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

B.Sc.- I Semester

Subject: Basic Concepts of Programming (Using "C")

Paper Code: BSCS101

Assignment, Oct 2025

Note- Assignment consists of 8 questions. Students are required to attempt any 4 Questions.

Unit I

- 1. What do you understand by Flowchart? Explain the various symbols used in Flowchart.
- 2. What is programming language and its uses? Write the programming domains.

Unit II

- 3. Explain all the decision making statements with example.
- 4. What do you understand by looping? Explain its type with example.

Unit III

- 5. What is String? Explain any ten String library functions.
- 6. What do you mean by Arrays? Explain all its type with syntax.

Unit IV

- 7. Differentiate between structure and unions with suitable examples
- 8. What is pointer? Explain it with examples.

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

Subject: JAVA Programming <u>Assignment 2025</u>

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

Max. Marks- 10

UNIT-I

- Q1. What do you understand by OOP? Describe its features and explain the concept of Class and Object through example.
- Q2. Explain about the conditional and Iterative statements with syntax.

UNIT-II

- Q3. Describe the concept and uses of Inheritance. Explain the types of Inheritance with examples.
- Q4. What do you mean by Method overloading? Explain it with example.

UNIT-III

- Q5. Explain about creation and uses of Package through examples.
- Q6. What is the purpose of Exception handling? Explain Exception handling with example.

UNIT-IV

- Q7. Distinguish between Multi-Threading and Multitasking. Explain the life cycle of thread through diagram.
- Q8. Explain the JDBC architecture and describe about the types of driver.

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

Subject: Data and Computer Networks Paper Code: BSCS 302

Assignment 2025

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

Max. Marks- 10

UNIT - I

- 1. What do you mean by computer networking? Explain its various characteristics.
- 2. Describe various network topologies (Bus, Star, Ring, Tree, Mesh, and Hybrid).

UNIT - II

- 3. Describe guided & unguided transmission Media in detail.
- 4. Describe error detection method in data link layer.

UNIT - III

- 5. Explain following Computer Network Devices.
 - (a) Hub (b) Switch (C) Repeater
 - (d) Router (e) Bridge (f) router
- 6. Describe routing algorithm present in network layer.

UNIT - IV

- 7. What is TCP/IP model? Compare it with OSI model.
- 8. Explain following protocols. FTP, HTTP, DHCP, POP3, Telnet and SMTP.

S. S. Jain Subodh P.G. College, Jaipur(Autonomous) B.Sc.- V Semester Paper Code: BSCS501

Subject: PHP Programming Assignment 2025

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

Max. Marks- 10

UNIT-I

- Q1. What do you mean by control statement? Explain it with syntax.
- Q2. Define Operator. Explain its types with examples.

UNIT-II

- Q3. Why do we use array? Explain its types with examples.
- Q4. Write the uses of function and explain its types with examples.

UNIT-III

- Q5. What are Cookies and Session? Explain it with examples.
- Q6. What is the purpose of Exception handling? Explain Exception handling with example.

UNIT-IV

- Q7. Describe File Handling? Perform write and read operations through example.
- Q8. Through an example explain the database handling in PHP.

S. S. Jain Subodh P.G. College, Jaipur(Autonomous) B.Sc. - V Semester

Subject: Artificial Intelligence Paper Code: BSCS 502

Assignment 2025

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

Max. Marks- 10

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 prepositional and predicate calculus.