint into pdf & pdf to word.
12. How to merge and split pdf files.

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MS-Excel

1. Enter the Following data in Excel Sheet

REGIONAL SALES PROJECTION						
State	Qtr1	Qtr2	Qtr3	Qtr4	Qtr Total	Rate Amount
Delhi	2020	2400	2100	3000	15	
Punjab	1100	1300	1500	1400	20	
U.P.	3000	3200	2600	2800	17	
Haryana	1800	2000	2200	2700	15	
Rajasthan	2100	2000	1800	2200	20	
TOTAL						
AVERAGE						

a. Apply Formatting as follow:

Title in TIMES NEW ROMAN

FontSize-14

Remaining text-ARIAL, FontSize-10

State name and Qtr. Heading Bold, Italic with Gray Fill Color.

Numbers in two decimal places.

Qtr. Heading in center Alignment.

Apply Border to whole data.

b. Calculate State and Qtr. Total
c. Calculate Average for each quarter
d. Calculate Amount=Rate*Total.

2. Given the following worksheet

	A	B	C	D
1	Roll No.	Name	Marks	Grade
2	1001	Sachin	99	
3	1002	Sehwag	65	
4	1003	Rahul	41	
5	1004	Sourav	89	
6	1005	Harbhajan	56	

Calculate the grade of these students on the basis of following guidelines:

If Marks	Then Grade
>=80	A+
>= 60 and <80	A
>= 50 and <60	B
<50	F

3. Given the following worksheet

	A	B	C	D	E	F	G
1	Salesman	Sales in(Rs.)					
2	No.	Qtr1	Qtr2	Qtr3	Qtr4	Total	Commission
3	S001	5000	8500	12000	9000		
4	S002	7000	4000	7500	11000		
5	S003	4000	9000	6500	8200		
6	S004	5500	6900	4500	10500		
7	S005	7400	8500	9200	8300		
8	S006	5300	7600	9800	6100		

Calculate the commission earned by the salesman on the basis of following Candidates:

If Total Sales	Then Commission
<20000	0% of sales
> 20000 and< 25000	4% of sales
> 25000 and< 30000	5.5%of sales
> 30000 and< 35000	8%of sales
>=35000	11%of sales

The total sales are the sum of sales of all the four quarters.

4. Company XYZ Ltd. pays a monthly salary to its employees who consist of basic salary, allowances & deductions. The details of allowances and deductions are as follows:
   - HRA Dependent on Basic
     30% of Basic if Basic<=1000
     25% of Basic if Basic>1000 & Basic<=3000
     20% of Basic if Basic>3000
   - DA Fixed for all employees,30% of Basic
   - Conveyance Allowance(CA)
     Rs.50/- if Basic is <=1000

Rs.75/- if Basic >1000 & Basic<=2000
Rs.100 if Basic>2000
- Entertainment Allowance (EA)
    NIL if Basic is<=1000
    Rs.100/-if Basic > 1000

Deductions
- Provident Fund
  6% of Basic
- Group Insurance Premium
  Rs.40/-if Basic is <=1500
  Rs.60/-if Basic > 1500 & Basic<=3000
  Rs.80/-if Basic>3000
  Calculate the following:
  Gross Salary=Basic +HRA+ DA+ CA+ EA
  Total Deduction=Provident Fund + Group Insurance Premium
  Net Salary=Gross Salary–Total Deduction

5. Create Payment Table for a fixed Principal amount, variable rate of interests and time in the form at below:

No. of Installments	5%	6%	7%	8%	9%
3	XX	XX	XX	XX	XX
4	XX	XX	XX	XX	XX
5	XX	XX	XX	XX	XX
6	XX	XX	XX	XX	XX

6. Use an array formula to calculate Simple Interest for given principal amounts given the rate of Interest and time

Rate of Interest	8%
Time	5Years
Principal	Simple Interest
1000`	?
18000	?
5200	?

7. The following table gives a year wise sale figure of five salesmen in Rs.

Salesman	2019	2020	2021	2022
S1	10000	12000	20000	50000
S2	15000	18000	50000	60000
S3	20000	22000	70000	70000
S4	30000	30000	100000	80000
S5	40000	45000	125000	90000

a. Calculate total sale year wise.
b. Calculate the net sale made by each salesman
c. Calculate the maximum sale made by the salesman
d. Calculate the commission for each salesman under the condition.
   >> If total sales > 4, 00,000 give 5% commission on total sale made by the salesman.

>> Otherwise give 2% commission.
  e. Draw a bar graph representing the sale made by each salesman.
  f. Draw a pie graph representing the sale made by a salesman in 2000.

8. Enter the following data in Excel Sheet

PERSONAL BUDGET FOR FIRST QUARTER

Monthly Income(Net): 1,475

EXPENSES	JAN	FEB	MARCH QUARTER TOTAL	QUARTER AVERAGE
Rent	600.00	600.00	600.00	
Telephone	48.25	43.50	60.00	
Utilities	67.27	110.00	70.00	
Credit Card	200.00	110.00	70.00	
Oil	100.00	150.00	90.00	
AV to Insurance	150.00			
Cable TV	40.75	40.75	40.75	
Monthly Total				

  a. Calculate Quarter total and Quarter average.
  b. Calculate Monthly total.
  c. Surplus=Monthly income-Monthly total.
  d. What would be the total surplus if monthly income is 1500.
  e. How much does the telephone expense for March differ from quarter average?
  f. Create a 3D column graph for telephone and utilities.
  g. Create a pie chart for monthly expenses.

9. Enter the following data in Excel Sheet

TOTAL REVENUE EARNED FOR SAM'S BOOK STALL

Publisher Name	1997	1998	1999	2000	Total
A	Rs. 1,000.00	Rs. 1100.00	Rs. 1,300.00	Rs. 800.00	
B	Rs. 1,500.00	Rs. 700.00	Rs. 1,000.00	Rs. 2,000.00	
C	Rs. 700.00	Rs. 900.00	Rs. 1,500.00	Rs. 600.00	
D	Rs. 1,200.00	Rs. 500.00	Rs. 200.00	Rs. 1,100.00.	

  a) Compute the total revenue earned.
  b) Plot the line chart to compare the revenue of all publishers for 4 years.
  c) Chart Title should be Total Revenue of Sam's Book stall(1997-2000)'
  d) Give appropriate categories and value axis title.
10. Generate 25 random numbers between 0 & 100 and find their sum, average and count. How many no. are in the range 50-60.

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MS-Power Point

1. Do the following task:
   - Start a new blank presentation
   - Your first Slide is going to be a Title Slide
   - Write the Text as in the preview below:
     o Lighthouse Co Ltd
     o Make the Font of "Lighthouse" Arial Black and size 88

- Insert a second slide this should be with a layout of Bulleted List
- Write the Text as in preview below
- [Title]: Lighthouse Co Ltd
- [Body]:
    i. Mission Statement
    ii. Company Objectives
    iii. Management Team
    iv. Employees
    v. Sales

Make the Font Color of the Points to Green

Insert a third slide that should be an Organization Chart.

Include the following people in the chart:
   a. David Brent, General Manager
   b. Tim Canterbury, Head of Sales
   c. Gareth Keenan, Assistant to the General Manager
   d. Dawn Tinsley , Human Resources Manager

Add a fourth slide and this should be a Table Chart.

The chart should look like the following:

New Products	Discontinued Products
Digital Cameras	8mm Cameras
Ultra Slim Video Camera	8x Zoom Video Camera
25" Plasma TVs21"	Black and White TVs
DVD Recorders	Video Players
7.1 Dolby Surround Systems	2 channel stereo systems

- Make the titles New Products and Discontinued Products with a shadow effect and centered in the cell. Widen columns to fit Text as above.
- The Fifth slide should be a Chart slide. The chart should be a bar chart, and include the following data must be used to form the chart:

	January	February	March	April
TVs	20	27	90	75
DVDs	30	38	34	31
Wifi equipment	45	46	45	43
Video Recorders	25	29	15	40

- Change the colours of the chart so that the series of bars are red, yellow, pink, and green.
- Add a light coloured background to all slides in the presentation.
- Add also Transition effects between each slide and also different effects for all text and pictures in the presentation.
- Reverse the order of the second and third slides
- Save the presentation as Light House Ltd.

2. Do the following:
   Load your Presentation Application and start a new presentation
   - The first slide is a Title Slide. Select the appropriate layout and enter the title: **Annual Food Fair**
   - Add the subtitle: .**A Celebration of Eating**
   - Insert a small, red circle at the bottom right of the title slide.
   - Change the font color for the whole title and subtitle to blue, and apply a text shadow effect just to the words **Food** and **Fair**

- Insert a second slide to the presentation, selecting a layout appropriate for a series of bullet points, and using the title: **The Menu**. Enter the following text:
    i. Chocolate Desserts
    ii. Cakes and Puddings
    iii. Roast Meals
    iv. Using Pasta Creatively

- Change the line spacing for these bullet points to 1.5 lines.
- Increase the font size for the words **The Menu** in the title.
- Add a footer with your name and the text: **Food Fair** so they both appear on every slide, and number all the slides. (Make sure the number is not obscured by the red circle on the title slide)
- Insert a third slide, which is to be an organization chart. Use the title **Meet The Team**. Enter: **Maggie Peet, Manager** at the top of the chart, and show the following three as reporting to Maggie Peet: **Brian Webb, Bookings**; **Janine Newton, Publicity; Gregg Brown, Accounts**
- Embolden the text in the title of the third slide, and change the font to Arial.
- Apply a light coloured background to all the slides in the presentation
- On the third slide, insert an image suitable for the topic of food from an image library. Reduce the size of the image and place it where it will not interfere with text.
- Save the presentation as **foodfair**.
- Print the presentation with three slides per page, and close the presentation.

3. Do the followings:
    - Load your Presentation Application and start a new presentation
    - The first slide is a Title Only Slide. Select the appropriate layout and enter the title: **Cook Family Cruises**.
    - Add a small blue rectangle at the top left of this slide.
    - Change the font color for the whole title to red, and apply a text shadow effect just to the word **Cruises**.
    - Insert a second slide to the presentation, selecting a layout appropriate for a series of bullet points, and using the title: **Our Itinerary**. Enter the following text:
        a.   Canary Islands
        b.   Mediterranean
        c.   Greek Islands
    - Change the line spacing for these bullet points to 2 lines. Increase the font size of the word **Itinerary** in the title. Add a footer with your name and the text: **Cruise Information** so they both appear on every slide, and number all the slides.
    - Insert a third slide, which is to be a graph. Use the title **Our Market Share**. Use the following data to produce a pie chart: Cook 54%; Jackson 28%; Wilson 12%; Bennett 5%
    Embolden the text in the title of the third slide, and change the font to Arial.
    - Apply a different background to each slide in the presentation.
    - On the third slide, insert an image suitable for the topic of holidays from an image library. Reduce the size of the image and place it where it will not interfere with text.
    - Add a 4-slide containing nothing but the text: **Travel with us for less!!**
    - Save the presentation as a holiday.
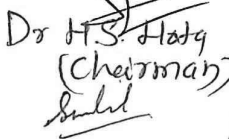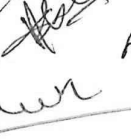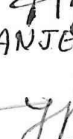   - Print the presentation with 4 slides per page, and close the presentation.
4. Creating an animation looks like the leaf is falling in a tree.
5. Creating an animation looks like demolishing a world trade center in America.
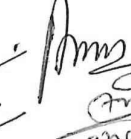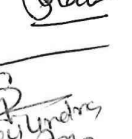
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MS-Access

1. Create a database named "college" and perform the following tasks:
   A. Create a table named "student" having following fields:
      Class, Roll no and Name with these Information i.e., Field Name, Data type and Description
   B. Fill at least 5 records.
   C. Prepare a query to display all records and Name should be in ascending order.
2. Create the employee table in MS-Access with the referential integrity-foreign key.

Note: This is a tentative list; the teachers' concern can add more experiment as per requirement.

Keywords	*Information Technology (IT), Information and Communication Technology (ICT), G-Suite, MS Word, MS Excel, MS Power Point, MS-Access.*

Signature of Convener & Members of CBoS:

Dr H.S. Hatg (Chairman)   (Suresh Kakkes)   ANJEETA KUJUR   sheilyndra

PART-C: Learning Resources

Text Books, Reference Books and Others

Text Books Recommended:

- Computer Fundamentals, P.K. Sinha, BPB Publication, Sixth Edition.
- Fundamentals of Information Technology, Chetan Shrivastava, Kalyan Publishers.
- Fundamentals of Computers, V. Rajaraman, PHI Sixth Edition.
- Computer Fundamentals and Office Automation, Dr. Santosh Kumar Miri, Iterative International Publisher IIP.
- Computer Fundamentals Architecture and Organization, B. Ram, New Age International Publishers, Fifth Edition.
- Fundamentals of Information Technology, Alexis Leon and Mathews Leon, Vikash Publication.

Reference Books Recommended:

- Introduction to Information Technology, V. Rajaraman, PHI publication.
- Fundamental of IT, Leon and Leon, Leon Tec world.
- Introduction to Information Technology, Aksoy and Denardis, Cengage learning.
- Computers Today, Suresh K. Basandra, Galgotia Publications.
- Information Technology – The breaking wave, Dennis P.Curtin, Kim Foley, Kunai Sen and Cathleen Morin, TMH.
- OFFICE 2013 in Simple Steps, Kogent Solution Inc., DremTech Press.
- Access 2010 in Simple Steps by Kogent Learning Solutions Inc.

Online Resources:
- Introduction to Computer Fundamental from W3school:
  https://www.w3schools.blog/computer-fundamentals-tutorial
- Introduction to MS-Word from W3school:
  https://www.w3schools.blog/ms-word-tutorial
- Introduction to MS-Excel from W3school:
  https://www.w3schools.com/excel/excel_introduction.php

- Introduction to MS-PowerPoint from W3school:
  https://www.w3schools.blog/powerpoint-tutorial
- Introduction to MS-Access from W3school:
  https://www.w3schools.com/sql/sql_ref_msaccess.asp
- Fundamentals of Computers & Information Technology (in Hindi) :
  https://www.mcu.ac.in/wp-content/uploads/2020/04/1PGDCA1-Unit-I-Fundamentals-of-Computers-Information-Technology.pdf.
  Fundamentals of Computers & Information Technology (in Hindi):
  https://hte.rajasthan.gov.in/dept/dte/board_of_technical_education,_rajasthan/government_polytechnic_college_hanumangarh/uploads/doc/fundamental-_final-rkd.pdf.
  Information and Computers
  Technology: https://cbseacademic.nic.in/web_material/doc/2014/11_ICT-IX.pdf.pdf.
- Microsoft Office (in Hindi):
  https://www.scribd.com/document/534988849/9-Microsoft-office-in-hindi-www-GkNotesPDF-com.
- MS-OFFICE:
  https://www.rgycsm.org/uploads/books/MICROSOFT-OFFICE-BOOK.pdf.
- MS-OFFICE:
  Hindi Notes: https://www.copaguide.com/2020/04/ms-office-topics.html.
- Microsoft Office Full Crash Course:
  https://www.youtube.com/watch?v=SH4oyV5AJ6A

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks: 50 Marks
Continuous Internal Assessment (CIA):   15 Marks
End Semester Exam (ESE):   35 Marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar +Attendance - 05 Total Marks - 15	Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against 15 Marks	
End Semester Exam (ESE):	Laboratory / Field Skill Performance: On spot Assessment A. Performed the Task based on lab. work - 20 Marks B. Spotting based on tools & technology (written) – 10 Marks Viva-voce (based on principle/technology) - 05 Marks		Managed by Course teacher as per lab. status

Name and Signature of Convener & Members of CBoS;

Dr. H.S. Hota
Chairman
Sunil
(Suresh Thakur)

Shailendra

ANJEETA KUJUR