SEQUENCES & SERIES (Q 5, PAPER 1)

LESSON NO. 2: WORKING WITH SERIES

2002

5 (b) The sum of the first n terms of an arithmetic series is given by

$$S_n = \frac{3n}{2}(n+3).$$

(i) Calculate the first term of the series.

(ii) By calculating S_9 and S_{10}, find T_{10} (the tenth term of the series).

1997

5 (c) In an arithmetic series

$$S_n = n^2 + n,$$

where S_n is the sum to the first n terms.
Write down
(i) S_{10}, the sum to 10 terms

(ii) S_{11}, the sum to 11 terms

(iii) T_{11}, the 11th. term.

ANSWERS
2002 5 (b) (i) 6   (ii) 33
1997 5 (c) (i) 110   (ii) 132   (iii) 22