EMPLOYEES' OLD-AGE BENEFITS INSTITUTIONS (EOBI)

Syllabus:
2024 LUMS-EOBI Written Test for Deputy Director IT Cadre
(Grade-08, Equivalent to BPS-18)

Part 1: IT Systems and Infrastructure Management (40%)

Software Engineering
- Software engineering methodologies and principles
- Software project management
- Software process and quality
- Software design patterns and best practices.

Networks
- Fundamentals of networking (OSI model, TCP/IP);
- Network security protocols and tools.

Database Skills
- Database management and administration
- SQL and NoSQL databases
- Database design and normalization
- Query optimization techniques
- Advanced SQL querying
- Stored procedures, triggers, and functions

Application Administration
- Experience with application servers
- Application deployment and management skills

Cyber Security Skills
- Basics of cybersecurity principles
- Familiarity with security tools (firewalls, intrusion detection systems)
- Risk management and compliance

IT Operations
- ITIL framework and practices
- Incident, problem, and change management
- Monitoring and maintenance of IT systems

Documentation Tools
- Familiarity with documentation tools (for example, Confluence, SharePoint)
- Best practices for IT documentation and knowledge management
- Proficiency in MS Office, including Office365, Word, Excel, PowerPoint, Using Excel for data analysis (formulas, charts, VBA), Power BI
- GitHub as code sharing tool

Developing and Maintaining Integration Interfaces
- Service Oriented Architecture (SOA)
- API development and integration

- o Middleware technologies
- o Data exchange formats (for example, JSON, XML)

IT Infrastructure Support
- o Server and storage management
- o Cloud infrastructure
- o Virtualization technologies

Computational Problem Solving
- o Proficiency in at least one high-level programming language
- o Scripting languages
- o Full-Stack development concepts

New emerging technologies
- o Artificial intelligence tools
- o Large language models and tools

Part 2: Communication Skills (20%)

The communication skills test will have three components to assess candidates' abilities in various aspects of what makes up this subject.

A. There will be a short passage (typically around 400 words) and have five-six multiple-choice questions.
B. There will be questions which will be about filling in the blanks and candidates will be expected to choose from the list of given answers.
C. There will be multiple-choice questions about various components of communication skills and candidates would be expected to choose the right answer from the list of provided options.

Part 3: Analytical Skills & Data Response (20%)

The test of analytical skills and data response will cover logical reasoning, problem solving, and critical thinking. It will include data interpretation through graphs, charts, tables, and data sets, focusing on drawing inferences. Numerical ability will be tested with basic arithmetic, percentages, ratios, and word problems. Basic descriptive statistics like mean, median, and mode will be included, along with data visualization using various charts and graphs. Additionally, case studies and real-world applications will assess the interpretation of data and draw actionable insights.

Part 4: IT Skills (20%)

This part of the test is aimed at examining computer skills of the candidates in communication using email and other tools; documentation and word processing; data manipulation using spreadsheets such as Excel; presentation authoring e.g., use of power point; internet usage such as search engines, portals, websites, and social media. The mode of examinations for this portion of the written test could be multiple-choice questions, structured questions, or true-false questions.