Syllabus

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

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| 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

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