#### Appendix 1

### Assistant Engineer (Civil)

## Assistant Engineer (Civil) - Syllabus Outline

# A. Advanced Technical / Job-Specific Knowledge - 30%

- 1. Construction Materials & Concrete Technology
- 2. Structural Engineering
- 3. Surveying & Geomatics
- 4. Estimation, Costing & Contracts
- 5. Soil Mechanics & Foundation Engineering
- 6. Transportation Engineering
- 7. Water Supply & Environmental Engineering
- 8. Tendering & PPRA Rules

# B. Professional / General Technical Knowledge - 40%

- 1. Engineering Drawing & Design
- 2. Project Management & Supervision
- 3. AutoCAD & Software Awareness (Theory)
- 4. Infrastructure Works
- 5. Office & Administrative Procedures

### C. General Aptitude - 30%

- 1. English
- 2. Analytical Reasoning
- 3. Basic & Applied Math
- 4. General Knowledge

#### Appendix 2

### Assistant Engineer (Electrical)

### A. Advanced Technical / Job-Specific Knowledge - 30%

- 1. Electrical Materials & Components
- 2. Power Systems
- 3. Electrical Machines
- 4. Power Electronics
- 5. Control Systems
- 6. Estimation & Costing
- 7. Renewable & Modern Energy Systems
- 8. Tendering & PPRA Rules

### B. Professional / General Technical Knowledge - 40%

- 1. Electrical Drawings & Diagrams
- 2. Project Supervision & Safety
- 3. Software Awareness (Theory)

gray 3



- 4. Infrastructure Works
- 5. Office & Administrative Procedures

# C. General Aptitude - 30%

- 1. English
- 2. Analytical Reasoning
- 3. Basic & Applied Math
- 4. General Knowledge

#### Appendix 3 Assistant Director (P&D)

# Job-Specific Knowledge / P&D Professional Skills - 30%

- 1. Public Sector Development Program (PSDP/ADP)
- 2. PC-I to PC-V formats and requirements
- 3. Monitoring & Evaluation (M&E) mechanisms
- 4. Project planning cycle
- 5. Financial analysis & cost estimation
- 6. Punjab Procurement Rules (PPRA)
- 7. Annual Development Plans and University Development Schemes
- 8. Infrastructure development concepts
- 9. Performance indicators and reporting

## B. Professional Knowledge - 40%

- 1. Public administration & governance
- 2. Project management
- 3. Report writing skills
- 4. Office management & communication
- 5. Data analysis and interpretation
- 6. Rules of Business, Govt. of the Punjab
- 7. Budgeting & financial procedures
- 8. University functioning framework (HEC policies, Statutes overview)

#### C. General Aptitude - 30%

- 1. English comprehension and grammar
- 2. Analytical reasoning
- 3. Quantitative reasoning (basic mathematics)
- 4. General knowledge and current affairs

#### Appendix 4

#### Sub-Engineer (Civil)

### A: Technical / Job-Specific Knowledge - 30%

- 1. Construction Materials
- 2. Building Construction
- 3. Surveying
- 4. Estimation & Costing
- 5. Soil Mechanics
- 6. Roads & Pavements
- 7. Water Supply & Sanitation
- 8. PPRA / Tendering





# B. Professional/General Technical Knowledge - 40% 1. Basic Engineering Drawing

- 2. Project Supervision
- 3. Basic AutoCAD Awareness (theory only)
- 4. University Infrastructure Works
- 5. Office Procedures

# C. General Aptitude - 30%

- 1. English
- 2. Analytical Reasoning
- 3. Basic Math
- 4. General Knowledge

### Appendix 5 Sub-Engineer (Electrical) A: Job-Specific Skills (30%)

- 1. Electrical Installations
- 2. Operation & Maintenance
- 3. Electrical Machines
- 4. Power Distribution
- 5. Safety Codes & Regulations
- 6. Use of Tools/Equipment

### B: Professional Knowledge (40%)

- 1. Basic Electrical Engineering
- 2. Electromagnetism
- 3. Electronics
- 4. Control Systems
- 5. Energy Systems
- 6. Estimation & Costing

### C: General Aptitude (30%)

- 1. English (Vocabulary, Grammar, Comprehension)
- 2. General Knowledge & Current Affairs
- 3. Basic Computer Knowledge
- 4. Analytical/Quantitative Reasoning



