

Total Pages—5

(Set-1)

M.Sc.-2nd (AP)

Numerical Techniques in Physics

Full Marks : 70

Time : 3 hours

Answer any six questions including Q. No. 1

The figures in the right-hand margin indicate marks

1. Answer the following : 2 × 10

(a) Rewrite the following with most appropriate form :

(i) $x = 5.12579 \times 10^4 \pm 4$ m and

(ii) $y = 1.38273 \pm 0.00313$ m/s

(b) $\frac{dy}{dx} = y + x^2$ and at $x = 0, y = 1$. Find the value of y at $x = 0.2$ using Euler's method with $h = 0.1$.

(Turn Over)