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Reg. No. :

2093

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(For the candidates admitted from 2002 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2003.

Second Semester

Physics

QUANTUM MECHANICS — II

Time : Three hours

Maximum : 100 marks

SECTION A — (20 × 1 = 20 marks)

Answer ALL questions.

Choose the correct answer :

1. Reduced Mass ' μ ' in the scattering of neutrons by protons is given by

(a) $\mu = \frac{m_n}{m_n + m_p}$

(b) $\mu = \frac{m_n m_p}{m_n + m_p}$

(c) $\frac{m_p}{m_n + m_p}$

(d) $\frac{m_n m_p}{m_n - m_p}$