

S.S Jain Subodh P.G. (Autonomous) College

B.Sc.Sem- I

BSCS101 :Programming in C

Assignment

Attempt one questions from each unit.

Unit- 1

Ques. 1- Explain the basic structure and execution of a C program. Also describe constants, variables, and data types with examples.

Ques. 2- Explain the history and importance of the C programming language.

Unit- 2

Ques.1- Explain decision-making and branching statements in C. Describe if, if-else, and nested if statements.

Ques. 2- Explain the use of break, continue, switch case and goto statements in C with simple examples.

Unit-3

Ques.1- What is an array? Explain the declaration, initialization, and representation of a one-dimensional array with an example.

Ques.2-. What is a string in C? Explain how strings are declared and initialized with suitable examples.

Unit-4

Ques.1- What is a structure in C? Explain how to declare a structure variable and access its members with an example

Ques.2-. What is a pointer? Explain the declaration and initialization of pointer variables with a suitable example.

S. S. Jain Subodh P.G. College, Jaipur(Autonomous)
B.Sc.- III Semester
Paper Code: BSCS301

Subject: JAVA Programming and DCCN
Assignment 2026

Note- Attempt four questions, one question from each unit. Write answer in at least 500 words with good presentation. Each question carries equal marks.

UNIT-I

Q1. Explain the evolution and major features of Object-Oriented Programming. Discuss encapsulation, data abstraction, inheritance, and polymorphism with suitable examples.

Q2. Explain Java Virtual Machine (JVM), conditional statements, and iterative statements with suitable examples.

UNIT-II

Q3. Explain the concept of inheritance and interfaces in Java. Discuss the different types of inheritance with an example.

Q4. Explain exception handling in Java. Discuss the use of try, catch, finally, and throw statements with a suitable example.

UNIT-III

Q5. Define computer networking. Explain its characteristics, advantages, and limitations. Also describe the different types of networks based on geographical span: LAN, MAN, and WAN.

Q6. Explain the different network topologies—Bus, Star, Ring, Tree, Mesh, and Hybrid—with suitable diagrams. Also describe the different transmission modes: Simplex, Half Duplex, and Full Duplex.

UNIT-IV

Q7. What is error detection? Explain the different types of errors and the error-detection techniques of Simple Parity, Two-Dimensional Parity, CRC, and Checksum in detail.

Q8. Explain the functions of TCP and UDP at the Transport Layer. Also describe the major network protocols FTP, HTTP, DHCP, POP3, Telnet, and SMTP.

S. S. Jain Subodh P.G. College, Jaipur(Autonomous)
B.Sc. - V Semester
Subject: Artificial Intelligence
Paper Code: BSCS 502

Assignment 2026

Note- Attempt four questions, one question from each unit. Write answer in at least 500 words with good presentation. Each question carries equal marks.

UNIT – I

1. What are Search techniques? Explain water jug problem in detail.
2. Describe tower of Hanoi problem with diagram.

UNIT – II

3. What is problem in artificial intelligence? Explain various Characteristics of problem.
4. Explain depth first and breadth first search method in detail.

UNIT – III

5. What do you mean by heuristic search method? Explain hill climbing method in detail.
6. Explain AND OR search method in detail.

UNIT – IV

7. Explain concept of knowledge.
8. Describe propositional and predicate calculus.

S. S. Jain Subodh P.G. College, Jaipur(Autonomous)

B.Sc. - V Semester

Subject: PHP Programming

Paper Code: BSCS 501

Assignment 2026

Note- Attempt four questions, one question from each unit. Write answer with good presentation. Each question carries equal marks.

UNIT – I

1. What is PHP ? Explain variable, constants and data type with example.
2. Differentiate between server side and client side language.

UNIT – II

3. What is associative array? Explain Multidimensional array with example.
4. Explain function in PHP. Give suitable example of function with string.

UNIT – III

5. Define Get, Post and Request method in PHP.
6. Explain session and exception handling in PHP.

UNIT – IV

7. Explain file handling in PHP.
8. Describe database handling in PHP. Define Insert, delete and update operation.