PESHAWAR ELECTRIC SUPPLY COMPANY

TEST FORMAT – MIRAD POSITIONS

<table>
<tr><th>S. No.</th><th>Designation</th><th>Required Qualification and Experience</th><th>Composition of Paper</th></tr>
<tr><td>1</td><td>Assistant Manager (Transmission & Planning)

(Market Implementation and Regulatory Affairs Department)</td><td>Bachelor degree in Electrical / Electronic Engineering from reputable HEC recognized Universities.

Minimum 03-years of total Experience including 01-years of experience in transmission planning if has. the candidate should possess understanding of transmission planning at 132-kv level, capital budgeting including preparation of project documents related to transmission planning etc.</td><td>Part-I Technical: 83% Passing Marks: 50%
Part-II General Knowledge etc.: 17% Passing Marks: 50%
Part-I (83% Technical)
<table>
<tr><th>Sr. No.</th><th>Core Areas</th><th>Percentage</th></tr>
<tr><td>A.</td><td>Fundamentals of Electrical Engineering:
1 Basic Electrical Engineering
Electrical Quantities V, I, PF, Power, Energy etc.
2 Various laws of Electrical Circuit Analysis
Power System Analysis</td><td>25%</td></tr>
<tr><td>B.</td><td>Power System Components
1 Generation, Transmission, Distribution
2 Power Transformer
3 Transmission and Distribution Networks and Distribution Transformer
4 Power System Protection
Protective Relays
Switchgear including (Circuit Breaker, Isolators)
LBS, Fuses, CT, PT, Surge Arrestors
Earthings / Safety of Equipment and persons</td><td>20%</td></tr>
<tr><td>C.</td><td>Basic and Power Electronics
1 Basic Electronics
Diodes / Transistors / ICs
2 Power Electronics
Power Diodes, Thyristor, MOSFETs, IGBTs, Power Capacitors, Inductors, Power Compensation / Regulation Components / Capacitors / Reactors
Power Telephony & Tele-protection through Power Carrier Systems and OPGW</td><td>15%</td></tr>
<tr><td>D.</td><td>MS Office / Internet / LAN/WAN / SQL / Wifi / GSM / (General Knowledge about IoTs)</td><td>10%</td></tr>
<tr><td>E.</td><td>Power Sector Structure and Regulation in Pakistan
1 Structure of the power sector: generation companies, NGC (National Grid Company), DISCOs, PEDO, CPPA-G, ISMO, PPIB and AEDB (basic roles)
2 NEPRA: functions, licensing and basic tariff concepts (revenue requirement, determination, motion for review)
3 Grid Code, Distribution Code, performance standards and Consumer Service Manual (basic awareness)
4 Power purchase basics: Power Purchase Agreements, capacity and energy payments, merit order dispatch</td><td>10%</td></tr>
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<tr><td>F.</td><td>Competitive Trading Bilateral Contract Market (CTBCM)
1 CTBCM concept and objectives; transition from single-buyer model
2 Market participants and their roles: Market Operator / ISMO, CPPA-G, DISCOs, Suppliers, Bulk Power Consumers (BPCs), traders
3 Bilateral contracts, open access and wheeling (basic concepts and charges)
4 Market Commercial Code, settlement, imbalance and ancillary services (basic awareness)
5 Metering and data exchange for market settlement</td><td>12%</td></tr>
<tr><td>G.</td><td>Emerging Technologies and Planning Basics
1 Solar PV, distributed generation, net metering / net billing
2 Battery Energy Storage Systems (BESS) and grid integration
3 AMI / AMR, GIS, demand-side management
4 Basic load / demand forecasting, energy balance and T&D losses</td><td>8%</td></tr>
<tr><td colspan="2">Total</td><td>100%</td></tr>
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Part-II (17%) Quiz on:
1. Intelligence (Verbal & Analytical Reasoning)
2. Pakistan Studies
3. General Knowledge
4. Islamiat
5. Management
Note: To qualify for interview / viva voce, candidates are required to pass both the tests separately as per criteria mentioned above.
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<tr><td>2</td><td>Assistant Manager (Finance) MIRAD
(Market Implementation and Regulatory Affairs Department)</td><td>Minimum qualification CA (Inter)/CMA (Inter)/ACCA (Member) or M.Com/MBA (Finance)/MBA, B.Com (Hons) 04 Years course / BBA Finance (Hons) 04 years course with 02 years post qualification experience in BPS-16 or equivalent thereof in Audit and Accounts of Govt. Department / Semi Govt. Organization/Corporation/autonomous bodies or large commercial organization or large Public Limited Companies or repute, Computer Literacy is mandatory or 04 Years / 08 Semester Honors Degrees.

Minimum 03 Years of total experience including 01 year of Experience in Power Sector if have. The Experience in relevant field will be given preference. The candidate should possess understanding of bilateral contract and bidding process and having knowledge of competitive electricity market will be an added advantage.</td><td>
Part-I Technical: 83% Passing Marks: 50%
Part-II General Knowledge etc.: 17% Passing Marks: 50%
Part-I (83% Technical)
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<tr><th>Sr. No.</th><th>Core Areas</th><th>Percentage</th></tr>
<tr><td>1.</td><td>Financial Accounting</td><td>14%</td></tr>
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<tr><td>3.</td><td>Advance Accounting</td><td>14%</td></tr>
<tr><td>4.</td><td>Banking</td><td>7%</td></tr>
<tr><td>5.</td><td>Auditing</td><td>7%</td></tr>
<tr><td>6.</td><td>Business Taxation</td><td>7%</td></tr>
<tr><td>7.</td><td>Financial Management</td><td>7%</td></tr>
<tr><td>8.</td><td>Energy Purchase Agreements (EPAs), Invoicing and Billing
EPAs with PEDO and other power producers; invoicing, billing, payment and reconciliation; power purchase price (capacity and energy components) (basic concepts)</td><td>9%</td></tr>
<tr><td>9.</td><td>Cost of Service, UoSC and Wheeling Charges
FACOSS (Fully Allocated Cost of Service Study) model; Use of System Charges (UoSC); wheeling charges; revenue requirement and tariff determination (basic concepts)</td><td>9%</td></tr>
<tr><td>10.</td><td>Financial Analysis (DIIP) and Contract Management
Financial analysis of Distribution Investment and Improvement Plan (DIIP): cost-benefit, payback, IRR; contract management, milestones, payments and claims (basic concepts)</td><td>6%</td></tr>
<tr><td>11.</td><td>Power Sector Structure and CTBCM Basics
NEPRA, NGC, ISMO, CPPA-G, DISCOs, PEDO; CTBCM participants, bilateral contracts, open access and settlement (basic awareness)</td><td>6%</td></tr>
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<td>Assistant Manager (Demand Forecasting)

(Market Implementation and Regulatory Affairs Department)</td>
<td>Bachelor degree in Electrical / Electronic Engineering from reputable HEC recognized Universities.

Minimum 03-years of total Experience including 01-years of Experience in demand forecasting if has. The candidate should possess understanding of medium term and other demand forecasting and consolidating demand forecasts.</td>
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