

S.B.B alias Appasaheb Jedhe College, Pune

S.Y. B.Sc. (Computer Science)

Internal Examination, 2016

Subject: Numerical Technique

Time: 1 hour

Marks-10

Q- 1) Attempt all of the following.

[2*2]

- 1) Find formula for Relative Error (E_R) and Absolute Error (E_A).
- 2) Find formula for False Position method and Newton-Raphson method.

Q-2) Attempt the following (Any two)

[2*3]

1) Estimate the missing term in the following table.

x	0	1	2	3	4
Y=f(x)	1	3	9	?	81

2) Use Regular Falsi method to find approximate root of equation

$$X^3 - 4X - 9 = 0 \text{ in the interval } (2, 3) \text{ correct up to 2 decimal places.}$$

3) Use Newton-Raphson method to find approximate root of

$$e^x \cos x = 1.4 \text{ using initial approximate } X_0=0.$$