B.Sc. (Sem. I)

S. S. Jain Subodh P.G. College, Jaipur
B.Sc.- I Semester
Session: 2024-25
Subject : Basic Concepts of Programming (Using "C")
Paper Code:- BCOMP101
Assignment

Note- Attempt any TWO questions from any Unit.

UNIT-I

1. Describe about the criteria of programming language evolution.
2. Explain about the syntax and semantics of programming language and distinguish between them in tabular form.

UNIT-II

3. Define flowchart and explain about each symbols which are used to design it. Distinguish between algorithm and flowchart.
4. Describe about the time and space complexity of algorithm.

UNIT-III

5. What do you mean by data type? Explain about various data types available in C language.
6. Describe about the decision making and branching statements available in C language with their syntax.

UNIT-IV

7. What do you understand by 'entry control loop' and 'exit control loop' ? Describe about the various looping statements available in C language with their syntax.
8. Describe about "Break and Continue Statement" with examples.

S.S. Jain Subodh P.G. College

BSC (Computer Application) I Semester
Session 2024-25
Subject –Operating system (BCOMP-102)

ASSIGNMENT

Note- Attempt any TWO questions from any Unit.

UNIT-I

Q1. Describe the characteristics and functions of Operating System

Q2. Describe various types of operating system.

UNIT-II

Q3. What is a process? Draw and explain process state diagram.

Q4. Write short notes on following-

   a) Critical Section problem
   b) Semaphore
   c) Types of Scheduler

UNIT-III

Q5. What is deadlock? Explain the necessary conditions for its occurrence.

Q6. Explain different methods to handle deadlocks.

UNIT-IV

Q7. Explain page replacement algorithms with suitable example.

Q8. Write short notes on following-

   a) Logical and physical address space
   b) Virtual Memory
   c) Fragmentation

S. S. JAIN SUBODH P.G. (AUTONOMOUS) COLLEGE, JAIPUR
Affiliated to University of Rajasthan, Jaipur
Assignment
B.Sc.-III
Subject: Data and Computer Networks
Paper Code: PBSC302
Paper Setter Name: - Dr. Yogendar Kumar Verma
Unit-I

1. What is a Network? Explain the types of network.

OR

Explain Different transmission Mode with example.

Unit-II

2. Explain different layer in OSI model.

OR

Explain different transmission media with their pros and cons.

Unit-III

3. Explain Presentation and Session Layer of TCP.

OR

Write short notes on:
   (a) DNS
   (b) HTTP

Unit-IV

4. Explain Different Merits and Demerits of OSI Model.

OR

Write short notes on:
   (a) FTP
   (b) SMTP

S. S. Jain Subodh PG (Autonomous) College, Jaipur
B.Sc- III Semester
BCOMP301: Java Programming
<u>Assignment</u>

Attempt any two questions.

<u>Unit- I</u>

1. Explain different features of Java.
2. Briefly discuss various data types and operators of Java.

<u>Unit- II</u>

3. What do you understand by Inheritance? Discuss different types of inheritance with appropriate examples.

4. Explain the Following with appropriate example:

   a. Finalize() block
   b. Constructor
   c. static

<u>Unit- III</u>

5. What are Exceptions? How do we handle exceptions in java? Discuss.

6. Describe Applet life cycle with suitable example.

<u>Unit- IV</u>

7. Write short note on:
   a. JDBC Drivers
   b. Database transection

8. What is multithreading? How do we implement multithreading in java? Explain.