S. S. Jain Subodh P.G. College, Jaipur

Assignment 2026

Programme- B.Sc. – IV Semester

Paper- BSCS402 :Software Engineering

Max. Marks- 20

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

Unit 1

Q1. Explain the System development life cycle with all the steps.

Q2. What is System? Explain various characteristics of systems.

Unit 2

Q3. Explain system planning and initial investigation.

Q4. Describe tools of structure analysis in detail.

Unit 3

Q5. What are software process models? Explain waterfall model and spiral model.

Q6. Describe software design principles.

Unit 4

Q7. Explain testing principles? Describe white box and black box testing.

Q8. Discuss unit testing, integration testing, validation testing and system testing.

Assignment

All Questions are Compulsory.
Attempt any (4) four questions (1) one from each unit.

Unit I

1. What do you understand by Operating System? Explain its need & services.
2. Explain the following -
a) Batch Operating System
b) Architecture of OS

Unit II

1. What is Deadlock? How it is prevented.
2. Explain the following terms:
   a. Segmentation
   b. External Fragmentation

Unit III

1. What is File Management System? Explain advantages of DBMS over File System.
2. a) Explain different types of DBMS Languages.
   b) Explain different types of Data Models.

Unit IV

1. What is Normalization? Explain all normal forms in detail.
2. Consider this below given table. Create Employee relation and insert atleast 5 records in this.

EMPLOYEE	FNAME	MINIT	LNAME	SSN	BDATE	ADDRESS	SEX	SALARY	SUPERSSN	DNO
	John	B	Smith	123456789	1965-01-09	731 Fondren, Houston, TX	M	30000	333445555	5
	Franklin	T	Wong	333445555	1955-12-08	638 Voss, Houston, TX	M	40000	888665555	5
	Alicia	J	Zelaya	999887777	1968-07-19	3321 Castle, Spring, TX	F	25000	987654321	4
	Jennifer	S	Wallace	987654321	1941-06-20	291 Berry, Bellaire, TX	F	43000	888665555	4
	Ramesh	K	Narayan	666884444	1962-09-15	975 Fire Oak, Humble, TX	M	38000	333445555	5
	Joyce	A	English	453453453	1972-07-31	5631 Rice, Houston, TX	F	25000	333445555	5
	Ahmad	V	Jabbar	987987987	1969-03-29	980 Dallas, Houston, TX	M	25000	987654321	4
	James	E	Borg	888665555	1937-11-10	450 Stone, Houston, TX	M	55000	null	1

a) Display all the records having salary greater than 30,000.
b) Display FNAME and BDATE where DNO =5.

S. S. Jain Subodh P.G. College, Jaipur

Assignment 2026

Programme- B.Sc. – VI Semester

Paper- BSCS601: Python Programming

Max. Marks- 20

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

Unit 1

Q1. Explain in detail about data types, operators, and String of the Python programming language.

Q2. Describe the control flow and looping mechanisms in Python comprehensively.

Unit 2

Q3. Discuss Python lists and tuples in detail, highlighting their features, operations, and applications.

Q4. Explain dictionaries and sets in Python with suitable details and applications.

Unit 3

Q5. Explain regular expressions and their implementation in Python in detail.

Q6. Describe exception handling in Python comprehensively.

Unit 4

Q7. Explain the principles of Object-Oriented Programming and their implementation in Python.

Q8. Discuss inheritance, polymorphism, and type identification in Python in detail.

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

Assignment 2026

Programme- B.Sc. – VI Semester

Paper- BSCS602 :CLOUD COMPUTING

Max. Marks- 20

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

Unit 1

Q1. Explain the concept of Cloud Computing and discuss its roots in Distributed Systems, Cluster Computing, Grid Computing, and Mobile Computing.

Q2. Describe the fundamental concepts of Distributed Systems and explain how they contributed to the evolution of Cloud Computing.

Unit 2

Q3. Explain the basic concepts and characteristics of Cloud Computing. Why is there a need for Cloud Computing?

Q4. Describe various cloud deployment models (Private, Public, Hybrid, and Community Cloud) and explain Cloud Service models such as RaaS, IaaS, PaaS, and SaaS with examples.

Unit 3

Q5. Explain Resource-as-a-Service (RaaS) and Infrastructure-as-a-Service (IaaS) with reference to the usage of physical resources and virtualization.

Q6. Describe Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS) with suitable examples .

Unit 4

Q7. Explain resource scheduling in Cloud Computing, including virtual machine provisioning, migration services, and scheduling techniques for resource reservation.

Q8. Discuss cloud applications, challenges, security and privacy issues, and explain Mobile Cloud Computing and integration of Cloud with Wireless Sensor Networks.

S. S. Jain Subodh P.G. College, Jaipur
B.Sc. - IV Semester
Paper Code: - BSCS401
Subject: Website Development
Assignment, March 2026

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

Max. Marks -20

UNIT-I

1. Explain Different applications of Internet?
2. Write a short on –
   I. WWW
   II. Web Browser
   III. Search engine.

UNIT-II

3. Explain Different Type of style sheet in CSS.
4. Create a HTML table given below-

Columu 1	Columu 2	Columu 3
Row 1 Cell 1	Row 1 Cell 2	Row 1 Cell 3
	Row 2 Cell 2	Row 2 Cell 3
Row 3 Cell 1		

UNIT-III

5. What are the different types of JavaScript Operators? With an example.
6. Explain various data types used in Java script.

UNIT-IV

7. What is a form validation? What are the major attributes of the form? Explain any six form validation components with example.
8. Explain components of Document Object Model (DOM).