DETAILED SYLLABUS FOR THE POST OF DEPUTY ACCOUNTS MANAGER IN KERALA WATER AUTHORITY

(CAT NO: 371/2024) - TOTAL MARKS : 100

PART - I - CA (80 MARKS)

Module - 1- Accounting

Introduction to accounting standards – IFRS converged accounting standards- Applicability of accounting standards – preparation of financial statement- cash flow statement – Accounting for bonus and right issue- Investment accounts- Department Accounts- Hire purchase - branch accounts- accounting for insurance claims- Accounting for incomplete records **(12 Marks)**

Module - 2 - Company Law

Incorporation of a company, Prospectus and allotment of securities- share capital and debentures- Company management and administration- deceleration and payment of dividend- Accounts of companies- Audit and Auditors **(10 Marks)**

Module - 3 -Cost and Management Accounting

Material cost- Employee cost- Overheads- activity based costing- cost sheet- cost accounting system- Unit and batch costing-job costing- contract costing- process and operation costing- joint products and byproducts- service costing- standard costing- marginal costing- budget and budgetary control **(12 marks)**

Module - 4 -Income Tax Law

Basic concepts- residence and scope of total income- income which do not form part of total income- heads of income- income from salaries, house property- profit and gains of business or profession, capital gains and other sources- set off and carry forward- deductions- advance tax- filing of return of income and self-assessment **(12 marks)**

Module - 5 -Auditing

Audit strategy- Audit planning and audit programme- Audit documentation- audit evidence- Risk assessment and internal control- Audit in automated environment- Audit sampling- company audit- Audit report- **(12 marks)**

Module - 6 -Financial management

Financing decisions- Investment decisions- Dividend decisions- ratio analysis- capital structure - Risk Analysis in Capital Budgeting- Introduction to Working Capital Management- Treasury and Cash Management -Management of Inventor- Management of Receivables - Management of Payables (Creditors)- Financing of Working Capital **(12 marks)**

Module - 7 -Strategic management

Introduction to strategic management- dynamic of competitive strategy-strategic management process- corporate level strategies- business level strategies-functional level strategies- organisational level strategies- strategic leadership-strategy implementation and control **(10 marks)**

PART - II Computer Application (20 Marks)

MODULE 1- COMPUTER FUNDAMENTALS & INFORMATICS

1.1 Components of a Computer system

1.1.1 **Hardware components**- Hardware-Definition, Components - Control unit, ALU,I/O devices, Memory, Motherboard-functions of each. Types of PCs – Desktop, Laptop, Note book, PDA, Special Purpose computers, Super computers – Characteristics and area of use. Memory – Comparison- Primary vs Secondary memory. RAM and ROM variations, Various Magnetic and Optical Storage Devices –examples. Input Devices – Keyboard, Mouse, trackball, joystick, scanners, Digital camera, OCR, OMR, MICR, Light pen, bar code readers, QR code, Voice recognition and touch screen-Characteristics. Output Devices - Monitors, Printers, Plotter, Sound cards and speakers-Characteristics. **(3 marks)**

1.1.2 **Software Concepts** - Types of software-system software and application software. System software-definition and examples. Functions of OS, Application software – definition and examples. Number systems – decimal, octal, hexadecimal and binary –Representation concepts only. Computer coding systems- EBCDIC, ASCII and Unicode-definitions. **(2 marks)**

MODULE 2 - OFFICE AUTOMATION

2.1 Introduction to MS-Office

2.1.1 Introduction to MS –WORD

Introduction to Word Processing, Introduction to MS Word: features, Creating, Saving and Opening documents in Word, Interface, Toolbars, Ruler, Different Menus, Keyboard Shortcut. Editing a Document. Opening Multi document windows, Editing Text – Selecting, Inserting, deleting, moving text, Previewing documents, Printing documents. Formatting Documents: Paragraph formats, Aligning Text and Paragraph, Borders and Shading, Headers and Footers, Multiple Columns. **(2 marks)**

2.1.2 Introduction to MS-Excel

Worksheet basics- Creating worksheet, Definition of cell, columns and rows.. Saving & protecting worksheet. Opening and moving around in an existing

worksheet. Toolbars and Menus-Functions, keyboard shortcuts. Cell formatting, changing alignment, character styles, column width, date format, borders & colors. Working with formulas & cell referencing. Functions .Previewing & Printing worksheet – Page setting, Print titles, Adjusting margins, Page break, headers and footers. **(2 marks)**

2.1.3 Introduction to MS-PowerPoint

Purpose of PowerPoint. Working with different views and menus of power point. Working with slides – Make new slide, move, copy, delete, duplicate, designing and lay outing of slide. Editing and formatting text, Printing presentation – Print slides, notes, handouts and outlines. Inserting Objects – Drawing and inserting objects using Clip Art's pictures and charts. Adding graphics, multimedia and special effects. Custom Animation – slide transition effects and other animation effects. **(1 mark)**

MODULE 3 - PROGRAMMING LANGUAGES

3.1   OOP Concepts

3.1.1 Principles of Object-oriented Programming: Object-Oriented Programming Paradigm, Basic Concepts of Object Oriented Programming, Benefits of OOPs, Object-Oriented Languages, Essentials of OOP(Objects, Class, ,Encapsulation, Data Abstraction, Inheritance, Reusability, Polymorphism, Delegation, Message Communication), Structure of C++ Program, Creating the Source File, Compiling and Linking. **(1 mark)**

3.1.2 **C++ Basics** - Preprocessors, comments, Data types, Operators, Expressions, Identifiers, Key words, Symbolic constants, Variable declaration and dynamic initialization, C++ statements, Control structures, Arrays and string handling, Specifying a Class, Defining Member Functions, its scope

(1 mark)

3.2   Visual Basic.Net

3.2.1 Introduction to .NET- .NET Framework features & architecture, CLR, Common Type System, MSIL, Assemblies and class libraries. Introduction to Visual studio, Project basics, types of project in . Net, IDE of VB.NET-Menu bar, Toolbar, Solution Explorer, Toolbox, Properties Window, Form Designer, Output Window, Object Browser. Visual development & event driven Programming -Methods and events. **(1 mark)**

3.2.2 The VB.NET Language- Variables -Declaring variables, Data Type of variables, Forcing variables declarations, Scope & lifetime of a variable, Constants, Arrays, types of array, control array, Collections, Subroutines, Functions, Passing variable, Number of Argument, Optional Argument, Returning value from function. Control flow statements: conditional statement, loop statement. GUI programming with Windows Forms, Msgbox

& Inputbox, TextBox, Label, Button, Listbox, Combobox, Checkbox,Radio button etc **(1 mark)**

MODULE 4 - DATABASE MANAGEMENT SYSTEMS

4.1   Introduction to Database concepts

Need of database, Flat database, Database Management Systems, Characteristics of DBMS, Relational Database, Entity and Referential Integrity, Primary key, Foreign key, Database elements-Tables, records, Query, Form, Report, Client-server paradigm **(1 mark)**

4.2   Database Query commands

Different DDL, DML, DCL commands, Creating, deleting, updating and manipulating tables using SQL commands, Applying constraints on tables, filtering using WHERE, LIKE etc. Joining tables, grouping data using Group By. Data aggregation functions **(2 marks)**

MODULE 5 - WEB DESIGNING

5.1   **Word Wide Web** (www) - History, Working, Web Browsers- functions, Concept of Search Engines, Searching the Web, HTTP, URLs, Web Servers, Web Protocols. HTML, Design tools, HTML editors , Image editors. **(1 mark)**

5.2   HTML - Concepts Of Hypertext, Versions of HTML, Elements of HTML, Syntax, Head & Body Sections, Building HTML Documents. Inserting Texts, Images, Hyperlinks, Backgrounds And Color Controls, Different HTML Tags, Table Layout and Presentation, Use of Font Size & Attributes, List Types and Its Tags, Use of Frames and Forms in Web Pages. **(1 mark)**

5.3   JavaScript Overview, syntax & conventions. Variables, Expressions, Branching   & Looping statements, Functions, Arrays Objects, Events & Document Object   Model - onClick, onMouseOver, on Submit, on Focus, on Change, onBlur.   onLoad, onUnload. Alerts, Prompts & Confirms.   **(1 mark)**

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.