

GEO-PHYSICS

PAPER—III

Time Allowed : Three Hours

Maximum Marks : 200

QUESTION PAPER SPECIFIC INSTRUCTIONS

**Please read each of the following instructions carefully
before attempting questions**

There are TEN questions divided under TWO Sections.

Candidate has to attempt SIX questions in all.

Question Nos. **1** and **6** are compulsory. Out of the remaining EIGHT questions, FOUR questions are to be attempted, choosing TWO from each Section.

The number of marks carried by a question/part is indicated against it.

Neat sketches may be drawn to illustrate answers, wherever required.

Unless otherwise mentioned, symbols and notations have their usual standard meanings.

Assume suitable data, if necessary, and indicate the same clearly.

Attempts of questions shall be counted in sequential order. Unless struck off, attempt of a question shall be counted even if attempted partly.

Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

Answers must be written in ENGLISH only.

Constants which may be needed :

Kepler's constant	= $3.986004418 \times 10^5 \text{ km}^3 \text{ s}^{-2}$
Mean radius of the Earth	= 6378 km
Mass of electron (m_e)	= $9.11 \times 10^{-31} \text{ kg}$
Charge of electron (e)	= $1.602 \times 10^{-19} \text{ C}$
Planck's constant (h)	= $6.62 \times 10^{-34} \text{ J s}$
Boltzmann's constant (k)	= $1.38 \times 10^{-23} \text{ J/K}$