

41

Reg. No. :

3044

[99 23 56]

(For the candidates admitted from 1999 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2001.

Second Semester

Physics

QUANTUM MECHANICS — I

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

SECTION A — (10 × 2 = 20 marks)

Choose the correct answer.

1. An operator 'α' is said to be a unit operator, if

(a) $\langle A | \alpha | A \rangle = 0$

(b) $\alpha | A \rangle = | A \rangle$ for any $| A \rangle$

(c) $\langle A | \alpha | A \rangle = 1$

(d) $\alpha | A \rangle = \langle A |$