

**Module 1: Operation & Maintenance of PGCB****Marks-100**

| Sl. No.             | Topic  | Session Code | Hour           |
|---------------------|--|--------------|----------------|
| 1.                  | Overall concept on Substation Equipments   | 1.01         | 02 hrs         |
| 2.                  | Operation procedure of substation equipment & Single Line diagram  |              |                |
| 3.                  | Function of Power Transformer  | 1.02         | 02 hrs         |
| 4.                  | Maintenance & Routine Inspection of Power Transformer  |              |                |
| 5.                  | Function of Instrument Transformer   | 1.03         | 02 hrs         |
| 6.                  | Maintenance & Routine Inspection of Instrument Transformer   |              |                |
| 7.                  | Function of Circuit Breaker (CB), Lightning Arrester (LA) & Disconnected Switch (DS)                         | 1.04         | 02 hrs         |
| 8.                  | Maintenance & Routine Inspection of Circuit Breaker (CB), Lightning Arrester (LA) & Disconnected Switch (DS) |              |                |
| 9.                  | Safety and Grounding System  | 1.05         | 02 hrs         |
| 10.                 | Operation & Maintenance of HVDC  | 1.06         | 02 hrs         |
| 11.                 | Responsibility of Assistant Engineer in PGCB   | 1.07         | 02 hrs         |
| 12.                 | Inspection procedure of Transmission Line & Tower  | 1.08         | 02 hrs         |
| 13.                 | Maintenance of Transmission Line & Tower   |              |                |
| 14.                 | Operation and Maintenance of National Load Dispatch Centre   | 1.09         | 02 hrs         |
| 15.                 | Load Management & Reporting System   |              |                |
| 16.                 | Frequency Control and Economic Load Dispatching  | 1.10         | 02 hrs         |
| 17.                 | Telecom & Remote Terminal Unit (RTU) basics  | 1.11         | 02 hrs         |
| 18.                 | Operation & Maintenance of SCADA   |              |                |
| 19.                 | Introduction of National Grid Code-2010 & KPI  | 1.12         | 02 hrs         |
| 20.                 | PGCB Website & E-mail uses & LAN, WAN, Internet  | 1.13         | 02 hrs         |
| 21.                 | E-Management & Office Automation   |              |                |
| 22.                 | Research & Technical Services  | 1.14         | 02 hrs         |
| 23.                 | Understanding of Power System Metering   | 1.15         | 02 hrs         |
| 24.                 | Routine Testing and Calibration of Meter   |              |                |
| 25.                 | Communication Concepts of PGCB and OPGW & Commercial Leasing   | 1.16         | 02 hrs         |
| 26.                 | Introductory Course on Substation DC Distribution System, Battery and Battery Charger                        | 1.17         | 02 hrs         |
| 27.                 | Basic Protection Concepts of Power Systems   |              |                |
| 28.                 | Transmission Line Protection   | 1.18         | 02 hrs         |
| 29.                 | Transformer Protection and Relay Co-ordination   | 1.19         | 02 hrs         |
| 30.                 | Basics of Busbar and Breaker Fall Protection   | 1.20         | 02 hrs         |
| 31.                 | Understanding Circuit Breaker Opening & Closing Schemes  |              |                |
| 32.                 | Understanding Interlocking Schemes   |              |                |
| 33.                 | Feedback Workshop and Evaluation Test  | 1.21         | 02 hrs         |
| <b>Total hour =</b> |  |              | <b>42 hour</b> |

**Module 2: Planning & Development of PGCB****Marks-100**

| Sl. No. | Topic   | Session Code | Hour    |
|---------|---|--------------|---------|
| 1.      | Mission, Vision, Goals, Objectives & Reforms Programs of Power Sector | 2.01         | 02 hrs. |

| Sl. No.             | Topic  | Session Code | Hour           |
|---------------------|--|--------------|----------------|
| 2.                  | Mission, Vision, Goals & Objectives of PGCB                                  | 2.02         | 02 hrs.        |
| 3.                  | Concepts of Smart Grid Action Plan for PGCB                                  | 2.03         | 02 hrs.        |
| 4.                  | Sustainable Energy Security Option for Bangladesh                            |              |                |
| 5.                  | Function of Instrument Transformer   | 2.04         | 02 hrs.        |
| 6.                  | Overview: Planning and Development of Bangladesh Power System                | 2.05         | 02 hrs.        |
| 7.                  | Load Flow Study  | 2.06         | 02 hrs.        |
| 8.                  | Short Circuit Study  |              |                |
| 9.                  | Power System Concept: Steady State & Transient Phenomena and Stability Study | 2.07         | 02 hrs.        |
| 10.                 | Environmental Impact Assessment: A Planning Tool                             | 2.08         | 02 hrs.        |
| 11.                 | Procedure and Techniques of Transmission Line Design                         | 2.09         | 02 hrs.        |
| 12.                 | Procedure and Techniques of Sub Station Design                               | 2.10         | 02 hrs.        |
| 13.                 | Procedure and Techniques of Civil Design                                     | 2.11         | 02 hrs.        |
| 14.                 | Quality Control: Civil Construction  | 2.12         | 02 hrs.        |
| 15.                 | Repair and Maintenance of Civil Infrastructure                               |              |                |
| 16.                 | Right of Way (ROW) clearing of Transmission Line: Practice & Procedure       | 2.13         | 02 hrs.        |
| 17.                 | Feedback Workshop and Evaluation Test  | 2.14         | 02 hrs.        |
| <b>Total hour =</b> |  |              | <b>28 hour</b> |

### Module 3: Project Management

**Marks-50**

| Sl. No.             | Topic  | Session Code | Hour           |
|---------------------|--|--------------|----------------|
| 1.                  | Introduction to Project Management: Project Planning, Concept & Techniques of Project Appraisal and Selection of Project | 3.01         | 02 hrs.        |
| 2.                  | TAPP, DPP & RDPP   | 3.02         | 02 hrs.        |
| 3.                  | Project Preparation and Project Implementation   | 3.03         | 02 hrs.        |
| 4.                  | Project Monitoring and Evaluation  | 3.04         | 02 hrs.        |
| 5.                  | Evaluation Test  | 3.05         | 02 hrs.        |
| <b>Total hour =</b> |  |              | <b>10 hour</b> |

### Module 4: Public Procurement

**Marks-50**

| Sl. No. | Topic  | Session Code | Hour    |
|---------|--|--------------|---------|
| 1.      | Introduction to PPR, Procurement Methods, Committee and Procurement Planning   | 4.01         | 02 hrs. |
| 2.      | STD used in Procurement of Goods, Works and Services including GCC and PCC   | 4.02         | 02 hrs. |
| 3.      | Advertisement, Tender Submission, Opening, Evaluation, Preparation of Evaluation Report, Tender Approval and Notification of Award | 4.03         | 02 hrs. |
| 4.      | Contract Management, Disposal of Complain, Review & Appeal and Documentation of Procurement Records                                | 4.04         | 02 hrs. |
| 5.      | E-Tendering  | 4.05         | 02 hrs. |
| 6.      | Procurement Management of PGCB   | 4.06         | 02 hrs. |
| 7.      | Store Management of PGCB   | 4.07         | 02 hrs. |
| 8.      | Feedback Workshop and Evaluation Test  | 4.08-4.09    | 02 hrs. |

| Sl. No.             | Topic | Session Code | Hour           |
|---------------------|-------|--------------|----------------|
| <b>Total hour =</b> |       |              | <b>16 hour</b> |

### Module 5: HRM & QMS of PGCB

**Marks-100**

| Sl. No.             | Topic  | Session Code | Hour           |
|---------------------|--|--------------|----------------|
| 1.                  | Theories & Functions of Organizational Management  | 5.01         | 02 hrs.        |
| 2.                  | HR for Non HR Manager/Professionals  | 5.02         | 02 hrs.        |
| 3.                  | Organogram of PGCB   | 5.03         | 01 hrs.        |
| 4.                  | Introductory Concepts of Service Rule and Recruitment, Selection & Confirmation Policy & Procedure | 5.04         | 02 hrs.        |
| 5.                  | Performance Management System & Key Performance Indicators (KPI) of PGCB                           | 5.05         | 02 hrs.        |
| 6.                  | Promotion Policy   | 5.06         | 02 hrs.        |
| 7.                  | Pay scale, Time scale & Selection grade  |              |                |
| 8.                  | Seniority, Fixation & Annual Increment   |              |                |
| 9.                  | Fringe Benefits (Electricity bill, Gratuity, Group Insurance & Tiffin bill etc)                    | 5.07         | 02 hrs.        |
| 10.                 | Shift duty allowance, Additional charge allowance & Honorarium                                     | 5.08         | 02 hrs.        |
| 11.                 | CPF Rule   |              |                |
| 12.                 | Medical Rule   |              |                |
| 13.                 | Procedure of Termination, Resign & Retirement  | 5.09         | 02 hrs.        |
| 14.                 | Settlement of Final Payment  |              |                |
| 15.                 | Misconduct, Disciplinary Procedure, Punishment & Appeal Procedure                                  | 5.10         | 02 hrs.        |
| 16.                 | Participation & Welfare fund Management  | 5.11         | 02 hrs.        |
| 17.                 | Residential Accommodation Policy & House Rent  |              |                |
| 18.                 | PGCB Security System for S/S & T/L including CCTV Monitoring                                       | 5.12         | 02 hrs.        |
| 19.                 | Key Point Installation (KPI) of PGCB and Security Manual   |              |                |
| 20.                 | QMS & ISO 9001:2008 & PGCB   | 5.13         | 02 hrs.        |
| 21.                 | Employee Counseling  | 5.14         | 02 hrs.        |
| 22.                 | Fire & Safety  | 5.15         | 02 hrs.        |
| 23.                 | First Aid System   |              |                |
| 24.                 | Criminal Case Handling, FIR & GD   |              |                |
| 25.                 | Total Quality Management (TQM)   | 5.16         | 02 hrs.        |
| 26.                 | Good Governance and PGCB   | 5.17         | 02 hrs.        |
| 27.                 | Feedback Workshop and Evaluation Test  | 5.18         | 02 hrs.        |
| <b>Total hour =</b> |  |              | <b>35 hour</b> |

### Module 6: Financial Management, Auditing System of PGCB

**Marks-50**

| Sl. No. | Topic  | Session Code | Hour    |
|---------|--|--------------|---------|
| 1.      | General Concept and Procedure of Financial Management    | 6.01         | 02 hrs. |
| 2.      | Functions of Accounts & Finance Department of PGCB       | 6.02         | 02 hrs. |
| 3.      | Budget Preparation & Administration of Budgetary Control |              |         |
| 4.      | Tax/VAT Rules  | 6.03         | 02 hrs. |
| 5.      | Delegation of Financial Administration                   | 6.04         | 02 hrs. |

| Sl. No.             | Topic   | Session Code | Hour           |
|---------------------|---|--------------|----------------|
| 6.                  | TA/DA & OT Rules  | 6.05         | 02 hrs.        |
| 7.                  | Internal Audit & Procedure                              | 6.06         | 02 hrs.        |
| 8.                  | Process of Audit Settlement                             | 6.07         | 02 hrs.        |
| 9.                  | Company Affairs of PGCB and as a Public Limited Company | 6.08         | 02 hrs.        |
| 10.                 | Feedback Workshop and Evaluation Test                   | 6.09         | 02 hrs.        |
| <b>Total hour =</b> |   |              | <b>18 hour</b> |

**Module 7: Office Management & Communication**

**Marks-100**

| Sl. No.             | Topic  | Session Code | Hour           |
|---------------------|--|--------------|----------------|
| 1.                  | Rules of Business & Allocation of Business                           | 7.01         | 02 hrs.        |
| 2.                  | File Management (Opening Files, Docketing and Indexing)              | 7.02         | 02 hrs.        |
| 3.                  | Noting, Drafting and Summery Writing                                 | 7.03         | 02 hrs.        |
| 4.                  | Communication & Techniques of Communication                          | 7.04         | 02 hrs.        |
| 5.                  | Letter Writing   | 7.05         | 02 hrs.        |
| 6.                  | Conducting Meeting, Writing Working Paper and Art of Writing Minutes | 7.06         | 02 hrs.        |
| 7.                  | Office Inspection and Report Writing                                 | 7.07         | 02 hrs.        |
| 8.                  | Listening Skills   | 7.08         | 02 hrs.        |
| 9.                  | Writing Skills   | 7.09         | 02 hrs.        |
| 10.                 | Art of Speaking  | 7.10         | 02 hrs.        |
| 11.                 | Art of Speaking  | 7.11         | 02 hrs.        |
| 12.                 | Evaluation Test  | 7.12         | 02 hrs.        |
| <b>Total hour =</b> |  |              | <b>24 hour</b> |

**Module 8: Organizational Behavior****Marks-100**

| Sl. No.             | Topic   | Session Code | Hour           |
|---------------------|---|--------------|----------------|
| 1.                  | Dynamics of Organization Behavior                   | 8.01         | 02 hrs.        |
| 2.                  | Manners & Etiquettes                                | 8.02         | 02 hrs.        |
| 3.                  | Corporate Culture                                   | 8.03         | 02 hrs.        |
| 4.                  | Motivation and Human relation in Organization       | 8.04         | 02 hrs.        |
| 5.                  | Leadership and Change Management                    | 8.05         | 02 hrs.        |
| 6.                  | Problem Solving and Decision Making Process         | 8.06         | 02 hrs.        |
| 7.                  | Group Dynamic and Team Building                     | 8.07         | 02 hrs.        |
| 8.                  | Conflict Management and Negotiation Skills          | 8.08         | 02 hrs.        |
| 9.                  | Procedure of Grievance Handling                     | 8.09         | 02 hrs.        |
| 10.                 | Professional Integrity: Morality, Ethics and Values | 8.10         | 02 hrs.        |
| 11.                 | Time Management and Work Planning                   | 8.11         | 02 hrs.        |
| 12.                 | Evaluation Test                                     | 8.12         | 02 hrs.        |
| <b>Total hour =</b> |   |              | <b>24 hour</b> |

**Module 9: Bangladesh Studies****Marks-50**

| Sl. No.             | Topic  | Session Code | Hour           |
|---------------------|--|--------------|----------------|
| 1.                  | Historical Background of Bangladesh & Liberation war                               | 9.01         | 02 hrs.        |
| 2.                  | Introduction to Bangladesh Constitution and Fundamental Principles of State Policy | 9.02         | 02 hrs.        |
| 3.                  | The National Flag, Anthem, Emblem Rules and Warrant of Precedence                  | 9.03         | 02 hrs.        |
| 4.                  | Human Rights and Fundamental Rights  | 9.04         | 02 hrs.        |
| 5.                  | Evaluation Test  | 9.01 - 9.04  | 02 hrs.        |
| <b>Total hour =</b> |  |              | <b>10 hour</b> |

**Module 10: Policy Strategy (Extension Lecture)****Marks-50**

| Sl. No.             | Topic   | Session Code | Hour           |
|---------------------|---|--------------|----------------|
| 1.                  | National Integrity Strategy of Bangladesh                         | 10.01        | 02 hrs.        |
| 2.                  | ICT policy; Vision 2021 & E-Governance                            | 10.02        | 02 hrs.        |
| 3.                  | Right to Information Act. 2009.                                   | 10.03        | 02 hrs.        |
| 4.                  | Anti-corruption Interventions in Bangladesh                       | 10.04        | 02 hrs.        |
| 5.                  | The role of Power in Economic Development: Bangladesh Perspective | 10.05        | 02 hrs.        |
| 6.                  | Citizen's Charter   | 10.06        | 02 hrs.        |
| 7.                  | Income Tax & Value Added Tax                                      | 10.07        | 02 hrs.        |
| 8.                  | The Electricity Act   | 10.08        | 02 hrs.        |
| 9.                  | Evaluation Test   | 10.09        | 02 hrs.        |
| <b>Total hour =</b> |   |              | <b>18 hour</b> |

**Module 11: Study Tour/Practical Field Visit****Marks-100**

| <b>Sl. No.</b> | <b>Topic</b>   | <b>Session Code</b> | <b>Hour</b>    |
|----------------|----------------|---------------------|----------------|
| 1.             | Study Tour - 1 | 11.01               | 01 day         |
| 2.             | Study Tour - 2 | 11.02               | 02 days        |
| 3.             | Study Tour - 3 | 11.03               | 02 days        |
| <b>Total =</b> |                |                     | <b>05 days</b> |