

Programme – BCA

All Assignments are compulsory. Solve any One question from each Assignment

Fundamentals of Information Technology

Assignment No 1

- Q.1. Draw Block Diagram of computer and explain each component in detail. Also write characteristics of a computer.
- Q.2. explain Binary, Decimal, Octal, and Hexadecimal number systems. Explain how to convert decimal number to binary with example.
- Q.3. what are generations of computer.
- Q.4. explain following devices
- 1) Pointing Devices, Scanners and its types,
 - 2) Voice Recognition Systems, Vision Input System, Touch Screen,
 - 3) Printers: Impact Printers and its types.
 - 4) Plotters, types of plotters,

Assignment No 2

- Q.1. explain Cache Memory, primary memory.
- Q.2. What is secondary memory? What are the characteristics of secondary memory? Explain types of secondary memory.
- Q.3. What is software? Explain types of software's with example
- Q.4. What are different languages used in computer field? What are advantages and disadvantages of these languages.

Algorithm and Program Design

Assignment 1:

1. What is an algorithm? What are the characteristics necessary for a sequence of instructions to qualify as an algorithm?
2. What is the flowchart? How does a flow chart help a programmer in program development?
3. Can a person draw a flowchart ask if he does not know how to perform the task manually? Discuss.
4. Why do flowcharts use standard symbols? Draw basic flowchart symbols and describe their functions.

Assignment 2:

1. Draw flowcharts for the two commonly used structures for the selection logic
2. What is the difference between if then and if then else structures?
3. Draw flowchart for the two commonly used tractors for iteration logic.

C Programming - I

Assignment 1:

- Q.1 Explain C Tokens in detail.
- Q.2 Define loop? Explain for loop with suitable example.
- Q.3 What do you mean by function? Explain function prototype, Function definition, Function call and Function parameters in detail.
- Q.4 Write a short note on break and continue statement.

Assignment 2:

- Q.1 Define an array. Explain one dimensional array with suitable example.
- Q.2 Differentiate between structure and union.
- Q.3 Explain dynamic memory allocation functions.
- Q.4 What is a pointer? Explain pointer declaration, Initialization and accessing variable through its pointer with example.

Business Organisation System

Assignment 1:

- Q.1 What do you mean by the term Business? Explain the characteristics of good Business?
- Q.2 Explain requisites for success in modern business along with example?
- Q.3 Elaborate on the beginning and growth of India business?
- Q.4 Describe various forms of business in detail?

Assignment 2:

- Q.1 Discuss in detail stages in formation and incorporation of company.
- Q.2 Write a note on
 - a) Memorandum of Association
 - b) Articles of Association
- Q.3 Which factors should be considered while starting a new business enterprise?
- Q.4 Write a detail note on Indian firms mergers and acquisitions?

Business Mathematics

Assignment 1:

1. Define set with their operations and various types.
2. Write Brief note on : Functions and their types
3. $AB+B^2=?$

$$\text{If } A = \begin{bmatrix} 1 & -2 & 3 \\ 2 & -2 & 5 \\ 0 & 5 & 2 \end{bmatrix} \text{ and } B = \begin{bmatrix} 1 & 0 & 3 \\ 5 & -2 & 5 \\ 0 & 5 & 3 \end{bmatrix}$$

4. A class consist 20 student out of 15 are girls and 5 are boys. How many way formulation of committee of 3 students
 - a. For all 3 boys in committee
 - b. One boy and 2 girls
 - c. Either all boys or all girls

Assignment 2:

1. Define matrix with their types.
2. Suppose a voter poll is taken in three states. In state A, 50% of voters support the liberal candidate, in state B, 60% of the voters support the liberal candidate, and in state C, 35% of the voters support the liberal candidate. Of the total population of the three states, 40% live in state A, 25% live in state B, and 35% live in state C. Given that a voter supports the liberal candidate, what is the probability that she lives in state B?
3. Construct truth table for $(p \vee q) \rightarrow r$ and put comment on last column
4. Define principle of inclusion exclusion with suitable example.

Lab on MS Office Suite

Assignment 1:

- Q1. Draw and explain different Input Devices in Computer
- Q2. Define Internet. Explain Internet Explorer in brief.
- Q3. Write Short Note on Menu in Word 2010.
- Q4. Write Short Note on Toolbar.

Assignment 2:

- Q1. Write steps to add audio or video file to PowerPoint Presentation.
- Q2. Write steps for Creating and using Templates.
- Q3. List out any 10 commonly used functions and explain them with syntax.
- Q4. Define fields of tables. Write steps to create and modify fields of table.

Lab on C programming - I

Assignment 1:

1. What is an Write a program to display factorial of a given number.
2. Write a program to check whether a given number is prime or not.
3. Write a program to check whether a given number is Armstrong number or not.
4. Write a program to input a five digit number and display its last and first digits.

Assignment 2:

1. Write a program to display the following pattern:

```
    1
   2 1 2
  3 2 1 2 3
 4 3 2 1 2 3 4
```
2. A) Write a function Maximum of Three() which returns the maximum of its three parameters.
B) Write a recursive function to display first N terms of Fibonacci sequence.
3. Write a program to display all array elements in descending order using bubble sort.
4. C Program to Search a Word in a string & Replace it with the Specified Word

Career and Life Skills - Business English

Assignment 1:

- Q.1. Write a formal letter to your customer to express apologies for sending a defective electronic product. Also mention about the replacement of the product.
- Q.2 Draft a notice to all the employees about the installation of new vending machines on each floor.
- Q.3. Write short notes on:
a) Etiquettes to be followed in business meetings. b) Telephone speaking skills
- Q.4 Briefly explain the outline of a Business Plan.

Assignment 2:

- Q.1. Draft an email to your senior manager telling him about the new marketing strategy for your new product(eco-friendly water heating system).
- Q.2. Write an email to the company about the new yet defective mobile you had purchased online.
- Q.3. Choose the correct word for in each sentence:
a) I have received the *information/informed* brochure. b) I got *confused/confusing* by his statements.
c) We always get *surprised/surprising* with new technology. d) The new novel by John Grisham *fascinating/fascination*.
- Q.4. Explain the factors that will make an effective power point presentation.