MANGALORE UNIVERSITY
B.A. (Data Processing) Degree Programme
2019-2020 Onwards
I Semester BA – Blown Up Syllabus

Group I	BASDPC131	48 hours
Theory/Week: 4 Hrs **Credits:2**	**Information Technology**	**IA: 20** **Exam: 80**

Topic	Chapter
UNIT I	**12 Hours**
Introduction to Computers: Introduction, Characteristics computers, Evolution computers Generation of Computers, Classification of computers, the computer system, Application of computers. **Number system:** Introduction, Number system, Conversion from decimal to binary and vice versa, Binary coding. **Computer Architecture:** Introduction, Central processing unit, main memory unit, interconnection of units, cache, communication between various units of a computer system. **Primary memory:** Introduction, memory representation, memory hierarchy, Random access memory, Types of RAM, Read-only memory, Types of ROM.	Chapter 1- Complete 2.8.1, 2.8.2, 2.9 Chapter 2.1, 2.2.5,2.2.6 (upto Pg. No. 32) 2.3, 2.3.1, 2.3.2, 3.1, 3.1.1, 3.2, 3.3, 3.3.1, 3.4,3.4.1
UNIT II	**12 Hours**
Secondary Storage: Introduction, classification, magnetic tape, magnetic disk- Floppy disk(Exclude read-write operation), Hard disk (with read write operation)	3.6, 3.7,3.7.2, 3.7.3, 3.8,3.8.1, 3.8.2, 3.9, 3.9.1, 3.9.2 3.9.4, 3.9.5
Optical disk- Storage organization, access mechanism, Types of Optical disks- only introduction to CD,DVD, Blu-ray disk, Advantages and disadvantages of Optical disks. Introduction to Magneto optical disk, Memory stick, Universal serial bus, Mass storage devices.	3.10,3.10.1,3.10.2, 3.11, 3.11.1, 3.11.2, 3.11.3, 3.11.4, 3.11.5, 3.12, 3.13, 3.13.1, 3.14, 3.15
Input devices – Type of input devices, Keyboard and Mouse (Both with working principles), Only introduction of Trackball, joystick ,lightpen, touch screen, scanner, OCR, OMR, MICR and Barcode reader (Working principles excluded)	4.1, 4.2 , 4.2.1,4.2.2 4.2,4.2.1,4.2.2, 4.2.6 - 4.2.10
Output devices- types of output devices. Printers-Dot matrix, Inkjet and Laser printers (three with working principle), Monitor- Resolution, Dot pitch, Refresh rate, Cathode ray tube monitor (Displaying graphics and colour display are excluded), Liquid Crystal Display Monitor. Differences between LCD and CRT, Other types of monitors. Voice response system, projector, Electronic white board, computer terminals.	4.3, 4.3.1, 4.3.4, 4.3.5 to 4.3.7, 4.4

UNIT III	12 Hours
Computer Program: Introduction, algorithm, flowchart. **Computer languages**: Introduction, Evolution of programming languages, classification of programming languages, generation of programming languages, Features of a good programming language, selection of a programming language.	10.1 to 10.3.4, 10.8,10.9,10.9,10.9.1,10.10(Complete), 10.11
Computer software: Introduction, software definition, relationship between software and hardware, software categories, terminology software. **Network basics:** Computer networks, Network topologies, Network devices	11.3(ALL subsections), 11.6 16.7,16.7.1,16.8, 16.8.1, 16.8.2, 16.8.3, 16.8.4, 16.8.5,16.10
UNIT IV	12 Hours
Internet basics: Introduction, Evolution, Basic internet terms, getting connected to internet, internet Applications, **Working with Application Software, Productivity software:** Word processing program, Spreadsheet program, presentation program, **Database and DBMS:** working with database, RDBMS-Keys,Primary key,candidate key,bforeign key	17.1,17.2,17.3,17.4,17.5 Chapter 13,14,15, 22.1,22.2,22.3,22.4 20.7.3

Text Book:
ITL Education Solution Limited, Introduction to Information Technology, Pearson, Second Edition

Reference Books:
1. A. K. SHARMA, Computer Fundamentals and Programming in C, Universities Press, 2nd Edition, 2018
2. Peter Norton, Introduction to Computers, 7th edition, Tata McGraw Hill Publication, 2011
Anita Goel, Computer Fundamentals, Pearson Education, 2011

Practical-I	**BASDPP132** **Office Automation Lab**	**48 Hrs**
Practical/Week: 3 Hrs **Credits: 2**	**Exercises in MS Office Package**	**I.A.: 20** **Exam: 80**

Part A: MS Word Exercises:
1. Prepare a word document including following features.
   - a) Inserting picture
   - b) Bulleting and numbering
   - c) Formatting
   - d) Border and shading,
   - e) Paragraph and line alignment
   - f) Mathematical expressions

2. Prepare a Word document with table containing Rollno, Name, Class, Marks in 3 subjects of 10 students. Calculate total marks & average. Also find the highest total marks obtained. Find the maximum and minimum marks secured in each subject.
3. Prepare a word document to Create an Advertisement banner
4. Using mail merge prepare a birthday invitation for 5 friends
5. Prepare your resume to apply for a job.

Part B: MS Excel Exercises
1. Create a work sheet to maintain student information such as RollNo, Name, Class, Marks in three subjects of ten students. Calculate total marks, average and grade. Find grade for distinction, first class, second class, Pass and Fail using normally used conditions.
   - Using custom sort, sort the data according to class: - Distinction first, First Class next, and so on. Within each class, average marks should be in descending order.
   - Also draw the Column chart showing the Roll no versus average scored.
2. create a worksheet to input 10 patients details such as admission num, admission date, patient name, ward code & number of days that patient is admitted. Ward details

Code	Ward type	Charge/day
1	General	400
2	Special	1500
3	AC	2300
4	ICU	5000

   Using Pivot table, display the no of patients in each ward type and represent it using Pie char
3. Create Employee database having EmpNo, EmpName, DOJ, department, designation and basic pay of eight employees. Calculate DA, HRA, Gross pay, Profession tax, Net pay, Provident fund as per the rule.

   DA: 30% of basic pay

   HRA: 10% of basic pay if basic pay is less than 25000, 15% of basic pay otherwise.

   Gross = DA + HRA + Basic pay

   Provident fund =12% of Basic pay or Rs.2000, whichever is less.

   Profession Tax = Rs.100 if Gross pay is less than 10000, Rs.200 otherwise.

   NetPay = Gross - (Professional tax + Provident Fund)

Prepare individual pay slips of (at least 2) employees in another work sheet

Part C : a) MS Access Exercises

1. Create STUDENT table with columns RegNo, Name, Class, combination, Address, Percentage Marks in PUC and design the following queries.
   a. Design a query to show all the columns of student table.
   b. Design a query to show regno and name of all the students. (selected columns).
   c. Design a query to show details of all the students those who are staying in Mangalore and scored Percentage more than 80%
   d. Design a query to show all the details of students whose name starting with the letter 'R'.
   e. Design a query to show all the details of students whose name ends with 'S'.
   f. Design a query to show the details of students belonging to I B.A. or III BA
   g. Design a query to show the details of students in alphabetical order of names
   h. Sort the table in descending order of their Regno.
2. Create client table with columns (clientno and clientname) and sales table with columns (orderno, orderdate and clientno). Create relationship between the tables and design the following queries.
   a. Design a query to show order num & order date.
   b. Design a query to show orders made by client name "ashwini".
   c. Design a query to show the order num, order date & client name.
   d. Design a query to show orders made by client number 2.
   e. Design a query to display number of order made by each client.
3. Create EMPLOYEE (Empno, Empname, Deptno, DOB, DOJ, Basic) and DEPARTMENT (Deptno, Deptname) tables. Create relationship between the tables and design the following queries.
   a. Design a query to get all the details of employ table.
   b. Design the query to display empno, empname, depname & salary.
   c. Design the query to get detaits of all the employes belonging to personal department.
   d. Design a query to get emp num,emp name of employees having salary above 7000.
   e. Design a query to get the details of employees having the salary above 7000 from financial department.
   f. Design a query to get the maximum salary in each department
   g. Design a query to get the average salary in each department.
   h. Design a query to get the total number of employees in each department.

Part C : b) MS Power Pont Exercises

Prepare a power point presentation with at least four slides (in each exercise) and picture, chart and other contents for the following matters. Apply various transition and animations. Slides should be moved automatically and repeatedly..

Exercise No. 1: About your college.
Exercise No. 2: Any visiting place of your choice.

Scheme of Examination

S. No.	Details			Marks
1.	Part A	MS Word		10
2.	Part B	MS Excel		10
3.	Part C	a)	MS Power Point	4
		b)	MS Access(Any 3 queries)	6
4.	Class Records			5
5.	Viva-Voce			5
Total Marks				**40**