

Reg. No. :

281

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(For the candidates admitted from 1999 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2000.

Third Semester

Physics

QUANTUM MECHANICS — II

Time : Three hours

Maximum : 100 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

Choose the correct answer :

1. In nuclear physics the scattering centres have linear dimensions of the order of

- (a) 10^{-2} to 10^{-1} cm (b) 10^{-7} to 10^{-6} cm
(c) 10^{-13} to 10^{-12} cm (d) 10^{-13} to 10^{-17} cm.

2. Doublet separation

- (a) increases with increasing atomic number
(b) decreases with increasing atomic number
(c) does not change with atomic number
(d) none of the above.