



TOTAL	60				

# GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

## SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : **Cs310**

SUBJECT NAME : **PHP AND MYSQL**

FACULTY NAME : **NIDHI GERA**

DESIGNATION : **LECTURER (COMPUTER)**

TOPIC	LECTURE / PRACTICAL CLASSES REQUIRED TO COVER TOPIC	MONTHS IN WHICH THE TOPIC WILL BE COVERED	ACTUAL DATE OF COVERING OF THE TOPIC	REASON FOR NOT COVERING THE TOPIC IN DUE TIME	E-CONTENTS PROVIDED TO STUDENTS RELATED TO TOPIC
UNIT 1: Overview of PHP :Static versus Dynamic Websites,Dynamic Contents from Databases	2	AUG			
Developing Dynamic Internet Applications, Client-Side scripting versus Server-Side Scripting	3	SEP			
Advantages and Capabilities of PHP, PHP versus ASP	2	SEP			
UNIT 2: Basic Scripting, Loop and Conditional Constructs,PHP Scripting Fundamentals	3	SEP			
Primitive Data Types, Defining Constants and Variables	2	OCT			
Loop Constructs: While, Do-While, For, Exit & Break	3	OCT			
Conditional Constructs: If, Else and Elseif, Switch/Case Statement	3	OCT-NOV			
PHP Operators: Logical, Relational, Bitwise, Ternary Operator (?)	3	NOV			
UNIT 3: Arrays in PHP : Usage of Arrays in PHP,	2	DEC			
Initializing Arrays,Adding and Removing Items from Arrays	3	DEC			
One-dimensional and Multidimensional arrays, Array Functions	2	JAN			
UNIT 4 :Working with Databases and Forms,Configuring PHP for Database Support	3	JAN			
PHP's Database API's, PHP's SQL API	4	JAN			
MySQL vs. Access, MySQL vs. SQL Server, Database Drivers	3	FEB			
UNIT 5:Using Cookies with PHP : Purpose of Cookies, Cookies Myths	2	FEB			
Setting Cookies,Retrieving, Expiring and Deleting Cookies,Storing Arrays in Cookie	2	FEB-MAR			
UNIT 6:MySQL : Introduction to MySQL, Creating Databases and Tables	3	MAR			
Working on Data and Tables, Retrieving and Modifying Data	2	MAR			
SQL Functions, SQL Operators	3	APRIL			
Data Definition Statements, Data Manipulation Statements	3	APRIL			
Stored Procedures and Functions	3	APRIL-MAY			
Creating Triggers, Creating simple dynamic report using database	4	MAY			



# GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

## SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : **Cs307**

SUBJECT NAME : **DATA WAREHOUSE AND MINING**

FACULTY NAME : **NIDHI GERA**

DESIGNATION : **LECTURER (COMPUTER)**

TOPIC	LECTURE / PRACTICAL CLASSES REQUIRED TO COVER TOPIC	MONTHS IN WHICH THE TOPIC WILL BE COVERED	ACTUAL DATE OF COVERING OF THE TOPIC	REASON FOR NOT COVERING THE TOPIC IN DUE TIME	E-CONTENTS PROVIDED TO STUDENTS RELATED TO TOPIC
UNIT 1: Data Mining : Introduction to Data Mining, How Data Mining Works	2	AUG			
Data Mining Tasks,Data Mining Elements	2	AUG			
Data Mining Architecture	2	SEP			
Advantages &Disadvantages	1	SEP			
UNIT 2:Data Pre-Processing :Introduction, Task of Data Pre-processing	2	SEP			
Data Cleaning,Data Integration	3	SEP			
Transformation, Data Reduction	3	OCT			
UNIT 3: Data Mining Techniques : Introduction	1	OCT			
Decision Tree, Clustering	3	OCT-NOV			
Genetic Algorithms,Artificial Neural Networks	3	NOV			
UNIT 4 : Data Warehouse : Introduction, Definition,Characteristics	3	NOV			
Difference between Data Warehouse and Database System	1	DEC			
Advantage and Disadvantages	1	DEC			
Relationship between Data Mining and Data Warehousing	1	DEC			
UNIT 5:Data Warehouse Architectures Overall and Typical Architecture	3	DEC-JAN			
Three-Tier architecture,Problem in Three-Tier architecture	3	JAN			
Goal of Data Warehouse Architecture, Frameworks of Data Warehouse	3	JAN			
Data Warehouse back-end Tools and Utilities	2	FEB			
Components of Data Warehouse	2	FEB			
Meta Data: Introduction, Definition,Types of Meta data,Use of Meta Data	4	FEB-MAR			
Data Marts, Access Tools, Data Warehouse Database	4	MAR			
On-Line Analytical Processing :Introduction Characteristics of OLAP System	2	APRIL			
Motivation for using OLAP, Multidimensional View and Operations	3	APRIL			
Guidelines for OLAP Implementation.	2	APRIL-MAY			

Difference between OLAP & OLTP, Servers: OLAP,ROLAP,MOLAP	4	MAY			
TOTAL					

# GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

## SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : **CS206**

SUBJECT NAME : **Data Communication**

FACULTY NAME : **NIDHI GERA**

DESIGNATION : **LECTURER**

TOPIC	LECTURE / PRACTICAL CLASSES REQUIRED TO COVER TOPIC	MONTHS IN WHICH THE TOPIC WILL BE COVERED	ACTUAL DATE OF COVERING OF THE TOPIC	REASON FOR NOT COVERING THE TOPIC IN DUE TIME
UNIT 1 :Data Communication : Model and Components	3	AUGUST		
Computer Networks, Line Configurations	3	SEPTEMBER		
Topology, Transmission modes	3	SEPTEMBER		
Communication Protocol: Layered Architecture	2	SEPTEMBER		
Reference Models : OSI and TCP/IP	4	OCTOBER		
UNIT 2:Signals and Transmission : Analog and Digital Forms	2	OCTOBER		
Analog Signals : Amplitude, Period and Frequency, Phase, Spectrum and bandwidth	4	NOVEMBER		
Digital Signals : Bit Interval and Bit Rate	2	NOVEMBER		
Digital Data Transmission : Parallel and Serial, Asynchronous and Synchronous	3	NOVEMBER		
Modems	2	NOVEMBER		
UNIT 3. Multiplexing and Communication Hardware :FDM and TDM	4	NOVEMBER		
Transmission Media: Guided & Unguided media, Performance factors	2	DECEMBER		
Network devices: Repeaters, Bridges, Switches, Routers and Gateways	2	DECEMBER		
UNIT 4:Data Link Layer : Introduction, Flow control & Error control	2	JANUARY		
Types of errors : Single bit & burst errors,Error Detection & Correction, VRC, LRC, CRC, Checksum, Hamming Code	4	JANUARY		
Flow control & error control protocols : Stop & Wait, 4.5.2 Sliding window,ARQ	2	FEBURARY		
HDLC	2	FEBURARY		
Local Area Networks : Introduction to Ethernet, Token bus, Token Ring & FDDI	2	FEBURARY		
UNIT 5. Switching and Frame Relay : Circuit Switching	2	MARCH		
Packet Switching : Datagram & Virtual Circuit approach	2	MARCH		
Introduction to Frame relay : Its role, advantages & disadvantages	2	APRIL		
Frame relay operation	1	APRIL		
Congestion Control : BECN, FECN	2	APRIL		

Leaky Bucket Algorithm	3	MAY		
TOTAL				



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E-CONTENTS PROVIDED TO STUDENTS RELATED TO TOPIC





TOTAL	60				

# GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

## SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE :

105

SUBJECT NAME : COMPUTER & IT FUNDAMENTALS

FACULTY NAME : NIDHI GERA

DESIGNATION : LECTURER

TOPIC	LECTURE / PRACTICAL CLASSES REQUIRED TO COVER TOPIC	MONTHS IN WHICH THE TOPIC WILL BE COVERED	ACTUAL DATE OF COVERING OF THE TOPIC	REASON FOR NOT COVERING THE TOPIC IN DUE TIME
Computer: An introduction, Generation of Computers & Types : PC, PC/XT, PC/AT, Main Frame, Super, Lap Top, Palm Top	2	AUGUST		
Data Representation: Bit, Nibble, Byte, Word, Number System : Decimal, Binary, Hexadecimal & their Conversions, Arithmetic Operations (Addition, Subtraction using Binary Number System), 1s, 2s Complement, Coding Technique : BCD, EBCDIC, ASCII	6	AUG-SEP		
Idea of: Hardware, Software, Firmware, Free ware, Human ware, Computer Languages and Translators: Machine, Assembly, High Level Language, Scripting Language, Object Oriented Language, Platform Independent Language, Translators: Assembler, Interpreter, Compiler	4	SEP		
Central Processing Unit (CPU), Memory Unit, Input/ Out Devices : Keyboard, Mouse (Optical), Digitizer, Scanner, Web Camera, Monitor (CRT, TFT), Printers, Plotters, Bar Code Reader	4	SEP-OCT		
Secondary Storage Devices : Floppy, Hard Disk, CD, DVD, Flash Drive, Block Diagram Showing Interconnection of Computer Parts	4	OCT		
UNIT 3: Operating System : Definition of Operating System (OS), Types of OS: Single user, Multi user, Multi Programming, Time Sharing, Multi Processing,	2	NOV		
UNIT 4 : Introduction to Windows XP: Introduction to Windows Environment, Parts of Windows Screen, Icon, Menu, Start Menu, Minimising, Maximising, Closing Windows, Windows Explorer, Recycle Bin, Clipboard, My Computer, My Network Places, Control Panel : Adding new Hardware and Software, Display, Font, Multimedia, Mouse, International System Accessories: Paint, Media Player, Scan disk, System Information	7	NOV-DEC		
UNIT 5: Information Concepts and Processing: Definition of Data, Information, Need of Information, Quality of Information, Concepts of Data Security, Privacy, Protection, Computer Virus and their types, Scanning & Removing Virus	3	DEC		
UNIT 6: Computer and Communication: Need of Data, Transmission, Data Transmission Media, Baud rate and Bandwidth, Digital and Analog Transmission, Serial and Parallel Data Transfer, Protocols, MODEM. Networking of Computers : LAN, WAN, MAN, Blue tooth, LAN Topologies: Bus, Star, Ring, Hybrid, Introduction to Ports : RS232, IEEE 488, PS2, USB, UTP	7	JAN		
UNIT 7: Internet: Introduction to Internet, Bridges, Routers, Switch, Gate way, www, Web Site, URL, e-mail, e-Commerce, Web browsing, Web page, Introduction to Hyper text & HTML, Introduction to http & ftp Protocol	6	FEB		



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E-CONTENTS PROVIDED TO STUDENTS RELATED TO TOPIC

