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**المرحلة : الثانية**

**المادة: التحليل العددي/Numerical Analysis**

**الجامعة المستنصرية**

**كلية التربية الأساسية**

**قسم الحاسبات**

Q1:-- **Fill in the blanks:-**

1. **If ƒ(c) ƒ(a) < 0,then the root belongs to----------**
2. **In bisection method ,we generate x by------------**
3. **the cessation clouse to generate the points is-------------**
4. **the no of iteration in bisection method satisfy the equ.--------**
5. **In false position method to generate the points x=---------**

Q2:-- **Write correct or incorrect with discussion:-**

1. **Bisection method can’t find the approximate root of ƒ(x) =1+e-x**

**on [0,1], Є=0.01.**

1. **Trapizume role dx ≈10.75, where n=4**

**ϵ=0.00001**

Q3:-  **Write three iteration using Newton- Raphson metod where**  ** **

**الحلول**

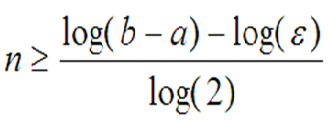
Q1:-- **Fill in the blanks:-**

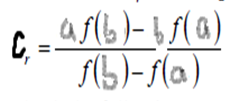
1) [a,c]

2)a+b/2

ǀ xn-xn-1 ǀ<**ϵ**

3)

4) 

5)

Q2:-- **Write correct or incorrect with discussion:-**

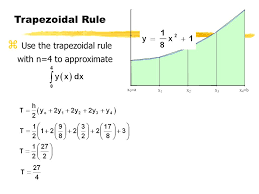
1. true

Ƒ(a)= 1+e-0=2

Ƒ(b)= 1+e-1=1.3678

Ƒ(a)\* Ƒ(b)>0

1. false=6.75



**ϵ=0.00001**

Q3:-  **Write three iteration using Newton- Raphson metod where**  ** **

