

COURSE CONTENT FOR DIFFERENT POSITIONS ADVERTISED IN CPPA-G

Sr#	Post	Topics														
1	AM IT (Oracle Developer – Oracle EBS HRMS & Payroll)	<ol style="list-style-type: none"> Oracle EBS HRMS/Payroll Technical Schema, APIs, Flows SQL & PL/SQL Database programming 														
2	AM IT (IT Governance)	<ol style="list-style-type: none"> IT Governance Fundamentals IT Governance Frameworks (Basic Concepts) Policy, Procedures & SOP Development IT Risk Management IT Compliance & Audit Fundamentals Metrics, Reporting & Documentation Information Security & Data Protection (Governance Perspective) IT Service Management Awareness (Governance Focus) 														
3	Junior Executive IT	<ol style="list-style-type: none"> Programming Fundamentals: Evaluate understanding of variables, loops, conditionals, and syntax in languages such as Python, Java, or C++. Data Structures and Algorithms: Assess proficiency with arrays, linked lists, trees, graphs, sorting algorithms, and their time and space complexities. Object-Oriented Programming (OOP): Test knowledge of classes, objects, inheritance, polymorphism, and design principles like SOLID. Database Management Systems (DBMS): Include questions on SQL queries, normalization, indexing, and differences between SQL and NoSQL databases. Software Development Methodologies: Cover Agile practices, Scrum roles, and the importance of continuous integration and delivery. Software Design Patterns and Principles: Evaluate understanding of common design patterns (e.g., Singleton, Factory) and principles like DRY (Don't Repeat Yourself) and KISS (Keep It Simple, Stupid). Version Control Systems: Assess familiarity with tools like Git, including branching, merging, and resolving conflicts. Web Technologies: Test knowledge of HTML, CSS, JavaScript, and frameworks such as React or Angular. Problem-Solving and Critical Thinking: Present scenarios requiring logical reasoning and the application of computer science principles to solve complex problems. Asbury Emerging Trends and AI Integration: Given the rise of AI-assisted coding tools, include questions on prompt engineering, the use of AI in software development, and ethical considerations. 														
4	Assistant Manager IT	<table border="1"> <thead> <tr> <th data-bbox="523 1653 831 1688">Tool/Technology</th> <th data-bbox="831 1653 1441 1688">Topic</th> </tr> </thead> <tbody> <tr> <td data-bbox="523 1688 831 1760" rowspan="2">.NET FrameWork</td> <td data-bbox="831 1688 1441 1724">CLR/CTS/CLS</td> </tr> <tr> <td data-bbox="831 1724 1441 1760">Interface</td> </tr> <tr> <td data-bbox="523 1760 831 1899" rowspan="3">OOP</td> <td data-bbox="831 1760 1441 1796">OOP</td> </tr> <tr> <td data-bbox="831 1796 1441 1868">Encapsulation, Inheritance, Polymorphism, Abstraction</td> </tr> <tr> <td data-bbox="831 1868 1441 1899">Overloading & overriding</td> </tr> <tr> <td data-bbox="523 1899 831 2033" rowspan="4">C#.NET</td> <td data-bbox="831 1899 1441 1935">Delegates</td> </tr> <tr> <td data-bbox="831 1935 1441 1971">Collections</td> </tr> <tr> <td data-bbox="831 1971 1441 2007">Generics</td> </tr> <tr> <td data-bbox="831 2007 1441 2033">LINQ</td> </tr> </tbody> </table>	Tool/Technology	Topic	.NET FrameWork	CLR/CTS/CLS	Interface	OOP	OOP	Encapsulation, Inheritance, Polymorphism, Abstraction	Overloading & overriding	C#.NET	Delegates	Collections	Generics	LINQ
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		ASP.NET Authentication and Authorization State Management Caching Threading Localization ASP.NET Entity Framework JSON AJAX MVC Designing HTML CSS SQL Server Constraints JOINS VIEWS Stored Procedures Triggers Cursors Sub Query Web APIs Web Services Restful APIs Windows Services
5	Assistant Network Engineer	1. Introduction to Data Center 2. Electrical Systems and UPS Operations 3. HVAC and Environmental Controls 4. Fire Detection and Suppression Systems 5. CCTV and Access Control Systems 6. Structured Cabling and Network Fundamentals 7. Monitoring, Reporting, and Documentation 8. AutoCAD and MS Office Applications
6	Assistant Manager Finance	1. CPPA Annual Reports & Electric Power Procurement Regulations 2022. 2. Knowledge of Pakistan Power Sector. (Roles of all Power sector Entities, Power Purchase Agreements, Tariff Structures). 3. Financial Accounting & Reporting (IFRS, budgeting, financial statement analysis, and audit coordination). 4. Financial Planning and Analysis (Ratio & trend analysis, debt servicing calculation and evaluation of financial data) and knowledge of MS office & AI Tools.
7	Junior Executive Finance	1. CPPA Annual Reports. 2. Basic Understanding of Pakistan Power Sector Entities and their functions. 3. Fundamentals of Financial Accounting & Reporting as well as Financial Planning and Analysis. 4. Computer Literacy and MS Office.
8	Assistant Manager Technical	1. Functions of CPPA -G 2. Functions of various Organizations in Power Sector. 3. Basic Knowledge of different Power Policies 4. Information about CTBCM (Competitive Trading Bilateral Contract Market) 5. Basic knowledge of NE policy and NE plan 6. Basic Knowledge of Power / Energy Purchase Agreements 7. Concept of Integrated Generation Expansion Plan (IGCEP) 8. Tariff structure information 9. Components of Tariff 10. Components of energy and capacity payments

		<ol style="list-style-type: none"> 11. Different Generation Technologies 12. Capacity Factor, Plant Factor, utilization factor, Peak Factor etc. 13. Power System Operations. 14. Power system economics i.e. merit order 15. Meter reading and invoicing mechanism 16. Fuel Cost Comparison of different Technologies 17. Types of spinning Reserves 18. Basic information of Grid Code, Distribution Code, Commercial Code 19. Technical and Financial Flows of Power Sector 20. Testing of Power Plants 21. Heat Rates, Plant Efficiency 22. Transmission and Distribution network of Pakistan. 23. Basics of protection and control.
9	Junior Executive Technical	<ol style="list-style-type: none"> 1. Functions of CPPA -G 2. Structure of Power Sector in Pakistan. 3. Basic Knowledge of Power Generation 4. Basic knowledge regarding Generation Tariff 5. Different Generation Technologies 6. Power System Operations. 7. Power system economics 8. Comparison of different Generation Technologies in terms of cost and efficiency 9. Technical and Financial Flows of Power Sector 10. Heat Rates, Plant Efficiency 11. Transmission and Distribution network of Pakistan. 12. Basics of protection and control. 13. Basic Information on Power Purchase Contracts