

SHOUTS: 1 (see end)

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2012 December 25
12:00 – 23:00

EXAMINATION FOR THE DEGREE OF MASTER OF EXAMINATIONS

Examinations 3

Exams001

[EX-666]

Advanced setting of exams

Be creative, but not vindictive

Answer each question in a separate booklet

Candidates are reminded that devices able to store or display text or images may not be used in examinations without prior arrangement.

Approximate marks are indicated in brackets as a guide for candidates.

1 Dummy question

(a) Show that, under the action of gravity alone, the scale size of the Universe varies according to

$$\ddot{R} = -\frac{4\pi G\rho_0}{3R^2}. \quad [4]$$

Is $\ddot{R} = d^2R/dt^2 > 10 \text{ au s}^{-2}$?

(b) Explain the nature of being. [16]

[Total: 20]

End of Paper

NOTE: Dummy question