

Technology	Exam Cycle	Syllabus
Mainframe	May'22	DB2, Cobol, JCL, CICS
D/W & Informatica	May'22	DW:- Datamart Metadatarepository Dimensional Data Model. Star ,Snowflake Schema. Slowly Changing Dimension. Conceptual ,Logical & Physical Data Model Partitioning SQL,RANK,DENSE_RANK Informatica:- ETL Types of Extracts Transformations - Join,Cache,Lookup source & targets mapping, session, workflow Designer, Workflow Manager, Workflow Monitor, Repository Manager applications PMCMD commands
D/W & Tableau	May'22	DW:- Datamart Metadatarepository Dimensional Data Model. Star ,Snowflake Schema. Slowly Changing Dimension. Conceptual ,Logical & Physical Data Model Partitioning SQL,RANK,DEIMSE_RANK Tableau:- Dimensions and measures Types of charts Structure Data for Analysis Field Types: Dimensions and Measures, Blue and Green Data Types Tableau's Order of Operations Data Aggregation in Tableau Functions, LOD

Automation Testing & HP UFT	May'22	<p>Topics on Automation Testing: what is automation testing, why is automation testing needed, benefits of automation testing, when to automate, decide best automation tools, why not to automate, end to end testing</p> <p>Topics on HP UFT: Checkpoints - Text, Text Area, Standard, Bitmap, Output - Text, Standard, Objects - Import, Read, Change Data from EXCEL, Object Spy, Object Spy, GetRoProperty, GetToProperty, SetTOProperty, Object Identification, Smart Identification, Ordinal Identifier, Virtual Objects, Types of Recording Modes: Analog, Low Level, Context, Functions, Transactions, Actions, Recovery Scenario</p>
Automation Testing & Selenium	May'22	<p>Topics on Automation Testing: what is automation testing, why is automation testing needed, benefits of automation testing, when to automate, decide best automation tools, why not to automate, end to end testing</p> <p>Topics on Selenium: Selenium webdriver, webdriver commands, navigation commands, webelement locators, webelement commands, select class, javascript executor, alert handling, selenium wait commands, window handle, frame handle, action class, file upload, options class</p>
Win 10 Admin	May'22	<p>Implementation:- clean install, create installation media, migrate to Windows 10, and configure and manage device drivers</p> <p>Manage & Maintain :- configure updates, monitor events and performance, back up and restore files, recover the entire system, and configure OneDrive for Business. She touches on Windows Defender, System Restore, Windows Insider, Resource Monitor etc</p> <p>Configure and Support Core Services :- networking, storage, data access and usage, and Remote Management, Windows Assessment and Deployment Kit,</p> <p>Powershell :- Basic Commands, Passing parameters to</p>

		<p>Commands, Working with Pipeline, Variables, Program flow etc</p> <p>PowerShell for Active Directory Administrators :- Console, ISE, User Account & Group account Management, Inactive accounts, Update & Modify Active Directory, Remote Management, ADAC features, Recycle Bin,</p>
Linux Admin	May'22	<p>Installation, Fundamentals, Intermediate skills, System Logging & Boot process, Disk Management, Logical Volume Manager, User Management, Networking, Permissions, Shell scripting, Advanced Skills,</p>
SAP ABAP	May'22	<p>Core ABAP topics including DDIC, Classical Reports, Interactive Report, Data Declaration, Internal Tables, Select Query, Events, Modularization Technics, ALV and SmartForms.</p>
Oracle PL/SQL	May'22	<p>SQL-GROUPBY, ORDERBY, WITH, Aggregate operations, constraints, indexes etc PROCEDURE, FUNCTION, PACKAGE CURSOR, EXCEPTIONS, VIEWS, Materialized Views Trigger</p>
Angular	May'22	<p>Server-side/Client-side Rendering, AOT compilation, Understanding about Angular versions, Components, Modules and Services, Dependency Injection, Directives, Routes and Forms, Types of Bindings, Component lifecycle hooks, Observable-Promise-Subscription, Sharing data between components, HTTP Client, Interceptors, NGRX/Store, State Management, Action-Reducer-Effects, Angular testing - Unit/ e2e testing</p>
Power Platforms	May'22	<p>Web pages, Power Apps, Table relationships, Tables in Dataverse, Power Virtual Agents, Bot General Data Protection Regulations Set up Power BI integration Portal Search Roles and Permissions in portals Forms and Lists Portal Management app Components Starter Portal Portal Architecture Canvas APP Dataverse Data Connectors Build an automated solution</p>

		<div>Power Apps portals</div> <div>Server side synchronization</div> <div>Manage Data</div> <div>Templates</div> <div>Audit and Logs</div> <div>Field level security to control access</div> <div>Dataflows</div> <div>Models in AI Builder</div> <div>Data loss prevention policies</div> <div>Expressions in Power Automate</div> <div>Columns</div> <div>Encryption</div> <div>Power BI</div> <div>Model Driven APP</div> <div>Enhance Power Virtual Agents bots</div> <div>Logical Branching</div> <div>Immersive business process flow in Power Automate</div> <div>Security in Microsoft Dataverse</div> <div>Solutions</div> <div>Actions</div> <div>Workflows</div> <div>Business process flows in Power Automate</div> <div>Build a basic chatbot</div> <div>Build a simple dashboard</div> <div>Environments</div> <div>Bot topics</div>
Microservices	May'22	<div>Introduction to Microservices & Design Principles</div> <div>Monolithic Architecture</div> <div>SOA Architecture</div> <div>Key benefits of Microservices</div> <div>Challenges in Microservices</div> <div>Comparisons between Monolithic, SOA and Microservices</div> <div>API Gateways for Microservices, Service discovery & registry,</div> <div>Data management, Service deployment, Caching and Security</div> <div>Microservices: Process and Organization</div> <div>Integrating Microservices</div> <div>Microservice technologies</div> <div>Decomposing Monolith</div> <div>Deployment & Maintaining</div> <div>deployment microservices with container, container</div> <div>technology & serverless introduction</div>

Java	May'22	<p>OOPS concepts (Data Abstraction, Encapsulation, Inheritance, Polymorphism)</p> <p>Basic Java constructs like loops and data types</p> <p>String handling</p> <p>Collection framework</p> <p>Multithreading</p> <p>Exception handling</p> <p>Generics</p> <p>Synchronisation</p> <p>Serialisation & De-serialisation</p> <p>Concurrent collection</p> <p>JDBC (Java Database Connectivity)</p> <p>Springboot</p>
.NET (Core, ASP.NET)	May'22	<p>Introduction to ASP.Net Core What is .Net Core</p> <p>.Net Core VS .Net Framework</p> <p>Overview of .Net Core & its architecture</p> <p>ASP.net core MVC with EF core REST and WebAPI</p> <p>Introduction to MVC</p> <p>Configuring MVC Controllers and Action, Razor views</p> <p>MVC Application Routes</p> <p>Models and Unit Testing</p> <p>Entity Framework core, code first, database first approach</p> <p>UI Layout of application</p> <p>Data and State Management</p> <p>Implementing Authentication</p> <p>Authorization and Handling Exceptions</p> <p>Debugging application</p> <p>Troubleshooting, HTTP Modules, & Handlers</p> <p>Middleware,Dependency injection,Exception Handling,Logging and caching in asp.net core</p> <p>RestFul Webservices Introduction to Rest API</p> <p>Rest Based Architecture</p> <p>Resources in Rest</p> <p>Working with REST Mesthods</p> <p>APIfication a. API design strategies</p> <p>b. API creation process and Methodology</p> <p>c. Domain Analysis</p> <p>d.Headers</p> <p>e.Media types</p> <p>f. Media Type Design</p> <p>g. Message body format</p> <p>h. Hypermedia Representation</p> <p>i. Media type Representation</p> <p>j. Error Representation</p> <p>ASP.NET webapi using REST a. Getting Started with webapi</p> <p>b. Model Validation</p> <p>c. Routing and Custom Methods</p>

		<div>d.sorting,paging,searching</div> <div>e . Authentication and Authorization</div> <div>F . Caching</div> <div>g. Swagger for API testing and documentation</div>
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C#	May'22	C# Foundation C# Control Statement C# Function C# Arrays C# Object Class C# Properties C# Inheritance C# Polymorphism C# Abstraction C# Namespace C# Strings C# Exception Handling C# File IO C# Collections C# Generics C# Delegates C# Multithreading C# Synchronization C# Web Services Asynchronous Programming Lambda Expression Extension method Reflection
ServiceNow	May'22	ServiceNow Fundamentals SERVICE NOW ITSM AND ADMINISTRATION ServiceNow Developer fundamentals
Performance Testing	May'22	Performance Testing fundamentals Jmeter Loadrunner NeoLoad Performance Monitoring Fundamentals (basics/optional) Splunk Core Appdynamics Dynatrace Others: Zabbix Scripting - Java, Shell, VB
IOS	May'22	Swift basics - collections,optionals,protocols,extensionsAuto layout constraintsDesign patterns - MVC,MVVM,ViperCore Data, user defaultsNotification CenterNavigation controllers, seguesURL sessionJSON parsingInterface builderTable viewsMemory management (ARC)GCDUIViewController lifecyle

Android	May'22	Kotlin (All concepts like Data class, Open class etc) ConstrainLayouts LiveData Android jetpack components : Navigation, Data Binding, RoomDB, Paging MWM Android deep linking Shared preferences Recyclerview, Activity lifecycle and fragment lifecycle
Python 3	May'22	Basics Keywords Namespaces and scope Statement, Indentation and comments Input/output Operators Data Types Control Flow Modules & Functions OOPS Exception Handling File Handline Regex Collections List and Tuples Dictionaries and Sets Using Databases in Python Generators, Comprehensions and lambda expressions

Scala	May'22	Basics Control Statements OOPS Parameterized – Type Exceptions Scala Annotations Methods String Scala classes Scala Packages Scala Traits and abstract classes Collection Map Scala Options Tuples sbt and scalatest Functional Programming Case classes
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