GOVERNMENT COLLEGE BAROTA GOHANA (SONIPAT)

Summary of Lesson Plans of College Faculty for Academic Session 2024-25

Name of Assistant/Associate Professor:- Dr. Rajesh Dawar

Class:- B.Sc 5th Sem   **From:- 22nd July 2024**

Subject:- DBMS   **Semester:- ODD Semester**

Months	Week	Topics/ Chapters to be Covered
JULY	1st week	--
	2nd week	--
	3rd week	--
	4th week	Introduction to DBMS-data, information, record, files, Concept of Traditional File System
AUG	1st week	Limitations of Traditional file System, DBMS Approach, its Characteristics and advantages/disadvantages of DBMS
	2nd week	Components of DBMS, DBA and its role **TEST-1**
	3rd week	Centralized and Client Server Architecture of DBMS, Three Level Architecture of DBMS, Mapping and instances. Data Independence - Physical and Logical Data Independence
	4th week	Data Models-Record Based Data Models, Object based Data Models, Physical Data Models and Conceptual Modeling **ASSIGNMENT-1**
SEPT	1st week	Entity Relationship Model-Entity type, entity sets, Attributes, Keys, Relationship, Relationship sets
	2nd week	Conceptual design using ER Diagram **TEST-2**
	3rd week	Relational Data Model, Properties of Relation, Keys, Integrity Constraints, Views
	4th week	Normalization- 1st to 3rd NF , BCNF,
OCT	1st week	Lossless join and dependency preserving decomposition
	2nd week	SQL Type and components of SQL, Data definition and data types, DDL Commands
	3rd week	DML Commands, Data Control commands, Specifying constraints,
	4th week	Basic Queries in SQL, insert, update and delete commands in SQL.
NOV	1st week	Inbuilt date functions in SQL
	2nd week	Inbuilt String function, commit, rollback and savepoints. Creating views
	3rd week	Revision
	4th week	--

GOVERNMENT COLLEGE BAROTA GOHANA (SONIPAT)

Summary of Lesson Plans of College Faculty for Academic Session 2024-25

Name of Assistant/Associate Professor:- Dr. Rajesh Dawar

Class:- B.Sc 3 rd Sem   **From:- 22nd July 2024**

Subject:- Object Oriented Design and C++   **Semester:- ODD Semester**

Months	Week	Topics/ Chapters to be Covered
JULY	1st week	--
	2nd week	--
	3rd week	--
	4th week	Introduction to Object Oriented Prog.
AUG	1st week	Object Oriented Prog. Concepts- Class, Objects, Methods, Message Passing, Abstraction, Encapsulation, Aggregation
	2nd week	Object Modelling Techniques- Object Model, Dynamic Model, Functional Model along with strengths and weakness of each
	3rd week	Introduction to C++, data types in C++, operators in C++, Basic Programs in C++
	4th week	Introduction to arrays, strings, pointers, recursion **Assignment-1**
SEPT	1st week	Inline functions, static data and member functions, friend functions
	2nd week	Preprocessor directives, namespaces, comparison of C with C++
	3rd week	Constructors and destructors in C++ **Test-1**
	4th week	Pointer Manipulations, new and delete operators, this pointer in C++
OCT	1st week	Console I/O in C++
	2nd week	Compile time polymorphism-Unary Operator Overloading through member and friend functions **TEST-2**
	3rd week	Function overloading
	4th week	Virtual functions
NOV	1st week	Abstract class and virtual class
	2nd week	Inheritance and its types, Role of Constructors and destructors in inheritance.
	3rd week	Revision
	4th week	--

GOVERNMENT COLLEGE BAROTA GOHANA (SONIPAT)

Summary of Lesson Plans of College Faculty for Academic Session 2024-25

Name of Assistant/Associate Professor:- Dr. Rajesh Dawar

Class:- BCA 3rd Sem   **From:- 22nd July 2024**

Subject:- DBMS   **Semester:- ODD Semester**

Months	Week	Topics/ Chapters to be Covered
JULY	**1st week**	--
	2nd week	--
	3rd week	--
	4th week	Introduction to DBMS-data, information, record, files, Concept of Traditional File System
AUG	**1st week**	Limitations of Traditional file System, DBMS Approach, its Characteristics and advantages/disadvantages of DBMS
	2nd week	Components of DBMS, DBA and its role **TEST-1**
	3rd week	Centralized and Client Server Architecture of DBMS, Three Level Architecture of DBMS, Mapping and instances. Data Independence - Physical and Logical Data Independence
	4th week	Data Models-Record Based Data Models, Object based Data Models, Physical Data Models and Conceptual Modeling **ASSIGNMENT-1**
SEPT	**1st week**	Entity Relationship Model-Entity type, entity sets, Attributes, Keys, Relationship, Relationship sets
	2nd week	Conceptual design using ER Diagram, Basic concepts of Hierarchical and Network Model.
	3rd week	Relational Data Model, Properties of Relation, Keys, Integrity Constraints, Views **TEST-2**
	4th week	Normalization- 1st to 3rd NF , BCNF,
OCT	**1st week**	Lossless join and dependency preserving decomposition
	2nd week	SQL Type and components of SQL, Data definition and data types, DDL Commands
	3rd week	DML Commands, Data Control commands, Specifying constraints,
	4th week	Basic Queries in SQL, insert, update and delete commands in SQL.
NOV	**1st week**	Inbuilt date functions in SQL, Inbuilt String function, commit, rollback and savepoints. Creating views
	2nd week	Query Processing, strategies for query processing, query optimization, query processor, concurrency and recovery
	3rd week	Revision
	4th week	--

GOVERNMENT COLLEGE BAROTA GOHANA (SONIPAT)

Summary of Lesson Plans of College Faculty for Academic Session 2024-25

Name of Assistant/Associate Professor:- Dr. Rajesh Dawar

Class:- BCA 3rd Sem   **From:- 22nd July 2024**

Subject:- Introduction to Operating System   **Semester:- ODD Semester**

Months	Week	Topics/ Chapters to be Covered
JULY	1st week	--
	2nd week	--
	3rd week	--
	4th week	Introduction to OS, its need and services
AUG	1st week	Operating System Structure, Types of Operating System
	2nd week	Introduction to Process, Operation on Process, Cooperating Process, Threads, Inter-process Communication **Test-1**
	3rd week	CPU Scheduling, Scheduling Criteria, Scheduling Algorithms
	4th week	Deadlock, Methods for handling deadlocks, Bankers's Algorithms **Assignment-1**
SEPT	1st week	Introduction to memory management, logical Vs Physical Address Space
	2nd week	Contiguous and Non-Contiguous Memory Allocation techniques
	3rd week	Page replacement Algorithms, thrashing
	4th week	Revision
OCT	1st week	File System Structure, File Allocation Methods
	2nd week	Free Space Management
	3rd week	Introduction to Device Management
	4th week	Disk Structure
NOV	1st week	Disk Scheduling **test-2**
	2nd week	FCFS, SSTF, SCAN , C-SCAN, Look , C-LOOK
	3rd week	Revision
	4th week	--

GOVERNMENT COLLEGE BAROTA GOHANA (SONIPAT)

Summary of Lesson Plans of College Faculty for Academic Session 2024-25

Name of Assistant/Associate Professor:- Dr. Rajesh Dawar

Class:- BCA 1st Sem   **From:- 22nd July 2024**

Subject:- SEC (Web Dev-I)   **Semester:- ODD Semester**

Months	Week	Topics/ Chapters to be Covered
JULY	1st week	--
	2nd week	--
	3rd week	--
	4th week	Overview of Internet, www, evolution and history of www, basic features and evolution of web development
AUG	1st week	Introduction to web servers, HTTP Protocol, URL, IP Address, Domain Names
	2nd week	Searching and web casting techniques.
	3rd week	Introduction to HTML, HTML Tags
	4th week	Tables in HTML, creating hyperlinks in HTML
SEPT	1st week	Inserting images in HTML **test-1**
	2nd week	Introduction to CSS
	3rd week	Introduction to javascript
	4th week	Hosting web site, ISP, steps for developing web site
OCT	1st week	Creating lists in HTML **Assignment-1**
	2nd week	Introduction to CGI, Features of ASP, VB Script, FLASH, Dreamweaver **test-2**
	3rd week	DOM Model, Element Access in Javascript, Event Handling
	4th week	CSS3 Basics
NOV	1st week	CSS3 Basics
	2nd week	Layout and Positioning
	3rd week	Revision
	4th week	--