Syllabus

**Deputy Manager (Research & Development) - npcc**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr. | Part | Weightage | Passing Marks(minimum) | Details |
| 1. | **General Ability** | **17%** (17 Questions) | **40 %** (7/17) | Pakistan Studies, Islamic Studies, Ethics/Islamic Studies, General Knowledge, Current Affairs |
| 2. | **Subject Ability** | **83%** (83 Questions) | **50 %**(42/83) | *(Syllabus details provided below under the respective post/title)* |

Syllabus of the Subjective PART *(as per ACADAMICS & requirement of the post)*:

## DEPUTY MANAGER (RESEARCH & DEVELOPMENT)

* Data Analytics
* Data visualization
* Exploratory data analysis
* Statistical modelling
* Power systems fundamentals
* AC generators and electrical machines
* Transformers
* Transmission lines and cables
* High voltage engineering
* High voltage direct current (HVDC)
* Power electronics
* Renewable energy sources
* Wind turbine generators
* Power system stability
* Power system economics

\*\*\*\*\*