Paper — (Nuclear Physics)

Name of course : B.Sc (Hons) PHYSICS

Semester : V

Marks — 10

(Assignment)

Q.1 Explain liquid drop model. obtain semi empirical mass formula. Give any two achievenad of the model — (2)

Q.2. Explain secular and Transient Equillibrium. (2)

Q.3 State the assumptions of Gamow's theory of alpha decay. what is the Geiger Nuttall law for alpha decay and represents it graphically In the energy spectrum of the alpha particle emitted in an alpha decay, very closely spaced lines are observed why? — (5)

Q.4 Define neutrino hypothesis and internal Conversion of nuclear reaction (1)

Shakir