

**LPUNEST – Ph.D. Physics**  
**(Sample Questions)**

**QUESTION 1** In the transpose of matrix A, the columns of the matrix A becomes

- Option A multiple column
- Option B rows
- Option C multiples
- Option D divisors

**QUESTION 2** Rest mass energy of the electron is

- Option A 511 GeV
- Option B 5.11 MeV
- Option C 0.511 MeV
- Option D 0.511 GeV

**QUESTION 3** Which concepts can be explained using uncertainty relation

- Option A Electron can not exist inside nucleus.
- Option B Proton can exists inside the nucleus.
- Option C Neutron can exists inside the nucleus.
- Option D All of these are correct

**QUESTION 4** The uncertainty principle was given by

- Option A Plank
- Option B de Broglie
- Option C Heisenberg
- Option D Schrodinger

**QUESTION 5** The two basic interactions that have finite ranges are

- Option A electromagnetic and strong
- Option B electromagnetic and weak
- Option C weak and strong
- Option D gravitational and weak