

**PhD Admission Test Fall 2024**  
**National University of Computer and Emerging Sciences**

1. The PhD Admission Test will be a 2-hours test with no negative marking;
2. The composition of Tests/Interviews at different domains are as follows:

|   |   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
|---|---|-----------|-----|------------|-----|----------------------------|----|----------------------|-----|------------------|----|----------------------------|-------|---|----|------------------|--|
| <p style="text-align: center;"><b>PhD (Computer Science)</b></p> <p>Test Date    3<sup>rd</sup> August, 2024 (<b>Saturday</b>)</p> <p>Duration     2-hours</p> <p>Description  MCQs</p> <p style="text-align: center;"><b>Test Core Areas (Section-A)</b></p> <p>Programming</p> <p>Data Science and Algorithms</p> <p>Computer Networks</p> <p>Operating Systems</p> <p>Database Systems</p> <p>Software Engineering</p> <p>Theory of Automata</p>   | <p style="text-align: center;"><b>PhD (Management Sciences)</b></p> <p>Test Date    3<sup>rd</sup> August, 2024 (<b>Saturday</b>)</p> <p>Duration     2-hours</p> <p>Description  MCQs</p> <p style="text-align: center;"><b>Test Core Areas (Section-A)</b></p> <table style="width: 100%; border: none;"> <tr><td>Economics</td><td style="text-align: right;">10</td></tr> <tr><td>Management</td><td style="text-align: right;">15</td></tr> <tr><td>Quantitative Techniques</td><td style="text-align: right;">15</td></tr> <tr><td>Research Methods</td><td style="text-align: right;">15</td></tr> <tr><td>Marketing</td><td style="text-align: right;">15</td></tr> <tr><td>Finance and Accounting</td><td style="text-align: right;">10+10</td></tr> <tr><td>Business Communication and Report Writing</td><td style="text-align: right;">10</td></tr> </table> <p style="text-align: center;"><b>Section-B</b></p> <p>Duration     1-hour</p> <p>Description  the applicants will be required to write an essay or answer a subjective question</p> | Economics | 10  | Management | 15  | Quantitative Techniques    | 15 | Research Methods     | 15  | Marketing        | 15 | Finance and Accounting     | 10+10 | Business Communication and Report Writing | 10 |                  |  |
| Economics   | 10  |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Management  | 15  |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Quantitative Techniques   | 15  |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Research Methods  | 15  |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Marketing   | 15  |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Finance and Accounting  | 10+10   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Business Communication and Report Writing   | 10  |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| <p style="text-align: center;"><b>PhD (Electrical Engineering)</b></p> <p>Test Date    3<sup>rd</sup> August, 2024 (<b>Saturday</b>)</p> <p>Duration     2-hours</p> <p>Description  MCQs</p> <p style="text-align: center;"><b>Test Core Areas (Section-A)</b></p> <p>Signals, Systems and Controls</p> <p>Electrical Circuits and Network Analysis</p> <p>Probability and Random Variables</p><br><p>Electromagnetics and Telecommunications</p> <p>Electromechanical Systems and Power Engineering</p> <p>Electronics</p> <p>Digital Logic Design and Computer Engineering</p> <p>Computing, Programming and Data Structures</p> | <p style="text-align: center;"><b>PhD (Mathematics)</b></p> <p>Test Date    5<sup>th</sup> August, 2024 (<b>Monday</b>)</p> <p>Duration     2.5-hours</p> <p>Description  MCQs</p> <p style="text-align: center;"><b>Test Core Areas (Section-A)</b></p> <table style="width: 100%; border: none;"> <tr><td>Calculus</td><td style="text-align: right;">50%</td></tr> <tr><td>Algebra</td><td style="text-align: right;">25%</td></tr> <tr><td>Introductory Real Analysis</td><td></td></tr> <tr><td>Discrete Mathematics</td><td style="text-align: right;">25%</td></tr> <tr><td>General Topology</td><td></td></tr> <tr><td>Probability and Statistics</td><td></td></tr> <tr><td>Numerical Analysis</td><td></td></tr> <tr><td>Complex Analysis</td><td></td></tr> </table>   | Calculus  | 50% | Algebra    | 25% | Introductory Real Analysis |    | Discrete Mathematics | 25% | General Topology |    | Probability and Statistics |       | Numerical Analysis                        |    | Complex Analysis |  |
| Calculus  | 50%   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Algebra   | 25%   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Introductory Real Analysis  |   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Discrete Mathematics  | 25%   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| General Topology  |   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Probability and Statistics  |   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Numerical Analysis  |   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |
| Complex Analysis  |   |           |     |            |     |                            |    |                      |     |                  |    |                            |       |   |    |                  |  |

**Note:**

1. Applicants will be called for an interviews after reviewing the marks of **Section-A**;
2. The final merit will be calculated by adding the marks of **Section-A, Section-B\*** and the interview marks; and
3. Admissions will be offered based on the availability and consent of supervisors.

\* Applicable for PhD (Management Sciences only)