Practical no.1:

Aim: Find accuracy and precision of given numbers.

Theory:

Find accuracy and precision of given numbers.

1. Find Accuracy -
2. 45.869 = 5.
3. 0.004762 = 4.
4. 0.0856000 = 6.
5. 42 = 2.
6. 5700 = 2.
7. 4200.00 = 6.
8. Find Precision –
9. 8.4612 = 10 -4.
10. 6.84 = 10-2.
11. 5.341062 = 10-6.

Practical No. 2:

Aim: Find truncation error from given series.

Theory:

Find truncation error in the result of following function for x=⅓ when we use:

ex = 1 + x + x2/2! + x3/3! + x4/4! + x5/5!

1. First three term -

Truncation Error = x3/3! + x4/4! + x5/5!

= (0.3)3/3! + (0.3)4/4! + (0.3)5/5!

= (0.3)3/6 + (0.3)4/24 + (0.3)5/120

= 0.485775 × 10-4

1. First four term -

Truncation Error = x4/4! + x5/5!

= (0.3)4/4! + (0.3)5/5!

= (0.3)4/24 + (0.3)5/120

= 0.00035775

1. First five term –

Truncation Error = x5/5!

= (0.3)5/5!

= (0.3)5/120

= 0.00002025