# ENTRANCE EXAMINATIONS, JUNE 2006
## QUESTION PAPER
# Ph.D. (PHYSICS)

Marks: 75
Time: 2.00 hrs.

Hall Ticket No.: 

I. Please enter you Hall Ticket Number on **Page 1 and the OMR answer sheets** without fail.

II. Read **carefully** the following instructions:

This Question paper has Two Sections: **Section- A and Section- B**

1. **Section-A** consists of 25 objective type questions of one mark each. **There is negative marking of one-fourth mark for every wrong answer.** The marks obtained by the candidate in this part will be used for resolving tie cases.

2. **Section- B** consists of 50 objective type questions of one mark each. **There is no negative marking in this section.**

3. All questions are to be answered.

4. Hand over both the question booklet and OMR answer sheet at the end of the examination.

5. Answers are to be marked on the OMR answer sheet following the instructions provided there upon.

6. Calculators are permitted. Logarithmic tables are not allowed.

> This book contains 21 pages

III. Values of physical constants:
$c = 3 \times 10^8$ m/s; $h = 6.63 \times 10^{-34}$ J.s; $k_B = 1.38 \times 10^{-23}$ J/K
$e = 1.6 \times 10^{-19}$ C; $\mu_o = 4\pi \times 10^{-7}$ Henry/m; $\epsilon_o = 8.85 \times 10^{-12}$ Farad/m